



7450 Ethernet Service Switch  
7750 Service Router  
7950 Extensible Routing System  
Virtualized Service Router  
Release 23.10.R3

## MD-CLI Command Reference Guide

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3HE 19224 AAH TQZZA 01  
Edition: 01  
February 2024

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# 1 Getting started

## 1.1 About this guide

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

For a list of unsupported features by platform and chassis, see the *SR OS R23.x.Rx Software Release Notes*, part number 3HE 19269 000x TQZZA.

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



**Note:**

This guide generically covers Release 23.x.Rx content and may contain some content that will be released in later maintenance loads. In addition, some SR OS features are platform-specific and may not be available or visible on all platforms. See the *SR OS R23.x.Rx Software Release Notes*, part number 3HE 19269 000x TQZZA, for information about the supported features and applicable platforms in each load of the Release 23.x.Rx software.

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

## 1.2 Platforms and terminology



**Note:**

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

*Table 1: Platforms and terminology*

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

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

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

## 1.3 Conventions

This section describes the general conventions used in this guide.

### 1.3.1 Precautionary and information messages

The following information symbols are used in the documentation.



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



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



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



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



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

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

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

#### Example: Options in a procedure

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

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

#### Example: Substeps in a procedure

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

## 1.4 MD-CLI command reference

## 1.4.1 MD-CLI tree hierarchy

Table 2: Command syntax symbols

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

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

```
location keyword
keyword - (cf1 | cf2 | cf3)

graceful-shutdown boolean
boolean - (true | false)
```

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

Figure 1: MD-CLI configuration tree example

```

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

```

sw4113

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

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

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

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

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

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

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

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

- number
- IPv4 address
- IPv6 address
- MAC address

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

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

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

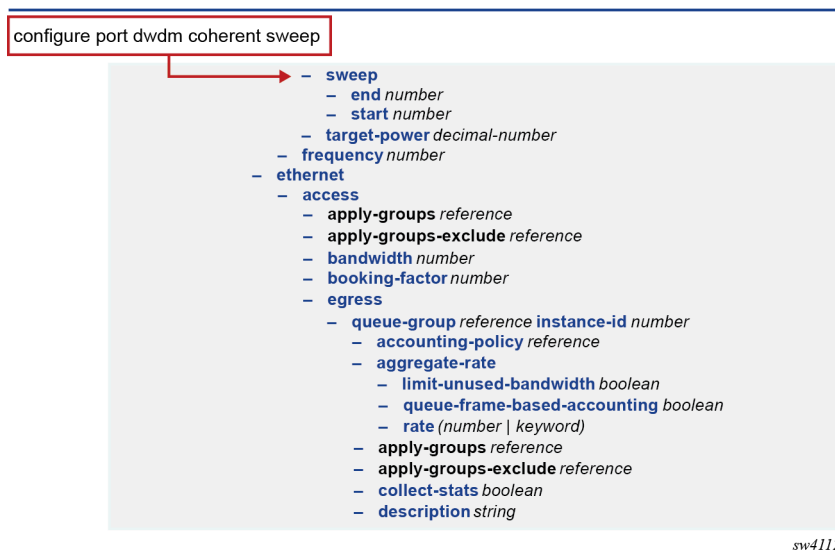
```
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
```

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

### 1.4.1.1 Context path

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

Figure 2: Command tree navigation



## 1.4.2 MD-CLI command descriptions

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

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

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

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

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


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

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

Table 3: Command descriptions fields

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



Field	Description
Default	YANG default value when there is no MD-CLI default. Platform-specific defaults are not displayed.
Reference	Reference to an element instance in the configuration or state datastore
Min./Max. Instances	For lists and leaf-lists, the minimum or maximum number of instances for this element
Notes	Information about special attributes of the element, including whether the element is: <ul style="list-style-type: none"> <li>• a key for an element</li> <li>• mandatory</li> <li>• ordered by the user (instead of by the system)</li> <li>• part of a choice of elements</li> </ul>
Introduced	Release in which the element was introduced
Deprecated	Release in which the element was deprecated
Platforms	Hardware platforms on which the element is available. See <a href="#">Platforms and terminology</a> for more information about the platforms. <p> <b>Note:</b> Some SR OS features are platform-specific and therefore may not be available or visible on all platforms. See the <i>SR OS R23.x.Rx Software Release Notes</i>, part number 3HE 19269 000x TQZZA, for information about platform support.</p>

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



**Note:**

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

## 2 Operational commands

This section lists the commands available at the operation level of the MD-CLI.

## 2.1 admin commands

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

```

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

```

## admin save [url]

```

- [url] string
- set
- time
  - [system-time] string
- show
- configuration
  - bof
  - booted
  - cflash-id string
  - [cli-path] string
  - configure
  - debug
  - depth number
  - detail
  - flat
  - full-context
  - intended
  - json
  - li
  - running
  - units
  - xml
- support-mode
- password
  - kernel string
  - shell string
- system
- license
  - activate
    - [file-url] string
    - now
  - clear
    - now
  - validate
    - [file-url] string
- management-interface
- commit
  - confirmed
    - accept
    - cancel
- operations
  - delete-operation
    - [delete-id] number
    - op-table-bypass boolean
  - stop-operation
    - op-table-bypass boolean
    - [stop-id] number
- security
- hash-control
  - custom-hash
    - algorithm keyword
    - key string
  - remove-custom-hash
- pki
- clear-ocsp-cache
  - [entry-id] number
- cmpv2
  - cert-request
    - ca-profile reference
    - current-certificate string
    - current-key string
    - domain-name string
    - hash-algorithm keyword
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)

```

## admin system security pki cmpv2 cert-request new-key

```

    - new-key string
    - save-as string
    - subject-dn string
  - clear-request
    - ca-profile reference
  - initial-registration
    - ca-profile reference
    - certificate string
    - domain-name string
    - hash-algorithm keyword
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - key-to-certify string
    - password string
    - protection-key string
    - reference string
    - save-as string
    - send-chain
    - subject-dn string
    - with-ca reference
  - key-update
    - ca-profile reference
    - hash-algorithm keyword
    - new-key string
    - old-certificate string
    - old-key string
    - save-as string
  - poll
    - ca-profile reference
  - convert-file
    - force
    - format keyword
    - [input-file] string
    - [output-file] string
  - crl-update
    - ca-profile reference
  - est
    - ca-certificates
    - est-profile string
    - force
    - output-url string
  - enroll
    - domain-name string
    - est-profile string
    - force
    - hash-algorithm keyword
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - key string
    - output-file string
    - subject-dn string
    - validate-certificate-chain
  - renew
    - certificate string
    - est-profile string
    - force
    - hash-algorithm keyword
    - key string
    - output-file string
    - validate-certificate-chain
  - export
    - format keyword
    - input-file string
    - key-file string
    - output-url string
    - password string

```

## admin system security pki export type

```

- type keyword
- generate-csr
  - domain-name string
  - hash-algorithm keyword
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - key-url string
  - output-url string
  - subject-dn string
  - use-printable
- generate-keypair
  - dsa-key-size number
  - ecdsa-curve keyword
  - rsa-key-size number
  - [save-path] string
- import
  - format keyword
  - input-url string
  - output-file string
  - password string
  - type keyword
  - validate-certificate-chain
- reload
  - application keyword
  - certificate string
  - key string
- show
  - file-content
    - [file-path] string
    - format keyword
    - password string
    - type keyword
- update-certificate
  - certificate reference
- secure-boot
- activate
  - card reference
  - confirmation-code string
  - serial-number string
- revoke-key
  - card reference
  - confirmation-code string
  - serial-number string
- update-key
  - card reference
  - confirmation-code string
  - serial-number string
  - software-image string
- validate
  - software-image string
- system-password
  - admin-password
- telemetry
  - grpc
    - cancel
    - all
    - subscription-id number
- tech-support
  - [url] string

```

## 2.1.1 admin command descriptions

### admin

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

### application-assurance

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

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

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

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

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

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

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

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

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

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

### **upgrade**

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

### **upgrade**

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



---

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

## clear

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

## security

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

## lockout

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

## all

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

---

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

### **user string**

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

### **password-history**

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

### **all**

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

### **user string**

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

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

## disconnect

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

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

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

## op-table-bypass *boolean*

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

## session-id *number*

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

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

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

### **username** *string*

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

### **ipsec**

Synopsis	Perform IPsec operations
Context	<a href="#">admin ipsec</a>
Tree	<a href="#">ipsec</a>
Introduced	23.10.R1
Platforms	All

### **show**

Synopsis	Display IPsec information
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Context	<a href="#">admin ipsec show</a>
Tree	<a href="#">show</a>
Introduced	23.10.R1
Platforms	All

## key

Synopsis	Display IPsec key history
Context	<a href="#">admin ipsec show key</a>
Tree	<a href="#">key</a>
Introduced	23.10.R1
Platforms	All

## gateway *string*

Synopsis	IPsec gateway name
Context	<a href="#">admin ipsec show key gateway <i>string</i></a>
Tree	<a href="#">gateway</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: ( <b>gateway</b> , <b>peer-tunnel-ip-address</b> , and <b>peer-tunnel-port</b> ), <b>ip-tunnel</b> , or <b>ipsec-tunnel</b> .
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-tunnel *string*

Synopsis	IPsec transport mode IP tunnel name
Context	<a href="#">admin ipsec show key ip-tunnel <i>string</i></a>
Tree	<a href="#">ip-tunnel</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: ( <b>gateway</b> , <b>peer-tunnel-ip-address</b> , and <b>peer-tunnel-port</b> ), <b>ip-tunnel</b> , or <b>ipsec-tunnel</b> .
Introduced	23.10.R1
Platforms	All

**ipsec-tunnel *string***

Synopsis	IPsec tunnel name
Context	<a href="#">admin ipsec show key ipsec-tunnel <i>string</i></a>
Tree	<a href="#">ipsec-tunnel</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: ( <b>gateway</b> , <b>peer-tunnel-ip-address</b> , and <b>peer-tunnel-port</b> ), <b>ip-tunnel</b> , or <b>ipsec-tunnel</b> .
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-tunnel-ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**

Synopsis	Dynamic tunnel IP address
Context	<a href="#">admin ipsec show key peer-tunnel-ip-address (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">peer-tunnel-ip-address</a>
Notes	The following elements are part of a mandatory choice: ( <b>gateway</b> , <b>peer-tunnel-ip-address</b> , and <b>peer-tunnel-port</b> ), <b>ip-tunnel</b> , or <b>ipsec-tunnel</b> .
Introduced	23.10.R1
Platforms	All

**peer-tunnel-port *number***

Synopsis	Dynamic tunnel port
Context	<a href="#">admin ipsec show key peer-tunnel-port <i>number</i></a>
Tree	<a href="#">peer-tunnel-port</a>
Range	0   1 to 65535
Notes	The following elements are part of a mandatory choice: ( <b>gateway</b> , <b>peer-tunnel-ip-address</b> , and <b>peer-tunnel-port</b> ), <b>ip-tunnel</b> , or <b>ipsec-tunnel</b> .
Introduced	23.10.R1
Platforms	All

**type *keyword***

Synopsis	Key type
Context	<a href="#">admin ipsec show key type <i>keyword</i></a>

Tree	<a href="#">type</a>
Options	ike, child
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## nat

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

## save-deterministic-script

Synopsis	Save script that computes deterministic NAT map entries
Context	<a href="#">admin nat save-deterministic-script</a>
Tree	<a href="#">save-deterministic-script</a>
Introduced	21.2.R1
Platforms	All

## reboot

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

## [card] keyword

Synopsis	Card to reboot
Context	<a href="#">admin reboot [card] keyword</a>
Tree	<a href="#">[card]</a>

---

Options	active, standby, upgrade
Introduced	16.0.R1
Platforms	All

## hold

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

## now

Synopsis	Reboot immediately without prompts or confirmation
Context	<a href="#">admin reboot now</a>
Tree	<a href="#">now</a>
Introduced	16.0.R1
Platforms	All

## redundancy

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

## force-switchover

Synopsis	Force a switchover to the standby CPM
Context	<a href="#">admin redundancy force-switchover</a>
Tree	<a href="#">force-switchover</a>
Introduced	16.0.R1
Platforms	All



## ignore-status

Synopsis	Switch to the standby CPM regardless of its status
Context	<a href="#">admin redundancy force-switchover ignore-status</a>
Tree	<a href="#">ignore-status</a>
Introduced	19.10.R1
Platforms	7950 XRS

## now

Synopsis	Force the switchover to the standby CPM immediately
Context	<a href="#">admin redundancy force-switchover now</a>
Tree	<a href="#">now</a>
Introduced	16.0.R1
Platforms	All

## synchronize

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

## boot-environment

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

## certificate

Synopsis	Synchronize imported certificate, key, and CRL files
Context	<a href="#">admin redundancy synchronize certificate</a>
Tree	<a href="#">certificate</a>
Notes	The following elements are part of a mandatory choice: <b>boot-environment</b> , <b>certificate</b> , or <b>configuration</b> .
Introduced	23.3.R1
Platforms	All

## configuration

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

## satellite

Synopsis	Perform administrative operations for satellites
Context	<a href="#">admin satellite</a>
Tree	<a href="#">satellite</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

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

Synopsis	Enter the <b>ethernet-satellite</b> list instance
Context	<a href="#">admin satellite ethernet-satellite</a> <i>reference</i>
Tree	<a href="#">ethernet-satellite</a>
Introduced	22.2.R1

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

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

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

### **reboot**

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

### **now**

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

### **upgrade**

Synopsis Initiate a firmware image update during the reboot  
Context [admin satellite ethernet-satellite reference reboot upgrade](#)  
Tree [upgrade](#)  
Introduced 22.2.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## synchronize

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

## tech-support

Synopsis	Save satellite technical support information
Context	<a href="#">admin satellite ethernet-satellite</a> <i>reference</i> <a href="#">tech-support</a>
Tree	<a href="#">tech-support</a>
Description	<p>This command creates a system core dump. If no file URL is specified and the <b>ts-location</b> command is configured in the <b>configure system security tech-support</b> context, the technical support file is automatically generated by the system with the file name based on the system name and the date and time, and is saved to the directory indicated by the <b>ts-location</b> configuration.</p> <p>The format of the auto-generated file name is ts-XXXXX.YYYYMMDD.HHMMUTC.dat, where:</p> <ul style="list-style-type: none"> <li>• XXXXX is the system name with special characters expanded to avoid problems with file systems (for example, a period (.) is expanded to %2E)</li> <li>• YYYYMMDD is the date with leading zeros on the year, month, and day</li> <li>• HHMM is the hours and minutes in UTC time (24 hour format, always 4 characters, with leading zeros on the hours and minutes)</li> </ul> <p><b>Note:</b> This command is not supported over non-interactive interfaces (for example, NETCONF).</p> <p><b>Note:</b> This command should only be used with authorized direction from the Nokia Technical Assistance Center (TAC).</p>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### [url] string

Synopsis	URL to save technical support information
Context	<a href="#">admin satellite ethernet-satellite</a> <i>reference</i> <a href="#">tech-support</a> <a href="#">[url]</a> <i>string</i>
Tree	<a href="#">[url]</a>
String Length	1 to 180

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Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## save

Synopsis	Perform configuration save operations
Context	<a href="#">admin save</a>
Tree	<a href="#">save</a>
Introduced	16.0.R1
Platforms	All

## bof

Synopsis	Save the BOF region configuration
Context	<a href="#">admin save bof</a>
Tree	<a href="#">bof</a>
Notes	The following elements are part of a choice: <b>bof</b> , <b>configure</b> , <b>debug</b> , or <b>li</b> .
Introduced	20.10.R1
Platforms	All

## configure

Synopsis	Save the configure region configuration
Context	<a href="#">admin save configure</a>
Tree	<a href="#">configure</a>
Notes	The following elements are part of a choice: <b>bof</b> , <b>configure</b> , <b>debug</b> , or <b>li</b> .
Introduced	20.7.R2
Platforms	All

## debug

Synopsis	Save the debug region configuration
Context	<a href="#">admin save debug</a>
Tree	<a href="#">debug</a>

---

Notes	The following elements are part of a choice: <b>bof</b> , <b>configure</b> , <b>debug</b> , or <b>li</b> .
Introduced	21.5.R1
Platforms	All

## **li**

Synopsis	Save the LI region configuration
Context	<a href="#">admin save li</a>
Tree	<a href="#">li</a>
Notes	The following elements are part of a choice: <b>bof</b> , <b>configure</b> , <b>debug</b> , or <b>li</b> .
Introduced	19.10.R1
Platforms	All

## **[url] string**

Synopsis	Location to save the configuration
Context	<a href="#">admin save [url] string</a>
Tree	<a href="#">[url]</a>
Introduced	16.0.R1
Platforms	All

## **set**

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

## **time**

Synopsis	System date and time
Context	<a href="#">admin set time</a>
Tree	<a href="#">time</a>
Introduced	19.10.R1

Platforms All

### **[system-time]** *string*

Synopsis System date and time

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

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

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

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

### **show**

Synopsis Enter the **show** context

Context [admin show](#)

Tree [show](#)

Description The **admin show** commands display the same configuration as the **info** command but are not subject to command authorization and do not require configuration mode access.

Introduced 16.0.R1

Platforms All

### **configuration**

Synopsis Show the current configuration

Context [admin show configuration](#)

Tree [configuration](#)

Introduced 16.0.R1

Platforms All

### **bof**

Synopsis Show the BOF region configuration

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Context	<a href="#">admin show configuration bof</a>
Tree	<a href="#">bof</a>
Notes	The following elements are part of a choice: <b>bof</b> , <b>configure</b> , <b>debug</b> , or <b>li</b> .
Introduced	20.10.R1
Platforms	All

### **booted**

Synopsis	Show the booted BOF configuration
Context	<a href="#">admin show configuration booted</a>
Tree	<a href="#">booted</a>
Notes	The following elements are part of a choice: <b>booted</b> or <b>cflash-id</b> .
Introduced	20.10.R1
Platforms	All

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

Synopsis	Show the BOF configuration file on a compact flash
Context	<a href="#">admin show configuration cflash-id string</a>
Tree	<a href="#">cflash-id</a>
String Length	4 to 6
Notes	The following elements are part of a choice: <b>booted</b> or <b>cflash-id</b> .
Introduced	20.10.R1
Platforms	All

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

Synopsis	Absolute path or relative path from '/'
Context	<a href="#">admin show configuration [cli-path] string</a>
Tree	<a href="#">[cli-path]</a>
Introduced	21.10.R1
Platforms	All



## configure

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

## debug

Synopsis	Show the debug region configuration
Context	<a href="#">admin show configuration debug</a>
Tree	<a href="#">debug</a>
Notes	The following elements are part of a choice: <b>bof</b> , <b>configure</b> , <b>debug</b> , or <b>li</b> .
Introduced	21.5.R1
Platforms	All

## depth *number*

Synopsis	Depth limit from the pwc
Context	<a href="#">admin show configuration depth <i>number</i></a>
Tree	<a href="#">depth</a>
Range	1 to 4294967040
Introduced	23.10.R1
Platforms	All

## detail

Synopsis	Include default and unconfigured values
Context	<a href="#">admin show configuration detail</a>
Tree	<a href="#">detail</a>
Introduced	20.7.R1
Platforms	All

## flat

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

## full-context

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

## intended

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

## json

Synopsis	Show the output in indented JSON format
Context	<a href="#">admin show configuration json</a>
Tree	<a href="#">json</a>
Notes	The following elements are part of a choice: <b>flat</b> , <b>full-context</b> , <b>json</b> , or <b>xml</b> .
Introduced	19.10.R1
Platforms	All

## li

Synopsis	Show the LI region configuration
Context	<a href="#">admin show configuration li</a>
Tree	<a href="#">li</a>
Notes	The following elements are part of a choice: <b>bof</b> , <b>configure</b> , <b>debug</b> , or <b>li</b> .
Introduced	19.10.R1
Platforms	All

## running

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

## units

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

## xml

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

## support-mode

Synopsis	Enable the kernel and shell commands
Context	<a href="#">admin support-mode</a>
Tree	<a href="#">support-mode</a>
Description	Commands in this context enable the <b>kernel</b> and <b>shell</b> commands. <b>Note:</b> These commands should be used only with authorized direction from Nokia support.
Introduced	16.0.R4
Platforms	All

## password

Synopsis	Enter support mode command passwords
Context	<a href="#">admin support-mode password</a>
Tree	<a href="#">password</a>
Introduced	23.10.R1
Platforms	All

## kernel *string*

Synopsis	Kernel command password
Context	<a href="#">admin support-mode password kernel <i>string</i></a>
Tree	<a href="#">kernel</a>
String Length	1 to 199
Notes	The following elements are part of a mandatory choice: <b>kernel</b> or <b>shell</b> .
Introduced	23.10.R1
Platforms	All

## shell *string*

Synopsis	Shell command password
Context	<a href="#">admin support-mode password shell <i>string</i></a>
Tree	<a href="#">shell</a>
String Length	1 to 199

---

Notes	The following elements are part of a mandatory choice: <b>kernel</b> or <b>shell</b> .
Introduced	23.10.R1
Platforms	All

## system

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

## license

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

## activate

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

## [file-url] *string*

Synopsis	Location of the license file to activate
Context	<a href="#">admin system license activate [file-url] string</a>
Tree	<a href="#">[file-url]</a>
String Length	1 to 256
Introduced	19.10.R1

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Platforms All

### now

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

### clear

Synopsis Clear system license  
Context [admin system license clear](#)  
Tree [clear](#)  
Description This command removes the entitlements that were installed using a license file.  
All the entitlements must be unallocated; otherwise, the command fails.  
Introduced 23.7.R1  
Platforms All

### now

Synopsis Clear license entitlements immediately  
Context [admin system license clear now](#)  
Tree [now](#)  
Introduced 23.7.R1  
Platforms All

### validate

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

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

Synopsis	Location of the license file to validate
Context	<a href="#">admin system license validate [file-url]</a> <i>string</i>
Tree	<a href="#">[file-url]</a>
String Length	1 to 256
Introduced	19.10.R1
Platforms	All

**management-interface**

Synopsis	Enter the <b>management-interface</b> context
Context	<a href="#">admin system management-interface</a>
Tree	<a href="#">management-interface</a>
Introduced	21.5.R1
Platforms	All

**commit**

Synopsis	Enter the <b>commit</b> context
Context	<a href="#">admin system management-interface commit</a>
Tree	<a href="#">commit</a>
Introduced	23.10.R1
Platforms	All

**confirmed**

Synopsis	Enter the <b>confirmed</b> context
Context	<a href="#">admin system management-interface commit confirmed</a>
Tree	<a href="#">confirmed</a>
Description	Commands in this context accept or cancel a confirmed commit that is in progress and that was started by another configuration session.
Introduced	23.10.R1
Platforms	All

## accept

Synopsis	Accept commit confirmed and cancel automatic rollback
Context	<a href="#">admin system management-interface commit confirmed accept</a>
Tree	<a href="#">accept</a>
Introduced	23.10.R1
Platforms	All

## cancel

Synopsis	Cancel commit confirmed and roll back changes
Context	<a href="#">admin system management-interface commit confirmed cancel</a>
Tree	<a href="#">cancel</a>
Description	When specified, the router rolls back the configuration and returns the changes to the candidate.
Introduced	23.10.R1
Platforms	All

## operations

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

## delete-operation

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



Platforms All

### **[delete-id]** *number*

Synopsis ID of the operation to remove

Context [admin system management-interface operations delete-operation \[delete-id\] number](#)

Tree [\[delete-id\]](#)

Range 1 to 10000

Notes This element is mandatory.

Introduced 21.5.R1

Platforms All

### **op-table-bypass** *boolean*

Synopsis Avoid operation ID allocation

Context [admin system management-interface operations delete-operation op-table-bypass boolean](#)

Tree [op-table-bypass](#)

Description When configured to **true**, the system bypasses the YANG-based operations infrastructure and avoids the allocation of an operation ID. This is useful if the global operations table is full and a delete operation or **admin disconnect** is required.

Introduced 21.5.R1

Platforms All

### **stop-operation**

Synopsis Stop the execution of an operational command

Context [admin system management-interface operations stop-operation](#)

Tree [stop-operation](#)

Description This command stops the execution of an operational command.  
An operation launched as "asynchronous" is not deleted from the system when it is stopped. Status and other data associated with the operation persist until the operation is explicitly deleted using the delete operation command or a retention timeout.

Introduced 21.5.R1

Platforms All

**op-table-bypass** *boolean*

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

**[stop-id]** *number*

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

**security**

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

**hash-control**

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

Platforms All

## custom-hash

Synopsis Custom encryption  
 Context [admin system security hash-control custom-hash](#)  
 Tree [custom-hash](#)  
 Introduced 16.0.R6  
 Platforms All

## algorithm *keyword*

Synopsis Algorithm for custom encryption  
 Context [admin system security hash-control custom-hash algorithm \*keyword\*](#)  
 Tree [algorithm](#)  
 Description This command configures the algorithm for custom encryption. The encryption uses ECB mode, PKCS#7 padding, and Base64 encoding.  
 Options 3des – DES-EDE3-ECB with PKCS #5 padding  
 aes128 – AES-128-ECB with PKCS #7 padding  
 aes192 – AES-192-ECB with PKCS #7 padding  
 aes256 – AES-256-ECB with PKCS #7 padding  
 Notes This element is mandatory.  
 Introduced 16.0.R6  
 Platforms All

## key *string*

Synopsis Key for encryption algorithm  
 Context [admin system security hash-control custom-hash key \*string\*](#)  
 Tree [key](#)  
 String Length 1 to 71  
 Notes This element is mandatory.  
 Introduced 16.0.R6  
 Platforms All

## remove-custom-hash

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

## pki

Synopsis	Perform PKI related operations
Context	<a href="#">admin system security pki</a>
Tree	<a href="#">pki</a>
Description	Commands in this context specify options for public key infrastructure operations.
Introduced	23.3.R1
Platforms	All

## clear-ocsp-cache

Synopsis	Clear the current OCSP response cache
Context	<a href="#">admin system security pki clear-ocsp-cache</a>
Tree	<a href="#">clear-ocsp-cache</a>
Introduced	23.3.R1
Platforms	All

## [entry-id] *number*

Synopsis	Local OCSP response cache entry ID to clear
Context	<a href="#">admin system security pki clear-ocsp-cache [entry-id] number</a>
Tree	<a href="#">[entry-id]</a>
Range	1 to 2000
Introduced	23.3.R1
Platforms	All

## cmpv2

Synopsis	Perform CMPv2 operations
Context	<a href="#">admin system security pki cmpv2</a>
Tree	<a href="#">cmpv2</a>
Description	Commands in this context specify options for Certificate Management Protocol v2 (CMPv2) operations.
Introduced	23.3.R1
Platforms	All

## cert-request

Synopsis	Request an additional certificate
Context	<a href="#">admin system security pki cmpv2 cert-request</a>
Tree	<a href="#">cert-request</a>
Description	<p>When specified, the system requests an additional certificate after the initial certificate has been obtained from the CA.</p> <p>The request is authenticated by a signature signed by the current key, along with the current certificate. The hash algorithm used for the signature depends on the key type:</p> <ul style="list-style-type: none"> <li>• DSA key - SHA1</li> <li>• RSA key: MD5   SHA1   SHA224   SHA256   SHA384   SHA512 (default is SHA1)</li> <li>• ECDSA key: SHA1   SHA224   SHA256   SHA384   SHA512 (default is SHA256)</li> </ul> <p>CA may not return a certificate immediately, for example, if the request process requires manual intervention. The <b>poll</b> command can be used to poll the status of the request.</p>
Introduced	23.3.R1
Platforms	All

## ca-profile *reference*

Synopsis	PKI CA profile name
Context	<a href="#">admin system security pki cmpv2 cert-request ca-profile <i>reference</i></a>
Tree	<a href="#">ca-profile</a>
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	<b>state system security pki ca-profile <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.3.R1

Platforms All

### **current-certificate** *string*

Synopsis Existing imported certificate file to create request  
Context [admin system security pki cmpv2 cert-request current-certificate](#) *string*  
Tree [current-certificate](#)  
String Length 1 to 95  
Notes This element is mandatory.  
Introduced 23.3.R1  
Platforms All

### **current-key** *string*

Synopsis Imported key file used to create the request  
Context [admin system security pki cmpv2 cert-request current-key](#) *string*  
Tree [current-key](#)  
Description This command specifies the imported key file corresponding to the existing imported certificate file used to create the request.  
String Length 1 to 95  
Notes This element is mandatory.  
Introduced 23.3.R1  
Platforms All

### **domain-name** *string*

Synopsis FQDNs for the Subject Alternative Name  
Context [admin system security pki cmpv2 cert-request domain-name](#) *string*  
Tree [domain-name](#)  
Description This command specifies the Fully Qualified Domain Names (FQDNs) for the Subject Alternative Name extension of the requesting certificate, separated by commas.  
String Length 1 to 512  
Introduced 23.3.R1  
Platforms All

**hash-algorithm** *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	<a href="#">admin system security pki cmpv2 cert-request hash-algorithm</a> <i>keyword</i>
Tree	<a href="#">hash-algorithm</a>
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address for the Subject Alternative Name
Context	<a href="#">admin system security pki cmpv2 cert-request ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	23.3.R1
Platforms	All

**new-key** *string*

Synopsis	New imported key file to create certificate request
Context	<a href="#">admin system security pki cmpv2 cert-request new-key</a> <i>string</i>
Tree	<a href="#">new-key</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**save-as** *string*

Synopsis	Full path to save the result certificate
Context	<a href="#">admin system security pki cmpv2 cert-request save-as</a> <i>string</i>
Tree	<a href="#">save-as</a>
String Length	1 to 200

Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **subject-dn** *string*

Synopsis	Subject of the requesting certificate
Context	<a href="#">admin system security pki cmpv2 cert-request subject-dn</a> <i>string</i>
Tree	<a href="#">subject-dn</a>
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C   ST   O   OU   CN}.
String Length	1 to 256
Introduced	23.3.R1
Platforms	All

### **clear-request**

Synopsis	Clear pending CMPv2 requests
Context	<a href="#">admin system security pki cmpv2 clear-request</a>
Tree	<a href="#">clear-request</a>
Description	When specified, the system clears pending CMPv2 requests for the specified CA. If no requests are pending, the system clears the saved result of the previous request
Introduced	23.3.R1
Platforms	All

### **ca-profile** *reference*

Synopsis	PKI CA profile name
Context	<a href="#">admin system security pki cmpv2 clear-request ca-profile</a> <i>reference</i>
Tree	<a href="#">ca-profile</a>
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	<b>state system security pki ca-profile</b> <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1



Platforms All

## initial-registration

Synopsis Request initial certificate using the CMPv2 protocol

Context [admin system security pki cmpv2 initial-registration](#)

Tree [initial-registration](#)

Description When specified, the system requests the initial certificate from the CA using the CMPv2 initial registration procedure.

The **ca-profile** parameter specifies a CA profile which includes CMP server information.

The **key-to-certify** parameter is an imported key file to be certified by the CA.

The request is authenticated via one of the following methods:

- A password and a reference number that pre-distributed by CA via out-of-band means. The specified password and reference number are not necessarily in the key-list configured in the corresponding CA-Profile. If key-list is not configured in the corresponding CA profile, the system uses the existing password to authenticate the CMPv2 packets from server if it is in password protection. If key-list is configured in the corresponding CA profile and the server does not send SenderKID, the system uses the lexicographical first key in the key-list to authenticate the CMPv2 packets from the server in case it is in password protection mode.
- A signature signed by the protection-key or key-to-certify, optionally with with the corresponding certificate. If the **protection-key** command is not specified, the system uses the **key-to-certify** configuration for message protection. The hash algorithm used for the signature depends on the key type. See the **cert-request** command for details. Optionally, the system may send a certificate or a chain of certificates in the extraCertsfield. The certificate is specified by the **certificate** parameter and must include the public key of the key used for message protection. Sending a chain is enabled by specifying the **send-chain** and **with-ca** command options.

The **subject-dn** command specifies the subject of the requesting certificate.

The **save-as** command specifies the full path name for saving the result certificate.

The CA may not return the certificate immediately, for example, if the request process requires manual intervention. In such cases, the **poll** command can be used to poll the status of the request.

Introduced 23.3.R1

Platforms All

## ca-profile reference

Synopsis PKI CA profile name

Context [admin system security pki cmpv2 initial-registration ca-profile reference](#)

Tree	<a href="#">ca-profile</a>
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	<b>state system security pki ca-profile</b> <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **certificate** *string*

Synopsis	Filename of the certificate for the protection key
Context	<a href="#">admin system security pki cmpv2 initial-registration certificate</a> <i>string</i>
Tree	<a href="#">certificate</a>
String Length	1 to 95
Notes	The following elements are part of a mandatory choice: ( <b>certificate</b> , <b>hash-algorithm</b> , <b>protection-key</b> , <b>send-chain</b> , and <b>with-ca</b> ) or ( <b>password</b> and <b>reference</b> ).
Introduced	23.3.R1
Platforms	All

### **domain-name** *string*

Synopsis	FQDNs for the Subject Alternative Name
Context	<a href="#">admin system security pki cmpv2 initial-registration domain-name</a> <i>string</i>
Tree	<a href="#">domain-name</a>
Description	This command specifies the Fully Qualified Domain Names (FQDNs) for the Subject Alternative Name extension of the requesting certificate, separated by commas.
String Length	1 to 512
Introduced	23.3.R1
Platforms	All

### **hash-algorithm** *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	<a href="#">admin system security pki cmpv2 initial-registration hash-algorithm</a> <i>keyword</i>
Tree	<a href="#">hash-algorithm</a>

Options	md5, sha1, sha224, sha256, sha384, sha512
Notes	The following elements are part of a mandatory choice: ( <b>certificate</b> , <b>hash-algorithm</b> , <b>protection-key</b> , <b>send-chain</b> , and <b>with-ca</b> ) or ( <b>password</b> and <b>reference</b> ).
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address for the Subject Alternative Name
Context	<a href="#">admin system security pki cmpv2 initial-registration ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	23.3.R1
Platforms	All

### **key-to-certify** *string*

Synopsis	Name of the key file used to create initial request
Context	<a href="#">admin system security pki cmpv2 initial-registration key-to-certify</a> <i>string</i>
Tree	<a href="#">key-to-certify</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **password** *string*

Synopsis	Password for message protection
Context	<a href="#">admin system security pki cmpv2 initial-registration password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 64
Notes	The following elements are part of a mandatory choice: ( <b>certificate</b> , <b>hash-algorithm</b> , <b>protection-key</b> , <b>send-chain</b> , and <b>with-ca</b> ) or ( <b>password</b> and <b>reference</b> ).
Introduced	23.3.R1

Platforms All

### **protection-key** *string*

Synopsis Key file used to generate message protection signature

Context [admin system security pki cmpv2 initial-registration protection-key](#) *string*

Tree [protection-key](#)

String Length 1 to 95

Notes The following elements are part of a mandatory choice: (**certificate**, **hash-algorithm**, **protection-key**, **send-chain**, and **with-ca**) or (**password** and **reference**).

Introduced 23.3.R1

Platforms All

### **reference** *string*

Synopsis Password reference number

Context [admin system security pki cmpv2 initial-registration reference](#) *string*

Tree [reference](#)

String Length 1 to 64

Notes The following elements are part of a mandatory choice: (**certificate**, **hash-algorithm**, **protection-key**, **send-chain**, and **with-ca**) or (**password** and **reference**).

Introduced 23.3.R1

Platforms All

### **save-as** *string*

Synopsis Full path to save the result certificate

Context [admin system security pki cmpv2 initial-registration save-as](#) *string*

Tree [save-as](#)

String Length 1 to 200

Notes This element is mandatory.

Introduced 23.3.R1

Platforms All

## send-chain

Synopsis	Send a certificate chain
Context	<a href="#">admin system security pki cmpv2 initial-registration send-chain</a>
Tree	<a href="#">send-chain</a>
Notes	The following elements are part of a mandatory choice: ( <b>certificate</b> , <b>hash-algorithm</b> , <b>protection-key</b> , <b>send-chain</b> , and <b>with-ca</b> ) or ( <b>password</b> and <b>reference</b> ).
Introduced	23.3.R1
Platforms	All

## subject-dn *string*

Synopsis	Subject of the requesting certificate
Context	<a href="#">admin system security pki cmpv2 initial-registration subject-dn <i>string</i></a>
Tree	<a href="#">subject-dn</a>
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C   ST   O   OU   CN}.
String Length	1 to 256
Introduced	23.3.R1
Platforms	All

## with-ca *reference*

Synopsis	Name of CA profile with certificate in the send chain
Context	<a href="#">admin system security pki cmpv2 initial-registration with-ca <i>reference</i></a>
Tree	<a href="#">with-ca</a>
Reference	<b>state system security pki ca-profile <i>string</i></b>
Notes	The following elements are part of a mandatory choice: ( <b>certificate</b> , <b>hash-algorithm</b> , <b>protection-key</b> , <b>send-chain</b> , and <b>with-ca</b> ) or ( <b>password</b> and <b>reference</b> ).
Introduced	23.3.R1
Platforms	All

## key-update

Synopsis	Request new certificate to update existing certificate
Context	<a href="#">admin system security pki cmpv2 key-update</a>

Tree	<a href="#">key-update</a>
Description	When specified, the system requests a new certificate from the CA to update an existing certificate due to reasons such as a key refresh or to replace a compromised key.  The CA may not return the certificate immediately, for example, if the request process requires manual intervention. In these cases, the <b>poll</b> command can be used to poll the status of the request.
Introduced	23.3.R1
Platforms	All

### **ca-profile** *reference*

Synopsis	PKI CA profile name
Context	<a href="#">admin system security pki cmpv2 key-update ca-profile</a> <i>reference</i>
Tree	<a href="#">ca-profile</a>
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	<b>state system security pki ca-profile</b> <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **hash-algorithm** *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	<a href="#">admin system security pki cmpv2 key-update hash-algorithm</a> <i>keyword</i>
Tree	<a href="#">hash-algorithm</a>
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

### **new-key** *string*

Synopsis	Name of new imported key file used for the key update
Context	<a href="#">admin system security pki cmpv2 key-update new-key</a> <i>string</i>
Tree	<a href="#">new-key</a>
String Length	1 to 95

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Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **old-certificate** *string*

Synopsis	Name of the old certificate file to be replaced
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">cmpv2</a> <a href="#">key-update</a> <a href="#">old-certificate</a> <i>string</i>
Tree	<a href="#">old-certificate</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **old-key** *string*

Synopsis	Name of the old key file to be replaced
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">cmpv2</a> <a href="#">key-update</a> <a href="#">old-key</a> <i>string</i>
Tree	<a href="#">old-key</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **save-as** *string*

Synopsis	Full path to save the result certificate file
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">cmpv2</a> <a href="#">key-update</a> <a href="#">save-as</a> <i>string</i>
Tree	<a href="#">save-as</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

## poll

Synopsis	Poll the CMPv2 server for pending request status
Context	<a href="#">admin system security pki cmpv2 poll</a>
Tree	<a href="#">poll</a>
Description	<p>When specified, the system polls the status of the pending CMPv2 request toward the specified CA.</p> <p>If the response is ready, the system resumes the CMPv2 protocol exchange with the server.</p> <p>SR OS allows only one pending CMP request per CA; therefore, no new request is allowed when a pending request is present.</p>
Introduced	23.3.R1
Platforms	All

## ca-profile *reference*

Synopsis	PKI CA profile name
Context	<a href="#">admin system security pki cmpv2 poll ca-profile <i>reference</i></a>
Tree	<a href="#">ca-profile</a>
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	<b>state system security pki ca-profile <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

## convert-file

Synopsis	Convert imported file between secure and legacy format
Context	<a href="#">admin system security pki convert-file</a>
Tree	<a href="#">convert-file</a>
Introduced	23.3.R1
Platforms	All

## force

Synopsis	Force the conversion
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Context	<a href="#">admin system security pki convert-file force</a>
Tree	<a href="#">force</a>
Description	When specified, the system forces the conversion of imported certificates and keys even if files with the same output names exist.
Introduced	23.3.R1
Platforms	All

**format** *keyword*

Synopsis	File format to convert to
Context	<a href="#">admin system security pki convert-file format keyword</a>
Tree	<a href="#">format</a>
Options	secure, legacy
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**[input-file]** *string*

Synopsis	Name of the file to be converted
Context	<a href="#">admin system security pki convert-file [input-file] string</a>
Tree	<a href="#">[input-file]</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**[output-file]** *string*

Synopsis	Output filename
Context	<a href="#">admin system security pki convert-file [output-file] string</a>
Tree	<a href="#">[output-file]</a>
Description	This command specifies the output filename. If the filename already exists, the system prompts the user to proceed or aborts if the <b>force</b> command is unconfigured.
String Length	1 to 95

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Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **crl-update**

Synopsis	Trigger the CRL update for the CA profile
Context	<a href="#">admin system security pki crl-update</a>
Tree	<a href="#">crl-update</a>
Introduced	23.3.R1
Platforms	All

### **ca-profile** *reference*

Synopsis	PKI CA profile name
Context	<a href="#">admin system security pki crl-update ca-profile</a> <i>reference</i>
Tree	<a href="#">ca-profile</a>
Description	This command configures the CA profile that contains the CMPv2 configuration like server URL.
Reference	<b>state system security pki ca-profile</b> <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **est**

Synopsis	Perform Enrollment over Secure Transport operations
Context	<a href="#">admin system security pki est</a>
Tree	<a href="#">est</a>
Description	Commands in this context configure command options for Enrollment over Secure Transport (EST) protocol operations.
Introduced	23.3.R1
Platforms	All

## ca-certificates

Synopsis	Download CA certificates from the EST server
Context	<a href="#">admin system security pki est ca-certificates</a>
Tree	<a href="#">ca-certificates</a>
Description	This command downloads a Certificate Authority (CA) certificate from an EST server specified by the profile name.
Introduced	23.3.R1
Platforms	All

## est-profile *string*

Synopsis	PKI EST profile name
Context	<a href="#">admin system security pki est ca-certificates est-profile string</a>
Tree	<a href="#">est-profile</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

## force

Synopsis	Force an overwrite of the result file
Context	<a href="#">admin system security pki est ca-certificates force</a>
Tree	<a href="#">force</a>
Introduced	23.3.R1
Platforms	All

## output-url *string*

Synopsis	Path to the result file
Context	<a href="#">admin system security pki est ca-certificates output-url string</a>
Tree	<a href="#">output-url</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1

Platforms All

## enroll

Synopsis Enroll a new certificate with CA with the EST protocol

Context [admin system security pki est enroll](#)

Tree [enroll](#)

Description When specified, the system enrolls a new certificate with Certificate Authority (CA) by the EST protocol specified with the **est-profile** command with a imported private key specified by the **key** command.

The **est-profile** command specifies the authentication between the system and EST server.

The **hash-alg**, **subject-dn**, **domain-name**, and **ip-address** commands are used to generate the Certificate Signing Request (CSR) in the EST request message. The **domain-name** and **ip-address** commands are used as subject alternative names.

If **validate-certificate-chain** is specified, the system validates the chain of result certificate before importing it. The certificate chain is the chain of all certificates from the result certificate to the issuing CA. The result certificate is the new certificate returned by the EST server.

The result certificate is imported and saved with the filename specified by the **output-file** command. If the **force** command is specified, the system overwrites the existing file with same name as the output file.

Introduced 23.3.R1

Platforms All

## domain-name *string*

Synopsis FQDNs for the Subject Alternative Name

Context [admin system security pki est enroll domain-name string](#)

Tree [domain-name](#)

Description This command specifies the Fully Qualified Domain Names (FQDNs) for the Subject Alternative Name extension of the requesting certificate, separated by commas.

String Length 1 to 512

Introduced 23.3.R1

Platforms All

## est-profile *string*

Synopsis PKI EST profile name

Context	<a href="#">admin system security pki est enroll est-profile</a> <i>string</i>
Tree	<a href="#">est-profile</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**force**

Synopsis	Force an overwrite of the result file
Context	<a href="#">admin system security pki est enroll force</a>
Tree	<a href="#">force</a>
Introduced	23.3.R1
Platforms	All

**hash-algorithm** *keyword*

Synopsis	Hash algorithm used for the certificate signature
Context	<a href="#">admin system security pki est enroll hash-algorithm</a> <i>keyword</i>
Tree	<a href="#">hash-algorithm</a>
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address for the Subject Alternative Name
Context	<a href="#">admin system security pki est enroll ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	23.3.R1
Platforms	All

### **key string**

Synopsis	Name of the imported the key file to enroll
Context	<a href="#">admin system security pki est enroll key string</a>
Tree	<a href="#">key</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **output-file string**

Synopsis	Name of the result file
Context	<a href="#">admin system security pki est enroll output-file string</a>
Tree	<a href="#">output-file</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **subject-dn string**

Synopsis	Subject of the requesting certificate
Context	<a href="#">admin system security pki est enroll subject-dn string</a>
Tree	<a href="#">subject-dn</a>
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C   ST   O   OU   CN}.
String Length	1 to 256
Introduced	23.3.R1
Platforms	All

### **validate-certificate-chain**

Synopsis	Validate result certificate chain before importing
Context	<a href="#">admin system security pki est enroll validate-certificate-chain</a>

Tree	<a href="#">validate-certificate-chain</a>
Introduced	23.3.R1
Platforms	All

## renew

Synopsis	Renew a CA certificate using the EST protocol
Context	<a href="#">admin system security pki est renew</a>
Tree	<a href="#">renew</a>
Description	<p>When specified, the system renews an imported certificate (specified by the <b>certificate</b> command) with a Certificate Authority (CA) using the EST protocol specified by the <b>est-profile</b> parameter, with an imported private key specified the <b>key</b> command. The key can be either the key of the certificate to be renewed or a new key.</p> <p>The authentication between system and EST server is specified by the <b>est-profile</b> parameter.</p> <p>The system uses the <b>hash-alg</b> command to generate the CSR in the EST request message.</p>
Introduced	23.3.R1
Platforms	All

## certificate *string*

Synopsis	Name of the imported certificate file to renew
Context	<a href="#">admin system security pki est renew certificate string</a>
Tree	<a href="#">certificate</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

## est-profile *string*

Synopsis	PKI EST profile name
Context	<a href="#">admin system security pki est renew est-profile string</a>
Tree	<a href="#">est-profile</a>
String Length	1 to 32

Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**force**

Synopsis	Force an overwrite of the result file
Context	<a href="#">admin system security pki est renew force</a>
Tree	<a href="#">force</a>
Introduced	23.3.R1
Platforms	All

**hash-algorithm *keyword***

Synopsis	Hash algorithm used for the certificate signature
Context	<a href="#">admin system security pki est renew hash-algorithm <i>keyword</i></a>
Tree	<a href="#">hash-algorithm</a>
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

**key *string***

Synopsis	Imported key file of the certificate to renew
Context	<a href="#">admin system security pki est renew key <i>string</i></a>
Tree	<a href="#">key</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**output-file *string***

Synopsis	Name of the result file
Context	<a href="#">admin system security pki est renew output-file <i>string</i></a>



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Tree	<a href="#">output-file</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **validate-certificate-chain**

Synopsis	Validate result certificate chain before importing
Context	<a href="#">admin system security pki est renew validate-certificate-chain</a>
Tree	<a href="#">validate-certificate-chain</a>
Introduced	23.3.R1
Platforms	All

### **export**

Synopsis	Export an imported file
Context	<a href="#">admin system security pki export</a>
Tree	<a href="#">export</a>
Introduced	23.3.R1
Platforms	All

### **format** *keyword*

Synopsis	Output file format
Context	<a href="#">admin system security pki export format</a> <i>keyword</i>
Tree	<a href="#">format</a>
Options	pkcs12, pkcs7-der, pkcs7-pem, pem, der
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **input-file** *string*

Synopsis	Name of the file to be exported
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Context	<a href="#">admin system security pki export input-file</a> <i>string</i>
Tree	<a href="#">input-file</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **key-file** *string*

Synopsis	Name of the key file to be exported
Context	<a href="#">admin system security pki export key-file</a> <i>string</i>
Tree	<a href="#">key-file</a>
Description	This command specifies the name of the key file to be exported when the output format may contain the certificate and the key.
String Length	1 to 95
Introduced	23.3.R1
Platforms	All

### **output-url** *string*

Synopsis	Full path to export the result file
Context	<a href="#">admin system security pki export output-url</a> <i>string</i>
Tree	<a href="#">output-url</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **password** *string*

Synopsis	Password used to encrypt the output file
Context	<a href="#">admin system security pki export password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 32
Introduced	23.3.R1

Platforms All

### **type** *keyword*

Synopsis Type of file to be exported  
Context [admin system security pki export type keyword](#)  
Tree [type](#)  
Options certificate, key, crl  
Notes This element is mandatory.  
Introduced 23.3.R1  
Platforms All

### **generate-csr**

Synopsis Generate a PKCS#10 certificate signing request file  
Context [admin system security pki generate-csr](#)  
Tree [generate-csr](#)  
Introduced 23.3.R1  
Platforms All

### **domain-name** *string*

Synopsis FQDNs for the Subject Alternative Name  
Context [admin system security pki generate-csr domain-name string](#)  
Tree [domain-name](#)  
Description This command specifies the Fully Qualified Domain Names (FQDNs) for the Subject Alternative Name extension of the requesting certificate, separated by commas.  
String Length 1 to 512  
Introduced 23.3.R1  
Platforms All

### **hash-algorithm** *keyword*

Synopsis Hash algorithm used for the certificate signature  
Context [admin system security pki generate-csr hash-algorithm keyword](#)

Tree	<a href="#">hash-algorithm</a>
Options	md5, sha1, sha224, sha256, sha384, sha512
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address for the Subject Alternative Name
Context	<a href="#">admin system security pki generate-csr ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Description	This command specifies an IPv4 or IPv6 address for the Subject Alternative Name extension of the requesting certificate.
Introduced	23.3.R1
Platforms	All

### **key-url string**

Synopsis	Full path to the key file used to generate the request
Context	<a href="#">admin system security pki generate-csr key-url string</a>
Tree	<a href="#">key-url</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **output-url string**

Synopsis	Full path to result certificate signing request file
Context	<a href="#">admin system security pki generate-csr output-url string</a>
Tree	<a href="#">output-url</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **subject-dn** *string*

Synopsis	Subject of the requesting certificate
Context	<a href="#">admin system security pki generate-csr subject-dn</a> <i>string</i>
Tree	<a href="#">subject-dn</a>
Description	This command specifies the subject DN attributes used in the certificate request. The format is a comma separated list with the format attr1=val1, attr2=val2, where attrN={C   ST   O   OU   CN}.
String Length	1 to 256
Introduced	23.3.R1
Platforms	All

### **use-printable**

Synopsis	Force ASCII encoding for input subject DN attributes
Context	<a href="#">admin system security pki generate-csr use-printable</a>
Tree	<a href="#">use-printable</a>
Description	When specified, the system forces the use of ASCII encoding for the input subject DN attributes. Otherwise, the system uses UTF-8 encoding.
Introduced	23.3.R1
Platforms	All

### **generate-keypair**

Synopsis	Generate PKI key pair
Context	<a href="#">admin system security pki generate-keypair</a>
Tree	<a href="#">generate-keypair</a>
Description	When specified, the system generates an RSA, DSA, or ECDSA private/public key pair file
Introduced	23.3.R1
Platforms	All

### **dsa-key-size** *number*

Synopsis	Length of the DSA key to be generated
Context	<a href="#">admin system security pki generate-keypair dsa-key-size</a> <i>number</i>

Tree	<a href="#">dsa-key-size</a>
Range	512 to 8192
Default	2048
Notes	The following elements are part of a mandatory choice: <b>dsa-key-size</b> , <b>ecdsa-curve</b> , or <b>rsa-key-size</b> .
Introduced	23.3.R1
Platforms	All

### **ecdsa-curve** *keyword*

Synopsis	Elliptic curve of the ECDSA key to be generated
Context	<a href="#">admin system security pki generate-keypair ecdsa-curve</a> <i>keyword</i>
Tree	<a href="#">ecdsa-curve</a>
Options	secp256r1, secp384r1, secp521r1
Default	secp256r1
Notes	The following elements are part of a mandatory choice: <b>dsa-key-size</b> , <b>ecdsa-curve</b> , or <b>rsa-key-size</b> .
Introduced	23.3.R1
Platforms	All

### **rsa-key-size** *number*

Synopsis	Length of the RSA key to be generated
Context	<a href="#">admin system security pki generate-keypair rsa-key-size</a> <i>number</i>
Tree	<a href="#">rsa-key-size</a>
Range	512 to 8192
Default	2048
Notes	The following elements are part of a mandatory choice: <b>dsa-key-size</b> , <b>ecdsa-curve</b> , or <b>rsa-key-size</b> .
Introduced	23.3.R1
Platforms	All

### **[save-path]** *string*

Synopsis	Full path to save the result key file
Context	<a href="#">admin system security pki generate-keypair [save-path]</a> <i>string</i>

Tree	<a href="#">[save-path]</a>
String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

## import

Synopsis	Import a certificate related file
Context	<a href="#">admin system security pki import</a>
Tree	<a href="#">import</a>
Description	When specified, the system imports an input file (key/certificate/CRL) to be used by SROS applications. The following summarizes the supported formats: <ul style="list-style-type: none"> <li>• Certificate - PKCS #12, PKCS #7 PEM encoded, PKCS #7 DER encoded, PEM, DER</li> <li>• Key - PKCS #12, PEM, DER</li> <li>• CRL - PKCS #7 PEM encoded, PKCS #7 DER encoded, PEM, DER</li> </ul>
Introduced	23.3.R1
Platforms	All

## format *keyword*

Synopsis	Output file format
Context	<a href="#">admin system security pki import format <i>keyword</i></a>
Tree	<a href="#">format</a>
Options	pkcs12, pkcs7-der, pkcs7-pem, pem, der
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

## input-url *string*

Synopsis	Full path to the file to import
Context	<a href="#">admin system security pki import input-url <i>string</i></a>
Tree	<a href="#">input-url</a>

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String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **output-file** *string*

Synopsis	Name of the result file
Context	<a href="#">admin system security pki import output-file</a> <i>string</i>
Tree	<a href="#">output-file</a>
String Length	1 to 95
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **password** *string*

Synopsis	Password used to encrypt the output file
Context	<a href="#">admin system security pki import password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

### **type** *keyword*

Synopsis	Type of file to be exported
Context	<a href="#">admin system security pki import type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	certificate, key, crl
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All



**validate-certificate-chain**

Synopsis	Validate the certificate chain
Context	<a href="#">admin system security pki import validate-certificate-chain</a>
Tree	<a href="#">validate-certificate-chain</a>
Description	When specified, the system validates the result certificate chain before it is imported.
Introduced	23.3.R1
Platforms	All

**reload**

Synopsis	Reload key or certificate files
Context	<a href="#">admin system security pki reload</a>
Tree	<a href="#">reload</a>
Description	When specified, the system reloads the key or certificate files for the specified application. This command can be used to ensure a changed imported file takes effect.
Introduced	23.3.R1
Platforms	All

**application *keyword***

Synopsis	Application to be reloaded
Context	<a href="#">admin system security pki reload application <i>keyword</i></a>
Tree	<a href="#">application</a>
Options	ipsec
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**certificate *string***

Synopsis	Name of the certificate file to reload
Context	<a href="#">admin system security pki reload certificate <i>string</i></a>
Tree	<a href="#">certificate</a>
String Length	1 to 95
Notes	This element is mandatory.

Introduced 23.3.R1  
Platforms All

### **key string**

Synopsis Name of the key file to reload  
Context [admin system security pki reload key string](#)  
Tree [key](#)  
String Length 1 to 95  
Notes This element is mandatory.  
Introduced 23.3.R1  
Platforms All

### **show**

Synopsis Enter the **show** context  
Context [admin system security pki show](#)  
Tree [show](#)  
Description Commands in this context include operations to display the PKI file.  
Introduced 23.3.R1  
Platforms All

### **file-content**

Synopsis Display content of certificate related files  
Context [admin system security pki show file-content](#)  
Tree [file-content](#)  
Introduced 23.3.R1  
Platforms All

### **[file-path] string**

Synopsis Full path to the file to display  
Context [admin system security pki show file-content \[file-path\] string](#)  
Tree [\[file-path\]](#)

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String Length	1 to 200
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**format** *keyword*

Synopsis	Format of the file to display
Context	<a href="#">admin system security pki show file-content format keyword</a>
Tree	<a href="#">format</a>
Options	pkcs10, pkcs12, pkcs7-der, pkcs7-pem, pem, der
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**password** *string*

Synopsis	File decryption password
Context	<a href="#">admin system security pki show file-content password string</a>
Tree	<a href="#">password</a>
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

**type** *keyword*

Synopsis	Type of the file to display
Context	<a href="#">admin system security pki show file-content type keyword</a>
Tree	<a href="#">type</a>
Options	certificate, key, crl, csr
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

## update-certificate

Synopsis	Update End Entity certificate
Context	<a href="#">admin system security pki update-certificate</a>
Tree	<a href="#">update-certificate</a>
Description	When specified, the system triggers an update for the specified certificate according to the corresponding <b>configure system security pki certificate-auto-update</b> configuration.
Introduced	23.3.R1
Platforms	All

## certificate *reference*

Synopsis	Name of the certificate file to be updated
Context	<a href="#">admin system security pki update-certificate certificate reference</a>
Tree	<a href="#">certificate</a>
Reference	<b>state system security pki certificate-auto-update <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

## secure-boot

Synopsis	Enter the <b>secure-boot</b> context
Context	<a href="#">admin system security secure-boot</a>
Tree	<a href="#">secure-boot</a>
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## activate

Synopsis	Activate secure boot on a CPM
Context	<a href="#">admin system security secure-boot activate</a>
Tree	<a href="#">activate</a>
Description	This command activates Secure Boot to enforce digital signature verification of the software on every boot.

Once Secure Boot is activated on a CPM, the capability is permanently enabled and cannot be disabled.

Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

### **card reference**

Synopsis	CPM slot where secure boot is activated or modified
Context	<a href="#">admin system security secure-boot activate card reference</a>
Tree	<a href="#">card</a>
Reference	<b>state cpm string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

### **confirmation-code string**

Synopsis	Confirmation code
Context	<a href="#">admin system security secure-boot activate confirmation-code string</a>
Tree	<a href="#">confirmation-code</a>
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

### **serial-number string**

Synopsis	CPM card serial number which secure-boot activates
Context	<a href="#">admin system security secure-boot activate serial-number string</a>
Tree	<a href="#">serial-number</a>
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## revoke-key

Synopsis	Revoke secure boot keys
Context	<a href="#">admin system security secure-boot revoke-key</a>
Tree	<a href="#">revoke-key</a>
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## card reference

Synopsis	CPM slot where secure boot is activated or modified
Context	<a href="#">admin system security secure-boot revoke-key card reference</a>
Tree	<a href="#">card</a>
Reference	<b>state cpm string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## confirmation-code string

Synopsis	Confirmation code
Context	<a href="#">admin system security secure-boot revoke-key confirmation-code string</a>
Tree	<a href="#">confirmation-code</a>
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## serial-number string

Synopsis	CPM card serial number which secure-boot activates
Context	<a href="#">admin system security secure-boot revoke-key serial-number string</a>
Tree	<a href="#">serial-number</a>
String Length	1 to 32

Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## update-key

Synopsis	Update secure boot keys
Context	<a href="#">admin system security secure-boot update-key</a>
Tree	<a href="#">update-key</a>
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## card reference

Synopsis	CPM slot where secure boot is activated or modified
Context	<a href="#">admin system security secure-boot update-key card reference</a>
Tree	<a href="#">card</a>
Reference	<b>state cpm string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## confirmation-code string

Synopsis	Confirmation code
Context	<a href="#">admin system security secure-boot update-key confirmation-code string</a>
Tree	<a href="#">confirmation-code</a>
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

**serial-number *string***

Synopsis	CPM card serial number which secure-boot activates
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">secure-boot</a> <a href="#">update-key</a> <a href="#">serial-number</a> <i>string</i>
Tree	<a href="#">serial-number</a>
String Length	1 to 32
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

**software-image *string***

Synopsis	Location of the target software image
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">secure-boot</a> <a href="#">update-key</a> <a href="#">software-image</a> <i>string</i>
Tree	<a href="#">software-image</a>
String Length	1 to 180
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

**validate**

Synopsis	Validate software signature for the specified image
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">secure-boot</a> <a href="#">validate</a>
Tree	<a href="#">validate</a>
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

**software-image *string***

Synopsis	Location of the target software image
Context	<a href="#">admin</a> <a href="#">system</a> <a href="#">security</a> <a href="#">secure-boot</a> <a href="#">validate</a> <a href="#">software-image</a> <i>string</i>
Tree	<a href="#">software-image</a>
String Length	1 to 180
Notes	This element is mandatory.



---

Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## system-password

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

## admin-password

Synopsis	Administrative password
Context	<a href="#">admin system security system-password admin-password</a>
Tree	<a href="#">admin-password</a>
Notes	This element is mandatory.
Introduced	22.10.R2
Platforms	All

## telemetry

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

## grpc

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

Platforms All

## cancel

Synopsis Cancel the gRPC dynamic telemetry subscription

Context [admin system telemetry grpc cancel](#)

Tree [cancel](#)

Introduced 19.10.R1

Platforms All

## all

Synopsis Cancel gRPC dynamic telemetry for all subscriptions

Context [admin system telemetry grpc cancel all](#)

Tree [all](#)

Notes The following elements are part of a mandatory choice: **all** or **subscription-id**.

Introduced 19.10.R1

Platforms All

## subscription-id *number*

Synopsis ID of the telemetry subscription to cancel

Context [admin system telemetry grpc cancel subscription-id \*number\*](#)

Tree [subscription-id](#)

Max. Range 0 to 4294967295

Notes The following elements are part of a mandatory choice: **all** or **subscription-id**.

Introduced 19.10.R1

Platforms All

## tech-support

Synopsis Save technical support information to a file

Context [admin tech-support](#)

Tree [tech-support](#)

Introduced 20.10.R1

---

Platforms All

**[url]** *string*

Synopsis URL to save technical support information

Context [admin tech-support \[url\]](#) *string*

Tree [\[url\]](#)

String Length 1 to 180

Introduced 20.10.R1

Platforms All

## 2.2 Configuration mode commands

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

```

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

```

## 2.2.1 Configuration mode command descriptions

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

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

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

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

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

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

### **commit**

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

Introduced 16.0.R1  
Platforms All

### **comment** *string*

Synopsis Comment associated with the commit  
Context [commit comment string](#)  
Tree [comment](#)  
String Length 1 to 2048  
Introduced 21.10.R1  
Platforms All

### **confirmed**

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

### **accept**

Synopsis Accept commit confirmed and cancel automatic rollback  
Context [commit confirmed accept](#)  
Tree [accept](#)  
Notes The following elements are part of a choice: **accept**, **cancel**, or (**comment** and **timeout**).  
Introduced 16.0.R1  
Platforms All

### **cancel**

Synopsis Cancel commit confirmed and roll back changes  
Context [commit confirmed cancel](#)  
Tree [cancel](#)

Description	When specified, the router rolls back the configuration and returns the changes to the candidate.
Notes	The following elements are part of a choice: <b>accept</b> , <b>cancel</b> , or ( <b>comment</b> and <b>timeout</b> ).
Introduced	16.0.R1
Platforms	All

### **comment** *string*

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

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

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

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

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

Introduced 16.0.R1  
 Platforms All

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

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

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

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

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

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

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

Synopsis Absolute path or relative path from pwc



Context	<code>compare string [to] string [cli-path] string</code>
Tree	<code>[cli-path]</code>
Introduced	20.10.R1
Platforms	All

## flat

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

## full-context

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

## lines number

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

Platforms All

## netconf-rpc

Synopsis Display changes in NETCONF <edit-config> RPC format

Context [compare string \[to\] string netconf-rpc](#)

Tree [netconf-rpc](#)

Description This option specifies the display of changes in NETCONF <edit-config> RPC format. This option is only supported with the **summary** option.

Notes The following elements are part of a choice: **flat** or **netconf-rpc**.

Introduced 21.5.R1

Platforms All

## summary

Synopsis Suppress specific differences and display a summary

Context [compare string \[to\] string summary](#)

Tree [summary](#)

Description This command allows the suppression of specific differences and displays a summarized comparison. The summarized differences in elements under the highest level container that was deleted is displayed with { ... }. A tilde (~) character is displayed to indicate the new value of an element that has changed.

Introduced 16.0.R1

Platforms All

## copy

Synopsis Copy a configuration element to another

Context [copy](#)

Tree [copy](#)

Introduced 20.10.R1

Platforms All

## [cli-path] string

Synopsis Absolute path or relative path from pwc, or 'pwc'

---

Context	<a href="#">copy [cli-path]</a> <i>string</i>
Tree	<a href="#">[cli-path]</a>
Introduced	20.10.R1
Platforms	All

### **to *string***

Synopsis	Destination path, or 'pwc'
Context	<a href="#">copy to <i>string</i></a>
Tree	<a href="#">to</a>
Introduced	20.10.R1
Platforms	All

### **discard**

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

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

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

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

Synopsis	Insert an element into a user-ordered list
Context	<a href="#">insert <i>string</i></a>
Tree	<a href="#">insert</a>
Introduced	19.10.R1

Platforms All

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

Synopsis Identification of the new entry  
 Context [insert string](#)  
 Tree [insert](#)  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms All

### **after**

Synopsis Insert an entry after the specified entry  
 Context [insert string after](#)  
 Tree [after](#)  
 Notes The following elements are part of a choice: **after**, **before**, **beginning**, or **end**.  
 Introduced 19.10.R1  
 Platforms All

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

Synopsis Absolute path or relative path from pwc  
 Context [insert string after \[cli-path\] string](#)  
 Tree [\[cli-path\]](#)  
 Introduced 19.10.R1  
 Platforms All

### **before**

Synopsis Insert an entry before the specified entry  
 Context [insert string before](#)  
 Tree [before](#)  
 Notes The following elements are part of a choice: **after**, **before**, **beginning**, or **end**.  
 Introduced 19.10.R1

Platforms All

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

Synopsis Absolute path or relative path from pwc  
Context [insert string before \[cli-path\] string](#)  
Tree [\[cli-path\]](#)  
Introduced 19.10.R1  
Platforms All

### **beginning**

Synopsis Insert the new entry at the beginning of the list  
Context [insert string beginning](#)  
Tree [beginning](#)  
Notes The following elements are part of a choice: **after**, **before**, **beginning**, or **end**.  
Introduced 19.10.R1  
Platforms All

### **end**

Synopsis Insert the new entry at the end of the list  
Context [insert string end](#)  
Tree [end](#)  
Notes The following elements are part of a choice: **after**, **before**, **beginning**, or **end**.  
Introduced 19.10.R1  
Platforms All

### **load** [[mode](#)] *keyword*

Synopsis Load configuration into the candidate configuration  
Context [load keyword](#)  
Tree [load](#)  
Introduced 16.0.R1  
Platforms All

**[mode] keyword**

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

**encryption-key string**

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

**interactive**

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

**[url] string**

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

**rename**

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

**[cli-path] string**

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

**to string**

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

**replace** *[pattern] string with string*

Synopsis	Match and replace values in the candidate configuration
Context	<a href="#">replace string with string</a>
Tree	<a href="#">replace</a>
Introduced	23.7.R1
Platforms	All

**[pattern]** *string*

Synopsis	String (") or regular expression (') pattern to match
Context	<a href="#">replace string with string</a>
Tree	<a href="#">replace</a>
Description	This command configures a text string or regular expression that defines the values to match.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

**with** *string*

Synopsis	String (") or regular expression (') pattern to replace
Context	<a href="#">replace string with string</a>
Tree	<a href="#">replace</a>
String Length	0 to 255
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

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

Synopsis	Absolute path or relative path from pwc
Context	<a href="#">replace string with string [cli-path] string</a>
Tree	<a href="#">[cli-path]</a>
Introduced	23.7.R1



---

Platforms All

### **continue-on-error**

Synopsis Continue the replace operation upon errors  
Context [replace string with string continue-on-error](#)  
Tree [continue-on-error](#)  
Introduced 23.7.R1  
Platforms All

### **depth *number***

Synopsis Replace operation depth from the pwc  
Context [replace string with string depth number](#)  
Tree [depth](#)  
Range 1 to 4294967040  
Introduced 23.7.R1  
Platforms All

### **ignore-case**

Synopsis Ignore case in pattern match  
Context [replace string with string ignore-case](#)  
Tree [ignore-case](#)  
Introduced 23.7.R1  
Platforms All

### **rollback**

Synopsis Roll back to a previous configuration  
Context [rollback](#)  
Tree [rollback](#)  
Introduced 16.0.R1  
Platforms All

**commit-id** *number*

Synopsis	Commit ID to roll back to
Context	<a href="#">rollback commit-id</a> <i>number</i>
Tree	<a href="#">commit-id</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>commit-id</b> or <b>rollback-id</b> .
Introduced	23.3.R1
Platforms	All

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

Synopsis	Previous configuration to roll back to
Context	<a href="#">rollback [rollback-id]</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">[rollback-id]</a>
Range	0 to 200
Options	startup – Configuration loaded when the system boots
Notes	The following elements are part of a choice: <b>commit-id</b> or <b>rollback-id</b> .
Introduced	23.3.R1
Platforms	All

**update**

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

**/configure**

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

---

Platforms All

### **/bof**

Synopsis Update the entire BOF candidate

Context [update /bof](#)

Tree [/bof](#)

Introduced 20.10.R1

Platforms All

### **check**

Synopsis Perform dry-run update report without an actual update

Context [update check](#)

Tree [check](#)

Introduced 16.0.R4

Platforms All

### **/debug**

Synopsis Update the entire debug candidate

Context [update /debug](#)

Tree [/debug](#)

Introduced 21.5.R1

Platforms All

### **/li**

Synopsis Update the entire LI candidate

Context [update /li](#)

Tree [/li](#)

Introduced 19.10.R1

Platforms All

---

**validate**

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

## 2.3 environment commands

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

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

## 2.3.1 environment command descriptions

### environment

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

### command-alias

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

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

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

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

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

**admin-state** *keyword*

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

**cli-command** *string*

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

**description** *string*

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

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

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

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

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

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

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

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



## command-completion

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

## enter *boolean*

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

## space *boolean*

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

## tab *boolean*

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

## console

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

## length *number*

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

## width *number*

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

## info-output

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

## always-display

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

## admin-state *boolean*

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

## message-severity-level

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

## cli *keyword*

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

---

Default	info
Introduced	16.0.R1
Platforms	All

### **more** *boolean*

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

### **progress-indicator**

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

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

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

### **delay** *number*

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

---

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

### **type** *keyword*

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

### **prompt**

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

### **context** *boolean*

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

**newline** *boolean*

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

**timestamp** *boolean*

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

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

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

**python**

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

**memory-reservation** *number*

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

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

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

**timeout** *number*

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

**time-display** *keyword*

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

---

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

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

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



## 2.4 file commands

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

```

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

```

## file repair

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

## 2.4.1 file command descriptions

### file

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

### change-directory

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

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

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

### checksum

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

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

**[type] keyword**

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

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

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

**copy**

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

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

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

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

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

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

### direct-http

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

### force

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

**proxy string**

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

**recursive**

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

**router-instance string**

Synopsis	Router name or VPRN service name
Context	<a href="#">file copy router-instance string</a>
Tree	<a href="#">router-instance</a>
Introduced	23.10.R1
Platforms	All

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

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

---

Platforms All

## disable

Synopsis Disable compact flash devices  
Context [file disable](#)  
Tree [disable](#)  
Introduced 20.10.R1  
Platforms All

## active

Synopsis Disable all devices on the active CPM  
Context [file disable active](#)  
Tree [active](#)  
Notes The following elements are part of a choice: **active**, **cflash-id**, or **standby**.  
Introduced 20.10.R1  
Platforms All

## cflash-id *string*

Synopsis Disable the compact flash device  
Context [file disable cflash-id string](#)  
Tree [cflash-id](#)  
String Length 4 to 6  
Notes The following elements are part of a choice: **active**, **cflash-id**, or **standby**.  
Introduced 20.10.R1  
Platforms All

## standby

Synopsis Disable all devices on the standby CPM  
Context [file disable standby](#)  
Tree [standby](#)  
Notes The following elements are part of a choice: **active**, **cflash-id**, or **standby**.

Introduced	20.10.R1
Platforms	All

**edit**

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

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

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

**enable**

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

**active**

Synopsis	Enable all devices on the active CPM
----------	--------------------------------------



---

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

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

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

### **standby**

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

### **format**

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

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

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

**list**

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

**reverse**

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

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

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

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

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

**make-directory**

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

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

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

**move**

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

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

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

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

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

**direct-http**

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

**force**

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

**proxy string**

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

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

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

**permission**

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

**[attribute]** *keyword*

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

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

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

**remove**

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

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

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

**direct-http**

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

## force

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

## proxy string

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

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

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

## remove-directory

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

## force

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

## recursive

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

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

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

## repair

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



**[cflash-id] string**

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

**show**

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

**client-tls-profile string**

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

**direct-http**

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

**proxy string**

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

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

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

**unzip**

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

**create-destination**

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

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

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

**force**

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

**list**

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

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

Synopsis	Source URL
----------	------------

---

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

## version

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

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

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

## 2.5 Global commands

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

```

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

```

## oam eth-cfm

- **eth-cfm**
  - **eth-test**
    - **data-length** *number*
    - **[destination]** (*mac-unicast-address-no-zero | number*)
    - **ma-admin-name** *reference*
    - **md-admin-name** *reference*
    - **mep-id** *number*
    - **priority** *number*
  - **linktrace**
    - **[destination]** (*mac-unicast-address-no-zero | number*)
    - **ma-admin-name** *reference*
    - **md-admin-name** *reference*
    - **mep-id** *number*
    - **ttl** *number*
  - **loopback**
    - **[destination]** (*mac-unicast-address-no-zero | keyword | number*)
    - **interval** *number*
    - **lbm-padding** *number*
    - **ma-admin-name** *reference*
    - **md-admin-name** *reference*
    - **mep-id** *number*
    - **priority** *number*
    - **send-count** *number*
    - **size** *number*
    - **timeout** *number*
  - **one-way-delay-test**
    - **[destination]** (*mac-unicast-address-no-zero | number*)
    - **ma-admin-name** *reference*
    - **md-admin-name** *reference*
    - **mep-id** *number*
    - **priority** *number*
  - **two-way-delay-test**
    - **[destination]** (*mac-unicast-address-no-zero | number*)
    - **ma-admin-name** *reference*
    - **md-admin-name** *reference*
    - **mep-id** *number*
    - **priority** *number*
  - **two-way-slm-test**
    - **[destination]** (*mac-unicast-address-no-zero | number*)
    - **interval** (*number | decimal-number*)
    - **ma-admin-name** *reference*
    - **md-admin-name** *reference*
    - **mep-id** *number*
    - **priority** *number*
    - **send-count** *number*
    - **size** *number*
    - **timeout** *number*
- **lsp-ping**
  - **bgp-label**
    - **fc** *keyword*
    - **interface** *reference*
    - **interval** *number*
    - **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **path-destination** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **prefix** (*ipv4-prefix | ipv6-prefix*)
    - **profile** *keyword*
    - **send-count** *number*
    - **size** *number*
    - **source-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **timeout** *number*
    - **ttl** *number*
  - **ldp**
    - **fc** *keyword*
    - **interface** *reference*

## oam lsp-ping ldp interval

- **interval** *number*
- **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **path-destination** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **prefix** (*ipv4-prefix | ipv6-prefix*)
- **profile** *keyword*
- **send-count** *number*
- **size** *number*
- **source-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **timeout** *number*
- **ttl** *number*
- **rsvp-te**
  - **fc** *keyword*
  - **interval** *number*
  - **lsp-name** *reference*
  - **path** *reference*
  - **profile** *keyword*
  - **send-count** *number*
  - **size** *number*
  - **source-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **timeout** *number*
  - **ttl** *number*
- **sr-isis**
  - **fc** *keyword*
  - **flex-algo** *number*
  - **igp-instance** *number*
  - **interface** *reference*
  - **interval** *number*
  - **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **path-destination** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **prefix** (*ipv4-prefix | ipv6-prefix*)
  - **profile** *keyword*
  - **send-count** *number*
  - **size** *number*
  - **source-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **timeout** *number*
  - **ttl** *number*
- **sr-ospf**
  - **fc** *keyword*
  - **flex-algo** *number*
  - **igp-instance** *number*
  - **interface** *reference*
  - **interval** *number*
  - **next-hop** *string*
  - **path-destination** *string*
  - **prefix** (*ipv4-prefix | ipv6-prefix*)
  - **profile** *keyword*
  - **send-count** *number*
  - **size** *number*
  - **source-ip-address** *string*
  - **timeout** *number*
  - **ttl** *number*
- **sr-ospf3**
  - **fc** *keyword*
  - **igp-instance** *number*
  - **interface** *reference*
  - **interval** *number*
  - **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **path-destination** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **prefix** (*ipv4-prefix | ipv6-prefix*)
  - **profile** *keyword*
  - **send-count** *number*
  - **size** *number*
  - **source-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **timeout** *number*

## oam lsp-ping sr-ospf3 ttl

- **ttl** *number*
- **sr-policy**
  - **color** *number*
  - **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **fc** *keyword*
  - **interface** *reference*
  - **interval** *number*
  - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **path-destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **profile** *keyword*
  - **segment-list** *number*
  - **send-count** *number*
  - **size** *number*
  - **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **timeout** *number*
  - **ttl** *number*
- **sr-te**
  - **fc** *keyword*
  - **interface** *reference*
  - **interval** *number*
  - **lsp-name** *reference*
  - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **path** *reference*
  - **path-destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **profile** *keyword*
  - **send-count** *number*
  - **size** *number*
  - **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **timeout** *number*
  - **ttl** *number*
- **lsp-trace**
  - **bgp-label**
    - **downstream-map-tlv** *keyword*
    - **fc** *keyword*
    - **interface** *reference*
    - **interval** *number*
    - **max-fail** *number*
    - **max-ttl** *number*
    - **min-ttl** *number*
    - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **output-format** *keyword*
    - **path-destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
    - **probe-count** *number*
    - **profile** *keyword*
    - **size** *number*
    - **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **timeout** *number*
  - **ldp**
    - **downstream-map-tlv** *keyword*
    - **fc** *keyword*
    - **interface** *reference*
    - **interval** *number*
    - **max-fail** *number*
    - **max-ttl** *number*
    - **min-ttl** *number*
    - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **output-format** *keyword*
    - **path-destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
    - **probe-count** *number*
    - **profile** *keyword*
    - **size** *number*
    - **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



## oam lsp-trace ldp timeout

- **timeout** *number*
- **rsvp-te**
  - **downstream-map-tlv** *keyword*
  - **fc** *keyword*
  - **interval** *number*
  - **lsp-name** *reference*
  - **max-fail** *number*
  - **max-ttl** *number*
  - **min-ttl** *number*
  - **output-format** *keyword*
  - **path** *reference*
  - **probe-count** *number*
  - **profile** *keyword*
  - **size** *number*
  - **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **timeout** *number*
- **sr-isis**
  - **downstream-map-tlv** *keyword*
  - **fc** *keyword*
  - **flex-algo** *number*
  - **igp-instance** *number*
  - **interface** *reference*
  - **interval** *number*
  - **max-fail** *number*
  - **max-ttl** *number*
  - **min-ttl** *number*
  - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **output-format** *keyword*
  - **path-destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
  - **probe-count** *number*
  - **profile** *keyword*
  - **size** *number*
  - **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **timeout** *number*
- **sr-ospf**
  - **downstream-map-tlv** *keyword*
  - **fc** *keyword*
  - **flex-algo** *number*
  - **igp-instance** *number*
  - **interface** *reference*
  - **interval** *number*
  - **max-fail** *number*
  - **max-ttl** *number*
  - **min-ttl** *number*
  - **next-hop** *string*
  - **output-format** *keyword*
  - **path-destination** *string*
  - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
  - **probe-count** *number*
  - **profile** *keyword*
  - **size** *number*
  - **source-ip-address** *string*
  - **timeout** *number*
- **sr-ospf3**
  - **downstream-map-tlv** *keyword*
  - **fc** *keyword*
  - **igp-instance** *number*
  - **interface** *reference*
  - **interval** *number*
  - **max-fail** *number*
  - **max-ttl** *number*
  - **min-ttl** *number*
  - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

## oam lsp-trace sr-ospf3 output-format

```

- output-format keyword
- path-destination (ipv4-address-no-zone | ipv6-address-no-zone)
- prefix (ipv4-prefix | ipv6-prefix)
- probe-count number
- profile keyword
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- sr-policy
- color number
- downstream-map-tlv keyword
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- fc keyword
- interface reference
- interval number
- max-fail number
- max-ttl number
- min-ttl number
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- output-format keyword
- path-destination (ipv4-address-no-zone | ipv6-address-no-zone)
- probe-count number
- profile keyword
- segment-list number
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- sr-te
- downstream-map-tlv keyword
- fc keyword
- interface reference
- interval number
- lsp-name reference
- max-fail number
- max-ttl number
- min-ttl number
- next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
- output-format keyword
- path reference
- path-destination (ipv4-address-no-zone | ipv6-address-no-zone)
- probe-count number
- profile keyword
- size number
- source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- oam-pm
- action keyword
- session reference
- test-type keyword
- saa
- owner reference test reference
- start
- accounting boolean
- stop
- accounting boolean
- service-activation-testhead
- service-test reference
- start
- stop
- password
- ping
- bypass-routing
- candidate-path
- color number

```

## ping count

```

- count number
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- distinguisher number
- do-not-fragment
- endpoint string
- fc keyword
- interface (reference | reference | reference | reference | reference)
- interval (number | decimal-number)
- next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
- output-format keyword
- pattern (keyword | number)
- preference number
- protocol-owner keyword
- router-instance (reference | reference)
- segment-list number
- size number
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- srv6-policy
- subscriber string
- timeout number
- tos number
- ttl number
- pwc
- [path-type] keyword
- previous
- pyexec (string | string)
- [argument-01] string
- [argument-02] string
- [argument-03] string
- [argument-04] string
- [argument-05] string
- [argument-06] string
- [argument-07] string
- [argument-08] string
- [argument-09] string
- [argument-10] string
- quit-config
- ssh
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- key-re-exchange
- mbytes (number | keyword)
- minutes (number | keyword)
- login-name string
- private-key-file string
- router-instance (string | string)
- telnet
- [destination] (ipv4-address-with-zone | ipv6-address-with-zone | string-not-all-spaces)
- port number
- router-instance (string | string)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- top
- traceroute
- candidate-path
- color number
- decode keyword
- dest-port number
- dest-port-udp-fixed
- [destination] (ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces)
- detail
- distinguisher number
- endpoint string

```

## traceroute min-ttl

- **min-ttl** *number*
- **numeric**
- **preference** *number*
- **probe-count** *number*
- **protocol** *keyword*
- **protocol-owner** *keyword*
- **router-instance** *string*
- **segment-list** *number*
- **size** *number*
- **source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **srv6-policy**
- **tos** *number*
- **ttl** *number*
- **wait** *number*
- **tree**
  - **[cli-path]** *string*
  - **detail**
  - **flat**

## 2.5.1 Global command descriptions

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

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

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

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

### **bof**

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

### **exclusive**

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

---

Introduced	20.10.R1
Platforms	All

### **private**

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

### **read-only**

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

### **configure**

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

### **exclusive**

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

## global

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

## private

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

## read-only

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

## debug

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

## exclusive

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

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

### **private**

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

### **read-only**

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

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

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

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

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



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Platforms All

## **edit-config**

Synopsis Enter a configuration mode

Context [edit-config](#)

Tree [edit-config](#)

Introduced 16.0.R1

Platforms All

## **bof**

Synopsis Enter the bof configuration context

Context [edit-config bof](#)

Tree [bof](#)

Introduced 20.10.R1

Platforms All

## **debug**

Synopsis Enter the debug configuration context

Context [edit-config debug](#)

Tree [debug](#)

Introduced 21.5.R1

Platforms All

## **exclusive**

Synopsis Enter exclusive configuration mode

Context [edit-config exclusive](#)

Tree [exclusive](#)

Introduced 16.0.R1

Platforms All

## global

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

## li

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

## private

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

## read-only

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

## enable

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

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

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

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

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

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

### **echo**

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

### **exit**

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

Platforms All

## all

Synopsis Return to the root context

Context [exit all](#)

Tree [all](#)

Introduced 16.0.R1

Platforms All

## history

Synopsis Show the command history

Context [history](#)

Tree [history](#)

Introduced 16.0.R1

Platforms All

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

Synopsis Show the information under the present working context

Context [info keyword](#)

Tree [info](#)

Introduced 16.0.R1

Platforms All

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

Synopsis Source datastore

Context [info keyword](#)

Tree [info](#)

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

Options  
 candidate – The candidate datastore  
 running – The running datastore  
 baseline – The baseline candidate configuration

	intended – The intended datastore
MD-CLI	candidate
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

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

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

**converted**

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

**depth** *number*

Synopsis	Depth limit from the pwc
Context	<a href="#">info</a> keyword <a href="#">depth</a> <i>number</i>
Tree	<a href="#">depth</a>
Range	1 to 4294967040
Introduced	23.10.R1

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Platforms All

### detail

Synopsis Include default and unconfigured values  
Context [info keyword detail](#)  
Tree [detail](#)  
Introduced 16.0.R1  
Platforms All

### differences

Synopsis Show the different values each model tries to set  
Context [info keyword differences](#)  
Tree [differences](#)  
Description When specified, this command shows only the values that are different when multiple models set the same configuration element.  
Notes The following elements are part of a choice: **differences**, **model**, or **values**.  
Introduced 23.3.R1  
Platforms All

### flat

Synopsis Show the context from the pwc on each line  
Context [info keyword flat](#)  
Tree [flat](#)  
Description This option shows the hierarchy on each line starting from the present working context.  
Notes The following elements are part of a choice: **flat**, **json**, or **xml**.  
Introduced 16.0.R1  
Platforms All

### full-context

Synopsis Show the full context on each line  
Context [info keyword full-context](#)

Tree	<a href="#">full-context</a>
Introduced	16.0.R1
Platforms	All

## inheritance

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

## json

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

## model keyword

Synopsis	Data model for which to display converted output
Context	<a href="#">info keyword model keyword</a>
Tree	<a href="#">model</a>
Description	<p>This option specifies the data model for which to display the converted output.</p> <p>This option is only supported with the <b>converted</b> option and is only available when <b>configure system management-interface yang-modules openconfig-modules</b> is set to <b>true</b>.</p>

Options	all – All models openconfig – OpenConfig models
Default	all
Notes	The following elements are part of a choice: <b>differences</b> , <b>model</b> , or <b>values</b> .
Introduced	20.7.R1
Platforms	All

## units

Synopsis	Include unit types for applicable elements
Context	<a href="#">info keyword units</a>
Tree	<a href="#">units</a>
Introduced	20.5.R1
Platforms	All

## values

Synopsis	Show all the values each model tries to set
Context	<a href="#">info keyword values</a>
Tree	<a href="#">values</a>
Description	When specified, this command shows all the values that each model tries to set.
Notes	The following elements are part of a choice: <b>differences</b> , <b>model</b> , or <b>values</b> .
Introduced	23.3.R1
Platforms	All

## xml

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



## li

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

## exclusive

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

## private

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

## read-only

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

## logout

Synopsis	Exit the CLI session
Context	<a href="#">logout</a>

---

Tree	<a href="#">logout</a>
Introduced	16.0.R1
Platforms	All

## oam

Synopsis	Perform OAM tests
Context	<a href="#">oam</a>
Tree	<a href="#">oam</a>
Introduced	20.2.R1
Platforms	All

## efm

Synopsis	Enter the <b>efm</b> context
Context	<a href="#">oam efm</a>
Tree	<a href="#">efm</a>
Introduced	20.2.R1
Platforms	All

## local-loopback

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

## [action] keyword

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

Introduced 20.2.R1  
Platforms All

### **port-id** *string*

Synopsis Port ID for the test  
Context [oam efm local-loopback port-id string](#)  
Tree [port-id](#)  
Notes This element is mandatory.  
Introduced 20.2.R1  
Platforms All

### **remote-loopback**

Synopsis Start or stop remote loopback test on a port  
Context [oam efm remote-loopback](#)  
Tree [remote-loopback](#)  
Introduced 20.2.R1  
Platforms All

### **[action]** *keyword*

Synopsis Action type for the test  
Context [oam efm remote-loopback \[action\] keyword](#)  
Tree [\[action\]](#)  
Options start, stop  
Notes This element is mandatory.  
Introduced 20.2.R1  
Platforms All

### **port-id** *string*

Synopsis Port ID for the test  
Context [oam efm remote-loopback port-id string](#)  
Tree [port-id](#)

Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **eth-cfm**

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

### **eth-test**

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

### **data-length** *number*

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

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

Synopsis	Destination MAC address or remote MEP ID of the peer
Context	<a href="#">oam eth-cfm eth-test [destination]</a> ( <i>mac-unicast-address-no-zero</i>   <i>number</i> )
Tree	<a href="#">[destination]</a>

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Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

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

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

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

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

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

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

**priority number**

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

**linktrace**

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

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

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

**ma-admin-name reference**

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

Introduced 20.2.R1  
Platforms All

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

Synopsis Domain name  
Context [oam eth-cfm linktrace md-admin-name reference](#)  
Tree [md-admin-name](#)  
Reference **state eth-cfm domain string**  
Notes This element is mandatory.  
Introduced 20.2.R1  
Platforms All

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

Synopsis Local Maintenance Association Endpoint (MEP) ID  
Context [oam eth-cfm linktrace mep-id number](#)  
Tree [mep-id](#)  
Range 1 to 8191  
Notes This element is mandatory.  
Introduced 20.2.R1  
Platforms All

### **ttl** *number*

Synopsis Time to live for a returned linktrace  
Context [oam eth-cfm linktrace ttl number](#)  
Tree [ttl](#)  
Range 0 to 255  
Default 64  
Introduced 20.2.R1  
Platforms All

**loopback**

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

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

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

**interval** *number*

Synopsis	Time between probes within the test run
Context	<a href="#">oam eth-cfm loopback interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	0 to 600
Units	deciseconds
Default	0
Introduced	20.2.R1
Platforms	All

**lbm-padding** *number*

Synopsis	Data portion size of the data TLV, no octet string
Context	<a href="#">oam eth-cfm loopback lbm-padding</a> <i>number</i>
Tree	<a href="#">lbm-padding</a>



Description	This command specifies the size of the data portion of the data TLV which does not allow for an optional octet string.  MSDU is not processed when setting is in use. A value of 0 means that no data TLV is added to the packet. This is specified with an octet string. This parameter and <b>size</b> are mutually exclusive.
Range	0   3 to 9778
Default	0
Introduced	20.2.R1
Platforms	All

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

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

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

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

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

Synopsis	Local Maintenance Association Endpoint (MEP) ID
Context	<a href="#">oam eth-cfm loopback mep-id number</a>
Tree	<a href="#">mep-id</a>

Range	1 to 8191
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **priority number**

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

### **send-count number**

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

### **size number**

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

Default	0
Introduced	20.2.R1
Platforms	All

**timeout** *number*

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

**one-way-delay-test**

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

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

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

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Platforms All

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

Synopsis Association name

Context [oam eth-cfm one-way-delay-test ma-admin-name reference](#)

Tree [ma-admin-name](#)

Reference **state eth-cfm domain string association string**

Notes This element is mandatory.

Introduced 20.2.R1

Platforms All

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

Synopsis Domain name

Context [oam eth-cfm one-way-delay-test md-admin-name reference](#)

Tree [md-admin-name](#)

Reference **state eth-cfm domain string**

Notes This element is mandatory.

Introduced 20.2.R1

Platforms All

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

Synopsis Local Maintenance Association Endpoint (MEP) ID

Context [oam eth-cfm one-way-delay-test mep-id number](#)

Tree [mep-id](#)

Range 1 to 8191

Notes This element is mandatory.

Introduced 20.2.R1

Platforms All

### **priority** *number*

Synopsis Frame priority that can be manipulated by QoS policies

Context	<a href="#">oam eth-cfm one-way-delay-test priority number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7
Introduced	20.2.R1
Platforms	All

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

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

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

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

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

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

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

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

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

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

### **priority** *number*

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

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

Synopsis	Initiate a two-way SLM test in SAA
Context	<a href="#">oam eth-cfm two-way-slm-test</a>
Tree	<a href="#">two-way-slm-test</a>

Introduced 20.2.R1  
 Platforms All

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

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

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

Synopsis Time between probes within the test run  
 Context [oam eth-cfm two-way-slm-test interval](#) (*number | decimal-number*)  
 Tree [interval](#)  
 Range 1 to 10  
 Units seconds  
 Default 5  
 Introduced 20.2.R1  
 Platforms All

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

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

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

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

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

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

### **priority** *number*

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

### **send-count** *number*

Synopsis	Number of two-way SLM test messages to send
Context	<a href="#">oam eth-cfm two-way-slm-test send-count number</a>
Tree	<a href="#">send-count</a>



Range	1 to 1000
Default	1
Introduced	20.2.R1
Platforms	All

**size number**

Synopsis	Data portion size of the data TLV, octet string allowed
Context	<a href="#">oam eth-cfm two-way-slm-test size number</a>
Tree	<a href="#">size</a>
Description	This command specifies the size of the data portion of the data TLV allowing for an optional octet string to be included.
Range	0 to 1500
Units	bytes
Default	0
Introduced	20.2.R1
Platforms	All

**timeout number**

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

**Isp-ping**

Synopsis	Perform a Label Switched Path (LSP) ping test
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Context	<a href="#">oam lsp-ping</a>
Tree	<a href="#">lsp-ping</a>
Introduced	23.3.R1
Platforms	All

## **bgp-label**

Synopsis	Perform a BGP-label LSP trace test
Context	<a href="#">oam lsp-ping bgp-label</a>
Tree	<a href="#">bgp-label</a>
Description	This command option performs a Border Gateway Protocol (BGP-label) LSP trace test using Target FEC Stack code point "BGP labeled IPv4 prefix".
Introduced	23.3.R1
Platforms	All

## **fc keyword**

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-ping bgp-label fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

## **interface reference**

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-ping bgp-label interface reference</a>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string</i> <b>interface</b> <i>string</i>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**interval** *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-ping bgp-label interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-ping bgp-label next-hop</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-ping bgp-label path-destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<a href="#">oam lsp-ping bgp-label prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.3.R1

---

Platforms All

### **profile** *keyword*

Synopsis QoS profile for the transmitted echo request packets  
Context [oam lsp-ping bgp-label profile keyword](#)  
Tree [profile](#)  
Options in, out  
Default out  
Introduced 23.3.R1  
Platforms All

### **send-count** *number*

Synopsis Number of echo request packets to send  
Context [oam lsp-ping bgp-label send-count number](#)  
Tree [send-count](#)  
Range 1 to 100  
Units packets  
Default 1  
Introduced 23.3.R1  
Platforms All

### **size** *number*

Synopsis Echo request packet pad size  
Context [oam lsp-ping bgp-label size number](#)  
Tree [size](#)  
Range 1 to 9786  
Units bytes  
Default 1  
Introduced 23.3.R1  
Platforms All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-ping bgp-label source-ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-ping bgp-label timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**ttl** *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	<a href="#">oam lsp-ping bgp-label ttl</a> <i>number</i>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

**ldp**

Synopsis	Perform Label Distribution Protocol (LDP) LSP ping test
Context	<a href="#">oam lsp-ping ldp</a>
Tree	<a href="#">ldp</a>
Introduced	23.3.R1

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Platforms All

### **fc** keyword

Synopsis QoS forwarding class for the sent echo request packet  
Context [oam lsp-ping ldp fc keyword](#)  
Tree [fc](#)  
Options be, l2, af, l1, h2, ef, h1, nc  
Default be  
Introduced 23.3.R1  
Platforms All

### **interface** reference

Synopsis Egress router interface to use with path destination  
Context [oam lsp-ping ldp interface reference](#)  
Tree [interface](#)  
Reference **state router** *string interface string*  
Notes The following elements are part of a choice: **interface** or **next-hop**.  
Introduced 23.3.R1  
Platforms All

### **interval** number

Synopsis Minimum time to expire before next echo request is sent  
Context [oam lsp-ping ldp interval number](#)  
Tree [interval](#)  
Range 1 to 10  
Units seconds  
Default 1  
Introduced 23.3.R1  
Platforms All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-ping ldp next-hop</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-ping ldp path-destination</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<a href="#">oam lsp-ping ldp prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-ping ldp profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

**send-count** *number*

Synopsis	Number of echo request packets to send
Context	<a href="#">oam lsp-ping ldp send-count</a> <i>number</i>
Tree	<a href="#">send-count</a>
Range	1 to 100
Units	packets
Default	1
Introduced	23.3.R1
Platforms	All

**size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-ping ldp size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-ping ldp source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-ping ldp timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>



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Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

### ***t***tl *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	<a href="#">oam lsp-ping ldp ttl number</a>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

### ***r***svp-*te*

Synopsis	Perform an RSVP-TE LSP ping test
Context	<a href="#">oam lsp-ping rsvp-te</a>
Tree	<a href="#">rsvp-te</a>
Introduced	23.3.R1
Platforms	All

### ***fc*** *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-ping rsvp-te fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

### **interval** *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-ping rsvp-te interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

### **lsp-name** *reference*

Synopsis	Name of the LSP to test
Context	<a href="#">oam lsp-ping rsvp-te lsp-name</a> <i>reference</i>
Tree	<a href="#">lsp-name</a>
Reference	<b>state router</b> <i>string mpls lsp string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **path** *reference*

Synopsis	Name of the MPLS path to test
Context	<a href="#">oam lsp-ping rsvp-te path</a> <i>reference</i>
Tree	<a href="#">path</a>
Reference	<b>state router</b> <i>string mpls path string</i>
Introduced	23.3.R1
Platforms	All

### **profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-ping rsvp-te profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>

---

Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

**send-count** *number*

Synopsis	Number of echo request packets to send
Context	<a href="#">oam lsp-ping rsvp-te send-count</a> <i>number</i>
Tree	<a href="#">send-count</a>
Range	1 to 100
Units	packets
Default	1
Introduced	23.3.R1
Platforms	All

**size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-ping rsvp-te size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-ping rsvp-te source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-ping rsvp-te timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**ttl** *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	<a href="#">oam lsp-ping rsvp-te ttl</a> <i>number</i>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

**sr-isis**

Synopsis	Perform an SR-ISIS LSP ping test
Context	<a href="#">oam lsp-ping sr-isis</a>
Tree	<a href="#">sr-isis</a>
Introduced	23.3.R1
Platforms	All

**fc** *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-ping sr-isis fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc

Default	be
Introduced	23.3.R1
Platforms	All

### **flex-algo** *number*

Synopsis	Segment Routing Flexible Algorithm for the test
Context	<a href="#">oam lsp-ping sr-isis flex-algo</a> <i>number</i>
Tree	<a href="#">flex-algo</a>
Range	128 to 255
Introduced	23.7.R1
Platforms	All

### **igp-instance** *number*

Synopsis	IGP instance for the SR-ISIS test
Context	<a href="#">oam lsp-ping sr-isis igp-instance</a> <i>number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 127
Default	0
Introduced	23.3.R1
Platforms	All

### **interface** *reference*

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-ping sr-isis interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string interface string</i>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**interval number**

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-ping sr-isis interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-ping sr-isis next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-ping sr-isis path-destination (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<a href="#">oam lsp-ping sr-isis prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.3.R1

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Platforms All

### **profile** *keyword*

Synopsis QoS profile for the transmitted echo request packets  
Context [oam lsp-ping sr-isis profile keyword](#)  
Tree [profile](#)  
Options in, out  
Default out  
Introduced 23.3.R1  
Platforms All

### **send-count** *number*

Synopsis Number of echo request packets to send  
Context [oam lsp-ping sr-isis send-count number](#)  
Tree [send-count](#)  
Range 1 to 100  
Units packets  
Default 1  
Introduced 23.3.R1  
Platforms All

### **size** *number*

Synopsis Echo request packet pad size  
Context [oam lsp-ping sr-isis size number](#)  
Tree [size](#)  
Range 1 to 9786  
Units bytes  
Default 1  
Introduced 23.3.R1  
Platforms All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-ping sr-isis source-ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-ping sr-isis timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**ttl** *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	<a href="#">oam lsp-ping sr-isis ttl</a> <i>number</i>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

**sr-ospf**

Synopsis	Perform an SR-OSPF LSP ping test
Context	<a href="#">oam lsp-ping sr-ospf</a>
Tree	<a href="#">sr-ospf</a>
Introduced	23.3.R1
Platforms	All



**fc keyword**

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-ping sr-ospf fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

**flex-algo number**

Synopsis	Segment Routing Flexible Algorithm for the test
Context	<a href="#">oam lsp-ping sr-ospf flex-algo number</a>
Tree	<a href="#">flex-algo</a>
Range	128 to 255
Introduced	23.7.R1
Platforms	All

**igp-instance number**

Synopsis	IGP instance for the SR-OSPF test
Context	<a href="#">oam lsp-ping sr-ospf igp-instance number</a>
Tree	<a href="#">igp-instance</a>
Range	0 to 31
Default	0
Introduced	23.3.R1
Platforms	All

**interface reference**

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-ping sr-ospf interface reference</a>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string interface string</i>

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Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

### **interval** *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-ping sr-ospf interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

### **next-hop** *string*

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-ping sr-ospf next-hop</a> <i>string</i>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

### **path-destination** *string*

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-ping sr-ospf path-destination</a> <i>string</i>
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
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Context	<a href="#">oam lsp-ping sr-ospf prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-ping sr-ospf profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

### **send-count** *number*

Synopsis	Number of echo request packets to send
Context	<a href="#">oam lsp-ping sr-ospf send-count</a> <i>number</i>
Tree	<a href="#">send-count</a>
Range	1 to 100
Units	packets
Default	1
Introduced	23.3.R1
Platforms	All

### **size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-ping sr-ospf size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1

Introduced 23.3.R1  
Platforms All

### **source-ip-address** *string*

Synopsis Source IP address  
Context [oam lsp-ping sr-ospf source-ip-address string](#)  
Tree [source-ip-address](#)  
Introduced 23.3.R1  
Platforms All

### **timeout** *number*

Synopsis Time to wait for a reply after sending an echo request  
Context [oam lsp-ping sr-ospf timeout number](#)  
Tree [timeout](#)  
Range 1 to 10  
Units seconds  
Default 5  
Introduced 23.3.R1  
Platforms All

### **ttl** *number*

Synopsis TTL value for the MPLS label of the echo request  
Context [oam lsp-ping sr-ospf ttl number](#)  
Tree [ttl](#)  
Range 1 to 255  
Default 255  
Introduced 23.3.R1  
Platforms All

### **sr-ospf3**

Synopsis Perform an SR-OSPFv3 LSP ping test

Context	<a href="#">oam lsp-ping sr-ospf3</a>
Tree	<a href="#">sr-ospf3</a>
Introduced	23.3.R1
Platforms	All

**fc keyword**

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-ping sr-ospf3 fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

**igp-instance number**

Synopsis	IGP instance for the SR-OSPFv3 test
Context	<a href="#">oam lsp-ping sr-ospf3 igp-instance number</a>
Tree	<a href="#">igp-instance</a>
Range	0 to 31   64 to 95
Default	0
Introduced	23.3.R1
Platforms	All

**interface reference**

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-ping sr-ospf3 interface reference</a>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string interface string</i>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**interval number**

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-ping sr-ospf3 interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-ping sr-ospf3 next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-ping sr-ospf3 path-destination (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<a href="#">oam lsp-ping sr-ospf3 prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.3.R1

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Platforms All

### **profile** *keyword*

Synopsis QoS profile for the transmitted echo request packets  
Context [oam lsp-ping sr-ospf3 profile keyword](#)  
Tree [profile](#)  
Options in, out  
Default out  
Introduced 23.3.R1  
Platforms All

### **send-count** *number*

Synopsis Number of echo request packets to send  
Context [oam lsp-ping sr-ospf3 send-count number](#)  
Tree [send-count](#)  
Range 1 to 100  
Units packets  
Default 1  
Introduced 23.3.R1  
Platforms All

### **size** *number*

Synopsis Echo request packet pad size  
Context [oam lsp-ping sr-ospf3 size number](#)  
Tree [size](#)  
Range 1 to 9786  
Units bytes  
Default 1  
Introduced 23.3.R1  
Platforms All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-ping sr-ospf3 source-ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-ping sr-ospf3 timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**ttl** *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	<a href="#">oam lsp-ping sr-ospf3 ttl</a> <i>number</i>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

**sr-policy**

Synopsis	Perform an SR policy LSP ping test
Context	<a href="#">oam lsp-ping sr-policy</a>
Tree	<a href="#">sr-policy</a>
Introduced	23.3.R1
Platforms	All



**color number**

Synopsis	Segment Routing color for the test
Context	<a href="#">oam lsp-ping sr-policy color number</a>
Tree	<a href="#">color</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

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

Synopsis	Segment Routing endpoint for the test
Context	<a href="#">oam lsp-ping sr-policy endpoint</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**fc keyword**

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-ping sr-policy fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

**interface reference**

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-ping sr-policy interface reference</a>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string</i> <b>interface</b> <i>string</i>

Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

### **interval** *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-ping sr-policy interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-ping sr-policy next-hop</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-ping sr-policy path-destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

### **profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
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Context	<a href="#">oam lsp-ping sr-policy profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

### **segment-list** *number*

Synopsis	Segment Routing segment list for the test
Context	<a href="#">oam lsp-ping sr-policy segment-list</a> <i>number</i>
Tree	<a href="#">segment-list</a>
Range	1 to 32
Introduced	23.3.R1
Platforms	All

### **send-count** *number*

Synopsis	Number of echo request packets to send
Context	<a href="#">oam lsp-ping sr-policy send-count</a> <i>number</i>
Tree	<a href="#">send-count</a>
Range	1 to 100
Units	packets
Default	1
Introduced	23.3.R1
Platforms	All

### **size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-ping sr-policy size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1

Introduced 23.3.R1  
Platforms All

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

Synopsis Source IP address  
Context [oam lsp-ping sr-policy source-ip-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)  
Tree [source-ip-address](#)  
Introduced 23.3.R1  
Platforms All

### **timeout** *number*

Synopsis Time to wait for a reply after sending an echo request  
Context [oam lsp-ping sr-policy timeout](#) *number*  
Tree [timeout](#)  
Range 1 to 10  
Units seconds  
Default 5  
Introduced 23.3.R1  
Platforms All

### **ttl** *number*

Synopsis TTL value for the MPLS label of the echo request  
Context [oam lsp-ping sr-policy ttl](#) *number*  
Tree [ttl](#)  
Range 1 to 255  
Default 255  
Introduced 23.3.R1  
Platforms All

### **sr-te**

Synopsis Perform an SR-TE LSP ping test

Context	<a href="#">oam lsp-ping sr-te</a>
Tree	<a href="#">sr-te</a>
Introduced	23.3.R1
Platforms	All

### **fc** *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-ping sr-te fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

### **interface** *reference*

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-ping sr-te interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string interface string</i>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

### **interval** *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-ping sr-te interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

**lsp-name reference**

Synopsis	Name of the LSP to test
Context	<a href="#">oam lsp-ping sr-te lsp-name reference</a>
Tree	<a href="#">lsp-name</a>
Reference	<b>state router string mpls lsp string</b>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-ping sr-te next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**path reference**

Synopsis	Name of the MPLS path to test
Context	<a href="#">oam lsp-ping sr-te path reference</a>
Tree	<a href="#">path</a>
Reference	<b>state router string mpls path string</b>
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-ping sr-te path-destination (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1

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Platforms All

### **profile** *keyword*

Synopsis QoS profile for the transmitted echo request packets  
Context [oam lsp-ping sr-te profile keyword](#)  
Tree [profile](#)  
Options in, out  
Default out  
Introduced 23.3.R1  
Platforms All

### **send-count** *number*

Synopsis Number of echo request packets to send  
Context [oam lsp-ping sr-te send-count number](#)  
Tree [send-count](#)  
Range 1 to 100  
Units packets  
Default 1  
Introduced 23.3.R1  
Platforms All

### **size** *number*

Synopsis Echo request packet pad size  
Context [oam lsp-ping sr-te size number](#)  
Tree [size](#)  
Range 1 to 9786  
Units bytes  
Default 1  
Introduced 23.3.R1  
Platforms All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-ping sr-te source-ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-ping sr-te timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**ttl** *number*

Synopsis	TTL value for the MPLS label of the echo request
Context	<a href="#">oam lsp-ping sr-te ttl</a> <i>number</i>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	255
Introduced	23.3.R1
Platforms	All

**lsp-trace**

Synopsis	Perform a Label Switched Path (LSP) trace test
Context	<a href="#">oam lsp-trace</a>
Tree	<a href="#">lsp-trace</a>
Introduced	23.3.R1
Platforms	All



**bgp-label**

Synopsis	Perform a BGP-label LSP trace test
Context	<a href="#">oam lsp-trace bgp-label</a>
Tree	<a href="#">bgp-label</a>
Description	This option performs an LSP trace test using Target FEC Stack sub-type "BGP labeled IPv4 prefix".
Introduced	23.3.R1
Platforms	All

**downstream-map-tlv** *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	<a href="#">oam lsp-trace bgp-label downstream-map-tlv keyword</a>
Tree	<a href="#">downstream-map-tlv</a>
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

**fc** *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-trace bgp-label fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

**interface** *reference*

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-trace bgp-label interface reference</a>
Tree	<a href="#">interface</a>

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Reference	<b>state router <i>string</i> interface <i>string</i></b>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

### **interval** *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-trace bgp-label interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

### **max-fail** *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	<a href="#">oam lsp-trace bgp-label max-fail</a> <i>number</i>
Tree	<a href="#">max-fail</a>
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

### **max-ttl** *number*

Synopsis	Maximum TTL
Context	<a href="#">oam lsp-trace bgp-label max-ttl</a> <i>number</i>
Tree	<a href="#">max-ttl</a>
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

**min-ttl** *number*

Synopsis	Initial TTL for the test
Context	<a href="#">oam lsp-trace bgp-label min-ttl</a> <i>number</i>
Tree	<a href="#">min-ttl</a>
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-trace bgp-label next-hop</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**output-format** *keyword*

Synopsis	Output format for the result
Context	<a href="#">oam lsp-trace bgp-label output-format</a> <i>keyword</i>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-trace bgp-label path-destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1

Platforms All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test

Context [oam lsp-trace bgp-label prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Notes This element is mandatory.

Introduced 23.3.R1

Platforms All

### **probe-count** *number*

Synopsis Number of OAM trace probes to send per TTL

Context [oam lsp-trace bgp-label probe-count](#) *number*

Tree [probe-count](#)

Range 1 to 10

Default 1

Introduced 23.3.R1

Platforms All

### **profile** *keyword*

Synopsis QoS profile for the transmitted echo request packets

Context [oam lsp-trace bgp-label profile](#) *keyword*

Tree [profile](#)

Options in, out

Default out

Introduced 23.3.R1

Platforms All

### **size** *number*

Synopsis Echo request packet pad size

Context [oam lsp-trace bgp-label size](#) *number*

Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-trace bgp-label source-ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

### **timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-trace bgp-label timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

### **ldp**

Synopsis	Perform an LDP LSP trace test
Context	<a href="#">oam lsp-trace ldp</a>
Tree	<a href="#">ldp</a>
Introduced	23.3.R1
Platforms	All

**downstream-map-tlv** *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	<a href="#">oam lsp-trace ldp downstream-map-tlv keyword</a>
Tree	<a href="#">downstream-map-tlv</a>
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

**fc** *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-trace ldp fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

**interface** *reference*

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-trace ldp interface reference</a>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string interface string</i>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**interval** *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-trace ldp interval number</a>
Tree	<a href="#">interval</a>

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Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

### **max-fail** *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	<a href="#">oam lsp-trace ldp max-fail</a> <i>number</i>
Tree	<a href="#">max-fail</a>
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

### **max-ttl** *number*

Synopsis	Maximum TTL
Context	<a href="#">oam lsp-trace ldp max-ttl</a> <i>number</i>
Tree	<a href="#">max-ttl</a>
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

### **min-ttl** *number*

Synopsis	Initial TTL for the test
Context	<a href="#">oam lsp-trace ldp min-ttl</a> <i>number</i>
Tree	<a href="#">min-ttl</a>
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-trace ldp next-hop</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**output-format** *keyword*

Synopsis	Output format for the result
Context	<a href="#">oam lsp-trace ldp output-format</a> <i>keyword</i>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-trace ldp path-destination</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<a href="#">oam lsp-trace ldp prefix</a> ( <i>ipv4-prefix   ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All



**probe-count** *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	<a href="#">oam lsp-trace ldp probe-count</a> <i>number</i>
Tree	<a href="#">probe-count</a>
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

**profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-trace ldp profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

**size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-trace ldp size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-trace ldp source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )

Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-trace ldp timeout number</a>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**rsvp-te**

Synopsis	Perform an RSVP-TE LSP trace test
Context	<a href="#">oam lsp-trace rsvp-te</a>
Tree	<a href="#">rsvp-te</a>
Introduced	23.3.R1
Platforms	All

**downstream-map-tlv** *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	<a href="#">oam lsp-trace rsvp-te downstream-map-tlv keyword</a>
Tree	<a href="#">downstream-map-tlv</a>
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

### **fc keyword**

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-trace rsvp-te fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

### **interval number**

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-trace rsvp-te interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

### **lsp-name reference**

Synopsis	Name of the LSP to test
Context	<a href="#">oam lsp-trace rsvp-te lsp-name reference</a>
Tree	<a href="#">lsp-name</a>
Reference	<b>state router string mpls lsp string</b>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **max-fail number**

Synopsis	Maximum consecutive timeouts before terminating test
Context	<a href="#">oam lsp-trace rsvp-te max-fail number</a>
Tree	<a href="#">max-fail</a>

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Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

**max-ttl** *number*

Synopsis	Maximum TTL
Context	<a href="#">oam lsp-trace rsvp-te max-ttl</a> <i>number</i>
Tree	<a href="#">max-ttl</a>
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

**min-ttl** *number*

Synopsis	Initial TTL for the test
Context	<a href="#">oam lsp-trace rsvp-te min-ttl</a> <i>number</i>
Tree	<a href="#">min-ttl</a>
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

**output-format** *keyword*

Synopsis	Output format for the result
Context	<a href="#">oam lsp-trace rsvp-te output-format</a> <i>keyword</i>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

**path** *reference*

Synopsis	Name of the MPLS path to test
Context	<a href="#">oam lsp-trace rsvp-te path</a> <i>reference</i>
Tree	<a href="#">path</a>
Reference	<b>state router</b> <i>string mpls path string</i>
Introduced	23.3.R1
Platforms	All

**probe-count** *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	<a href="#">oam lsp-trace rsvp-te probe-count</a> <i>number</i>
Tree	<a href="#">probe-count</a>
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

**profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-trace rsvp-te profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

**size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-trace rsvp-te size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 9786

Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-trace rsvp-te source-ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

### **timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-trace rsvp-te timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

### **sr-isis**

Synopsis	Perform an SR-ISIS LSP trace test
Context	<a href="#">oam lsp-trace sr-isis</a>
Tree	<a href="#">sr-isis</a>
Introduced	23.3.R1
Platforms	All

### **downstream-map-tlv** *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
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Context	<a href="#">oam lsp-trace sr-isis downstream-map-tlv keyword</a>
Tree	<a href="#">downstream-map-tlv</a>
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

### **fc keyword**

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-trace sr-isis fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

### **flex-algo number**

Synopsis	Segment Routing Flexible Algorithm for the test
Context	<a href="#">oam lsp-trace sr-isis flex-algo number</a>
Tree	<a href="#">flex-algo</a>
Range	128 to 255
Introduced	23.7.R1
Platforms	All

### **igp-instance number**

Synopsis	IGP instance for the SR-ISIS test
Context	<a href="#">oam lsp-trace sr-isis igp-instance number</a>
Tree	<a href="#">igp-instance</a>
Range	0 to 127
Default	0
Introduced	23.3.R1

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Platforms All

### **interface** *reference*

Synopsis Egress router interface to use with path destination

Context [oam lsp-trace sr-isis interface reference](#)

Tree [interface](#)

Reference **state router string interface string**

Notes The following elements are part of a choice: **interface** or **next-hop**.

Introduced 23.3.R1

Platforms All

### **interval** *number*

Synopsis Minimum time to expire before next echo request is sent

Context [oam lsp-trace sr-isis interval number](#)

Tree [interval](#)

Range 1 to 10

Units seconds

Default 1

Introduced 23.3.R1

Platforms All

### **max-fail** *number*

Synopsis Maximum consecutive timeouts before terminating test

Context [oam lsp-trace sr-isis max-fail number](#)

Tree [max-fail](#)

Range 1 to 255

Default 5

Introduced 23.3.R1

Platforms All



**max-ttl** *number*

Synopsis	Maximum TTL
Context	<a href="#">oam lsp-trace sr-isis max-ttl</a> <i>number</i>
Tree	<a href="#">max-ttl</a>
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

**min-ttl** *number*

Synopsis	Initial TTL for the test
Context	<a href="#">oam lsp-trace sr-isis min-ttl</a> <i>number</i>
Tree	<a href="#">min-ttl</a>
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-trace sr-isis next-hop</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**output-format** *keyword*

Synopsis	Output format for the result
Context	<a href="#">oam lsp-trace sr-isis output-format</a> <i>keyword</i>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	summary

Introduced 23.3.R1  
Platforms All

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

Synopsis IP address of the path destination  
Context [oam lsp-trace sr-isis path-destination](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)  
Tree [path-destination](#)  
Introduced 23.3.R1  
Platforms All

### **prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis Destination IP prefix for the test  
Context [oam lsp-trace sr-isis prefix](#) (*ipv4-prefix | ipv6-prefix*)  
Tree [prefix](#)  
Notes This element is mandatory.  
Introduced 23.3.R1  
Platforms All

### **probe-count** *number*

Synopsis Number of OAM trace probes to send per TTL  
Context [oam lsp-trace sr-isis probe-count](#) *number*  
Tree [probe-count](#)  
Range 1 to 10  
Default 1  
Introduced 23.3.R1  
Platforms All

### **profile** *keyword*

Synopsis QoS profile for the transmitted echo request packets  
Context [oam lsp-trace sr-isis profile](#) *keyword*  
Tree [profile](#)

---

Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

**size number**

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-trace sr-isis size number</a>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-trace sr-isis source-ip-address</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout number**

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-trace sr-isis timeout number</a>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**sr-ospf**

Synopsis	Perform an SR-OSPF LSP trace test
Context	<a href="#">oam lsp-trace sr-ospf</a>
Tree	<a href="#">sr-ospf</a>
Introduced	23.3.R1
Platforms	All

**downstream-map-tlv** *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	<a href="#">oam lsp-trace sr-ospf downstream-map-tlv keyword</a>
Tree	<a href="#">downstream-map-tlv</a>
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

**fc** *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-trace sr-ospf fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

**flex-algo** *number*

Synopsis	Segment Routing Flexible Algorithm for the test
Context	<a href="#">oam lsp-trace sr-ospf flex-algo number</a>
Tree	<a href="#">flex-algo</a>
Range	128 to 255
Introduced	23.7.R1

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Platforms All

### **igp-instance** *number*

Synopsis IGP instance for the SR-OSPF test

Context [oam lsp-trace sr-ospf igp-instance](#) *number*

Tree [igp-instance](#)

Range 0 to 31

Default 0

Introduced 23.3.R1

Platforms All

### **interface** *reference*

Synopsis Egress router interface to use with path destination

Context [oam lsp-trace sr-ospf interface](#) *reference*

Tree [interface](#)

Reference **state router** *string interface string*

Notes The following elements are part of a choice: **interface** or **next-hop**.

Introduced 23.3.R1

Platforms All

### **interval** *number*

Synopsis Minimum time to expire before next echo request is sent

Context [oam lsp-trace sr-ospf interval](#) *number*

Tree [interval](#)

Range 1 to 10

Units seconds

Default 1

Introduced 23.3.R1

Platforms All

### **max-fail** *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	<a href="#">oam lsp-trace sr-ospf max-fail</a> <i>number</i>
Tree	<a href="#">max-fail</a>
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

### **max-ttl** *number*

Synopsis	Maximum TTL
Context	<a href="#">oam lsp-trace sr-ospf max-ttl</a> <i>number</i>
Tree	<a href="#">max-ttl</a>
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

### **min-ttl** *number*

Synopsis	Initial TTL for the test
Context	<a href="#">oam lsp-trace sr-ospf min-ttl</a> <i>number</i>
Tree	<a href="#">min-ttl</a>
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

### **next-hop** *string*

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-trace sr-ospf next-hop</a> <i>string</i>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .

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Introduced	23.3.R1
Platforms	All

**output-format** *keyword*

Synopsis	Output format for the result
Context	<a href="#">oam lsp-trace sr-ospf output-format keyword</a>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

**path-destination** *string*

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-trace sr-ospf path-destination string</a>
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<a href="#">oam lsp-trace sr-ospf prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**probe-count** *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	<a href="#">oam lsp-trace sr-ospf probe-count number</a>
Tree	<a href="#">probe-count</a>

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Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

**profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-trace sr-ospf profile keyword</a>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

**size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-trace sr-ospf size number</a>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

**source-ip-address** *string*

Synopsis	Source IP address
Context	<a href="#">oam lsp-trace sr-ospf source-ip-address string</a>
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All



**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-trace sr-ospf timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**sr-ospf3**

Synopsis	Perform an SR-OSPFv3 LSP trace test
Context	<a href="#">oam lsp-trace sr-ospf3</a>
Tree	<a href="#">sr-ospf3</a>
Introduced	23.3.R1
Platforms	All

**downstream-map-tlv** *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	<a href="#">oam lsp-trace sr-ospf3 downstream-map-tlv</a> <i>keyword</i>
Tree	<a href="#">downstream-map-tlv</a>
Options	dsmap – Downstream mapping TLV ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

**fc** *keyword*

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-trace sr-ospf3 fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc

Default	be
Introduced	23.3.R1
Platforms	All

### **igp-instance** *number*

Synopsis	IGP instance for the SR-OSPFv3 test
Context	<a href="#">oam lsp-trace sr-ospf3 igp-instance</a> <i>number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 31   64 to 95
Default	0
Introduced	23.3.R1
Platforms	All

### **interface** *reference*

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-trace sr-ospf3 interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string interface string</i>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

### **interval** *number*

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-trace sr-ospf3 interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

**max-fail number**

Synopsis	Maximum consecutive timeouts before terminating test
Context	<a href="#">oam lsp-trace sr-ospf3 max-fail number</a>
Tree	<a href="#">max-fail</a>
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

**max-ttl number**

Synopsis	Maximum TTL
Context	<a href="#">oam lsp-trace sr-ospf3 max-ttl number</a>
Tree	<a href="#">max-ttl</a>
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

**min-ttl number**

Synopsis	Initial TTL for the test
Context	<a href="#">oam lsp-trace sr-ospf3 min-ttl number</a>
Tree	<a href="#">min-ttl</a>
Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-trace sr-ospf3 next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">next-hop</a>

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Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**output-format** *keyword*

Synopsis	Output format for the result
Context	<a href="#">oam lsp-trace sr-ospf3 output-format keyword</a>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-trace sr-ospf3 path-destination (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<a href="#">oam lsp-trace sr-ospf3 prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**probe-count** *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	<a href="#">oam lsp-trace sr-ospf3 probe-count number</a>

Tree	<a href="#">probe-count</a>
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

### **profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-trace sr-ospf3 profile keyword</a>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

### **size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-trace sr-ospf3 size number</a>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Source IP address
Context	<a href="#">oam lsp-trace sr-ospf3 source-ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">source-ip-address</a>
Introduced	23.3.R1
Platforms	All

**timeout** *number*

Synopsis	Time to wait for a reply after sending an echo request
Context	<a href="#">oam lsp-trace sr-ospf3 timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.3.R1
Platforms	All

**sr-policy**

Synopsis	Perform an SR policy LSP trace test
Context	<a href="#">oam lsp-trace sr-policy</a>
Tree	<a href="#">sr-policy</a>
Introduced	23.3.R1
Platforms	All

**color** *number*

Synopsis	Segment Routing color for the test
Context	<a href="#">oam lsp-trace sr-policy color</a> <i>number</i>
Tree	<a href="#">color</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**downstream-map-tlv** *keyword*

Synopsis	Type of downstream mapping TLV in MPLS echo request PDU
Context	<a href="#">oam lsp-trace sr-policy downstream-map-tlv</a> <i>keyword</i>
Tree	<a href="#">downstream-map-tlv</a>
Options	dsmap – Downstream mapping TLV

	ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

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

Synopsis	Segment Routing endpoint for the test
Context	<a href="#">oam lsp-trace sr-policy endpoint</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **fc keyword**

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-trace sr-policy fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

### **interface reference**

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-trace sr-policy interface reference</a>
Tree	<a href="#">interface</a>
Reference	<b>state router</b> <i>string interface string</i>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**interval number**

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-trace sr-policy interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

**max-fail number**

Synopsis	Maximum consecutive timeouts before terminating test
Context	<a href="#">oam lsp-trace sr-policy max-fail number</a>
Tree	<a href="#">max-fail</a>
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

**max-ttl number**

Synopsis	Maximum TTL
Context	<a href="#">oam lsp-trace sr-policy max-ttl number</a>
Tree	<a href="#">max-ttl</a>
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

**min-ttl number**

Synopsis	Initial TTL for the test
Context	<a href="#">oam lsp-trace sr-policy min-ttl number</a>
Tree	<a href="#">min-ttl</a>



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Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-trace sr-policy next-hop</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**output-format** *keyword*

Synopsis	Output format for the result
Context	<a href="#">oam lsp-trace sr-policy output-format</a> <i>keyword</i>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-trace sr-policy path-destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**probe-count** *number*

Synopsis	Number of OAM trace probes to send per TTL
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Context	<a href="#">oam lsp-trace sr-policy probe-count</a> <i>number</i>
Tree	<a href="#">probe-count</a>
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

### **profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-trace sr-policy profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

### **segment-list** *number*

Synopsis	Segment Routing segment list for the test
Context	<a href="#">oam lsp-trace sr-policy segment-list</a> <i>number</i>
Tree	<a href="#">segment-list</a>
Range	1 to 32
Introduced	23.3.R1
Platforms	All

### **size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-trace sr-policy size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.3.R1

Platforms All

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

Synopsis Source IP address  
 Context [oam lsp-trace sr-policy source-ip-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)  
 Tree [source-ip-address](#)  
 Introduced 23.3.R1  
 Platforms All

### **timeout** *number*

Synopsis Time to wait for a reply after sending an echo request  
 Context [oam lsp-trace sr-policy timeout](#) *number*  
 Tree [timeout](#)  
 Range 1 to 10  
 Units seconds  
 Default 5  
 Introduced 23.3.R1  
 Platforms All

### **sr-te**

Synopsis Perform an SR-TE LSP trace test  
 Context [oam lsp-trace sr-te](#)  
 Tree [sr-te](#)  
 Introduced 23.3.R1  
 Platforms All

### **downstream-map-tlv** *keyword*

Synopsis Type of downstream mapping TLV in MPLS echo request PDU  
 Context [oam lsp-trace sr-te downstream-map-tlv](#) *keyword*  
 Tree [downstream-map-tlv](#)  
 Options dsmap – Downstream mapping TLV

	ddmap – Detailed downstream mapping TLV none – No mapping TLV
Introduced	23.3.R1
Platforms	All

**fc keyword**

Synopsis	QoS forwarding class for the sent echo request packet
Context	<a href="#">oam lsp-trace sr-te fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.3.R1
Platforms	All

**interface reference**

Synopsis	Egress router interface to use with path destination
Context	<a href="#">oam lsp-trace sr-te interface reference</a>
Tree	<a href="#">interface</a>
Reference	<b>state router string interface string</b>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

**interval number**

Synopsis	Minimum time to expire before next echo request is sent
Context	<a href="#">oam lsp-trace sr-te interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.3.R1
Platforms	All

### **lsp-name** *reference*

Synopsis	Name of the LSP to test
Context	<a href="#">oam lsp-trace sr-te lsp-name</a> <i>reference</i>
Tree	<a href="#">lsp-name</a>
Reference	<b>state router</b> <i>string mpls lsp string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **max-fail** *number*

Synopsis	Maximum consecutive timeouts before terminating test
Context	<a href="#">oam lsp-trace sr-te max-fail</a> <i>number</i>
Tree	<a href="#">max-fail</a>
Range	1 to 255
Default	5
Introduced	23.3.R1
Platforms	All

### **max-ttl** *number*

Synopsis	Maximum TTL
Context	<a href="#">oam lsp-trace sr-te max-ttl</a> <i>number</i>
Tree	<a href="#">max-ttl</a>
Range	1 to 255
Default	30
Introduced	23.3.R1
Platforms	All

### **min-ttl** *number*

Synopsis	Initial TTL for the test
Context	<a href="#">oam lsp-trace sr-te min-ttl</a> <i>number</i>
Tree	<a href="#">min-ttl</a>

Range	1 to 255
Default	1
Introduced	23.3.R1
Platforms	All

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

Synopsis	Egress IP next hop address to use with path destination
Context	<a href="#">oam lsp-trace sr-te next-hop</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	23.3.R1
Platforms	All

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

Synopsis	Output format for the result
Context	<a href="#">oam lsp-trace sr-te output-format</a> <i>keyword</i>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	summary
Introduced	23.3.R1
Platforms	All

### **path** *reference*

Synopsis	Name of the MPLS path to test
Context	<a href="#">oam lsp-trace sr-te path</a> <i>reference</i>
Tree	<a href="#">path</a>
Reference	<b>state router</b> <i>string mpls path string</i>
Introduced	23.3.R1
Platforms	All

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

Synopsis	IP address of the path destination
Context	<a href="#">oam lsp-trace sr-te path-destination</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">path-destination</a>
Introduced	23.3.R1
Platforms	All

**probe-count** *number*

Synopsis	Number of OAM trace probes to send per TTL
Context	<a href="#">oam lsp-trace sr-te probe-count</a> <i>number</i>
Tree	<a href="#">probe-count</a>
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	All

**profile** *keyword*

Synopsis	QoS profile for the transmitted echo request packets
Context	<a href="#">oam lsp-trace sr-te profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	23.3.R1
Platforms	All

**size** *number*

Synopsis	Echo request packet pad size
Context	<a href="#">oam lsp-trace sr-te size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1

Introduced 23.3.R1  
Platforms All

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

Synopsis Source IP address  
Context [oam lsp-trace sr-te source-ip-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)  
Tree [source-ip-address](#)  
Introduced 23.3.R1  
Platforms All

### **timeout** *number*

Synopsis Time to wait for a reply after sending an echo request  
Context [oam lsp-trace sr-te timeout](#) *number*  
Tree [timeout](#)  
Range 1 to 10  
Units seconds  
Default 5  
Introduced 23.3.R1  
Platforms All

### **oam-pm**

Synopsis Initiate an on-demand OAM Performance Monitoring test  
Context [oam oam-pm](#)  
Tree [oam-pm](#)  
Introduced 20.2.R1  
Platforms All

### **action** *keyword*

Synopsis OAM-PM test action  
Context [oam oam-pm action](#) *keyword*  
Tree [action](#)



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Options	start, stop
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **session** *reference*

Synopsis	OAM-PM session name
Context	<a href="#">oam oam-pm session reference</a>
Tree	<a href="#">session</a>
Reference	<b>state oam-pm session</b> <i>string</i>
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

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

Synopsis	Test type
Context	<a href="#">oam oam-pm test-type keyword</a>
Tree	<a href="#">test-type</a>
Options	dm, dmm, lmm, slm, twamp-light
Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	All

### **saa**

Synopsis	Enter the <b>saa</b> context
Context	<a href="#">oam saa</a>
Tree	<a href="#">saa</a>
Introduced	22.10.R1
Platforms	All

**owner** [**owner-name**] *reference test reference*

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

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

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

**test** *reference*

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

**start**

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

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Platforms All

### **accounting *boolean***

Synopsis Disable recording results in accounting policy  
Context [oam saa owner reference test reference start accounting boolean](#)  
Tree [accounting](#)  
Default true  
Introduced 22.10.R1  
Platforms All

### **stop**

Synopsis Stop the SAA test  
Context [oam saa owner reference test reference stop](#)  
Tree [stop](#)  
Introduced 22.10.R1  
Platforms All

### **accounting *boolean***

Synopsis Disable recording results in accounting policy  
Context [oam saa owner reference test reference stop accounting boolean](#)  
Tree [accounting](#)  
Default true  
Introduced 22.10.R1  
Platforms All

### **service-activation-testhead**

Synopsis Start or stop Service Activation Testhead service test  
Context [oam service-activation-testhead](#)  
Tree [service-activation-testhead](#)  
Introduced 23.10.R1  
Platforms All

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

Synopsis	Service test name
Context	<a href="#">oam service-activation-testhead service-test reference</a>
Tree	<a href="#">service-test</a>
Introduced	23.10.R1
Platforms	All

**[service-test-name]** *reference*

Synopsis	Name of the service test to be started or stopped
Context	<a href="#">oam service-activation-testhead service-test reference</a>
Tree	<a href="#">service-test</a>
Reference	<b>state test-oam service-activation-testhead service-test string</b>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

**start**

Synopsis	Start OAM SATH service test
Context	<a href="#">oam service-activation-testhead service-test reference start</a>
Tree	<a href="#">start</a>
Description	This command starts an OAM Service Activation Testhead (SATH) service test. Only one instance of a service test is allowed for the specified <i>service-test-name</i> . If the user attempts to start another instance of a service test for the same <i>service-test-name</i> while the current instance is still running, an error is generated.
Introduced	23.10.R1
Platforms	All

**stop**

Synopsis	Stop OAM SATH service test
Context	<a href="#">oam service-activation-testhead service-test reference stop</a>
Tree	<a href="#">stop</a>

---

Description	This command stops an OAM Service Activation Testhead (SATH) service test. If the user attempts to stop a service test that is already complete, an error is generated.
Introduced	23.10.R1
Platforms	All

## password

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

## ping

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

## bypass-routing

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

**candidate-path**

Synopsis	Ping candidate path of the SRv6 policy
Context	<a href="#">ping candidate-path</a>
Tree	<a href="#">candidate-path</a>
Description	When configured, this command allows the user to specify a candidate path of the SRv6 policy to ping. The candidate path does not need to be the currently active candidate path.
Introduced	23.10.R1
Platforms	All

**color number**

Synopsis	Color identifier of the Segment Routing IPv6 policy
Context	<a href="#">ping color number</a>
Tree	<a href="#">color</a>
Max. Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	23.7.R1
Platforms	All

**count number**

Synopsis	Number of ping requests to send to the remote host
Context	<a href="#">ping count number</a>
Tree	<a href="#">count</a>
Range	1 to 100000
Units	packets
Default	5
Introduced	19.10.R1
Platforms	All

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

Synopsis	Destination IP address or DNS name
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Context	<a href="#">ping [destination]</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone   string-not-all-spaces</i> )
Tree	<a href="#">[destination]</a>
String Length	1 to 128
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	19.10.R1
Platforms	All

### **distinguisher** *number*

Synopsis	SRv6 policy candidate path distinguisher
Context	<a href="#">ping distinguisher</a> <i>number</i>
Tree	<a href="#">distinguisher</a>
Description	This command specifies the distinguisher of the SRv6 policy candidate path to send the ping probe on.  This command must be configured if the <b>protocol-owner</b> command is configured to <b>bgp</b> .
Range	1 to 4294967295
Introduced	23.10.R1
Platforms	All

### **do-not-fragment**

Synopsis	Do not fragment the request frame
Context	<a href="#">ping do-not-fragment</a>
Tree	<a href="#">do-not-fragment</a>
Description	This command sets the do-not-fragment bit in the IPv4 header. This prevents packet fragmentation along the path when there is an MTU mismatch.
Introduced	19.10.R1
Platforms	All

### **endpoint** *string*

Synopsis	Endpoint identifier of the Segment Routing IPv6 policy to be pinged
Context	<a href="#">ping endpoint</a> <i>string</i>

Tree	<a href="#">endpoint</a>
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	23.7.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class option for the transmitted packet
Context	<a href="#">ping fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	nc
Introduced	19.10.R1
Platforms	All

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

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

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

Synopsis	Time between consecutive ping requests
Context	<a href="#">ping interval</a> ( <i>number   decimal-number</i> )



Tree	<a href="#">interval</a>
Range	1 to 10000
Units	seconds
Default	1
Introduced	19.10.R1
Platforms	All

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

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

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

Synopsis	Output format
Context	<a href="#">ping output-format</a> <i>keyword</i>
Tree	<a href="#">output-format</a>
Options	summary, detail
Default	detail
Introduced	19.10.R1
Platforms	All

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

Synopsis	Pattern string to include in the packet
Context	<a href="#">ping pattern</a> ( <i>keyword   number</i> )
Tree	<a href="#">pattern</a>
Range	0 to 65535

Options	sequential
Default	sequential
Introduced	19.10.R1
Platforms	All

### **preference** *number*

Synopsis	SRv6 policy candidate path preference
Context	<a href="#">ping preference number</a>
Tree	<a href="#">preference</a>
Description	This command specifies the preference of the SRv6 policy candidate path to send the ping probe on.
Max. Range	0 to 4294967295
Default	100
Introduced	23.10.R1
Platforms	All

### **protocol-owner** *keyword*

Synopsis	Protocol owner
Context	<a href="#">ping protocol-owner keyword</a>
Tree	<a href="#">protocol-owner</a>
Description	This command specifies the protocol owner of the SRv6 policy candidate path to ping. The <b>bgp</b> option specifies a BGP SRv6 policy. The <b>static</b> option specifies a locally configured static SRv6 policy.
Options	bgp, static
Introduced	23.10.R1
Platforms	All

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

Synopsis	Router name or VPRN service name
Context	<a href="#">ping router-instance (reference   reference)</a>
Tree	<a href="#">router-instance</a>
Default	Base

Reference	<b>state router</b> <i>string</i> <b>state service vprn</b> <i>string</i>
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	19.10.R1
Platforms	All

### **segment-list** *number*

Synopsis	Segment Routing IPv6 segment list to be pinged
Context	<a href="#">ping segment-list</a> <i>number</i>
Tree	<a href="#">segment-list</a>
Range	1 to 32
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	23.7.R1
Platforms	All

### **size** *number*

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

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

Synopsis	Source IP address used in the ICMP Echo Request packet
Context	<a href="#">ping source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).

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Introduced	19.10.R1
Platforms	All

### **srv6-policy**

Synopsis	Ping a Segment Routing IPv6 policy
Context	<a href="#">ping srv6-policy</a>
Tree	<a href="#">srv6-policy</a>
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	23.7.R1
Platforms	All

### **subscriber string**

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

### **timeout number**

Synopsis	Wait time for the ICMP Echo Reply packet
Context	<a href="#">ping timeout number</a>
Tree	<a href="#">timeout</a>
Description	This command specifies the time to wait for the ICMP Echo Reply packet. The timer is started when the last ICMP Echo Request is sent.
Range	1 to 10
Units	seconds
Default	5
Introduced	19.10.R2

Platforms All

### **tos number**

Synopsis Type of Service (ToS) bits in the IP header  
Context [ping tos number](#)  
Tree [tos](#)  
Range 0 to 255  
Default 0  
Introduced 19.10.R1  
Platforms All

### **tll number**

Synopsis Time to Live (TTL) included in the request packet  
Context [ping tll number](#)  
Tree [tll](#)  
Range 1 to 128  
Default 64  
Introduced 19.10.R1  
Platforms All

### **pwc**

Synopsis Show the present working context  
Context [pwc](#)  
Tree [pwc](#)  
Introduced 16.0.R1  
Platforms All

### **[path-type] keyword**

Synopsis Alternative format to display the path  
Context [pwc \[path-type\] keyword](#)  
Tree [\[path-type\]](#)

Description	This command provides alternative formats to display the present working context. The <b>gnmi-path</b> option replaces the <b>xpath</b> option.
Options	model-path – YANG-modeled format for RESTCONF gnmi-path – gNMI format for streaming telemetry cli-path – MD-CLI format on a single line for copying and pasting json-instance-path – YANG-modeled format for pySROS
Introduced	19.10.R1
Platforms	All

## previous

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

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

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

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

Synopsis	Location of the script to be executed
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>string</i> )
Tree	<a href="#">pyexec</a>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

**[argument-01] string**

Synopsis	First argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>string</i> ) <a href="#">[argument-01]</a> <i>string</i>
Tree	<a href="#">[argument-01]</a>
Introduced	21.7.R1
Platforms	All

**[argument-02] string**

Synopsis	Second argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>string</i> ) <a href="#">[argument-02]</a> <i>string</i>
Tree	<a href="#">[argument-02]</a>
Introduced	21.7.R1
Platforms	All

**[argument-03] string**

Synopsis	Third argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>string</i> ) <a href="#">[argument-03]</a> <i>string</i>
Tree	<a href="#">[argument-03]</a>
Introduced	21.7.R1
Platforms	All

**[argument-04] string**

Synopsis	Fourth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>string</i> ) <a href="#">[argument-04]</a> <i>string</i>
Tree	<a href="#">[argument-04]</a>
Introduced	21.7.R1
Platforms	All

**[argument-05] string**

Synopsis	Fifth argument
Context	<a href="#">pyexec</a> ( <i>string</i>   <i>string</i> ) <a href="#">[argument-05]</a> <i>string</i>

---

Tree [\[argument-05\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-06] string**

Synopsis Sixth argument  
Context [pyexec \(string | string\) \[argument-06\] string](#)  
Tree [\[argument-06\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-07] string**

Synopsis Seventh argument  
Context [pyexec \(string | string\) \[argument-07\] string](#)  
Tree [\[argument-07\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-08] string**

Synopsis Eight argument  
Context [pyexec \(string | string\) \[argument-08\] string](#)  
Tree [\[argument-08\]](#)  
Introduced 21.7.R1  
Platforms All

**[argument-09] string**

Synopsis Ninth argument  
Context [pyexec \(string | string\) \[argument-09\] string](#)  
Tree [\[argument-09\]](#)  
Introduced 21.7.R1  
Platforms All



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

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

**quit-config**

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

**ssh**

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

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

Synopsis	Destination IP address or DNS name
Context	<a href="#">ssh</a> <a href="#">[destination]</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i>   <i>string-not-all-spaces</i> )
Tree	<a href="#">[destination]</a>
String Length	1 to 128
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	All

## key-re-exchange

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

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

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

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

Synopsis	Time after which SSH client initiates key re-exchange
Context	<a href="#">ssh key-re-exchange minutes</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">minutes</a>
Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	20.7.R1
Platforms	All

**login-name** *string*

Synopsis	SSH login username
Context	<a href="#">ssh login-name</a> <i>string</i>
Tree	<a href="#">login-name</a>
String Length	1 to 32
Introduced	20.7.R1
Platforms	All

**private-key-file** *string*

Synopsis	File with SSH private key
Context	<a href="#">ssh private-key-file</a> <i>string</i>
Tree	<a href="#">private-key-file</a>
Introduced	23.10.R3
Platforms	All

**router-instance** (*string* | *string*)

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

**telnet**

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

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

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

**port number**

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

**router-instance** (*string | string*)

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

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

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

## top

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

## traceroute

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

## candidate-path

Synopsis	Trace route of the candidate path of the SRv6 policy
Context	<a href="#">traceroute candidate-path</a>
Tree	<a href="#">candidate-path</a>
Description	When configured, this command allows the user to specify a candidate path of the SRv6 policy to traceroute. The candidate path does not need to be the currently active candidate path.
Introduced	23.10.R1
Platforms	All

## color number

Synopsis	Color ID of the SRv6 policy to trace
Context	<a href="#">traceroute color number</a>

---

Tree	<a href="#">color</a>
Description	This command launches a traceroute of an SRv6 policy that matches a specific color.
Max. Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	23.3.R1
Platforms	All

### **decode** *keyword*

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

### **dest-port** *number*

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

### **dest-port-udp-fixed**

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

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

Synopsis	Destination IP address or DNS name
Context	<a href="#">traceroute [destination]</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   string-not-all-spaces</i> )
Tree	<a href="#">[destination]</a>
String Length	1 to 128
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	19.10.R1
Platforms	All

**detail**

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

**distinguisher** *number*

Synopsis	SRv6 policy candidate path distinguisher
Context	<a href="#">traceroute distinguisher</a> <i>number</i>
Tree	<a href="#">distinguisher</a>
Description	This command specifies the distinguisher of the SRv6 policy candidate path to send the traceroute probe on.  This command must be configured if the <b>protocol-owner</b> command is configured to <b>bgp</b> .
Range	1 to 4294967295
Introduced	23.10.R1
Platforms	All

**endpoint** *string*

Synopsis	Endpoint of the SRv6 policy to trace
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Context	<a href="#">traceroute endpoint</a> <i>string</i>
Tree	<a href="#">endpoint</a>
Description	This command configures an IPv6 endpoint address for an SRv6 policy as the target of the traceroute.
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	23.3.R1
Platforms	All

### **min-ttl** *number*

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

### **numeric**

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

### **preference** *number*

Synopsis	SRv6 policy candidate path preference
Context	<a href="#">traceroute preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Description	This command specifies the preference of the SRv6 policy candidate path to send the traceroute probe on.



Max. Range	0 to 4294967295
Default	100
Introduced	23.10.R1
Platforms	All

### **probe-count** *number*

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

### **protocol** *keyword*

Synopsis	Packet type to send
Context	<a href="#">traceroute protocol</a> <i>keyword</i>
Tree	<a href="#">protocol</a>
Description	This command sets the transport protocol, UDP or TCP, for the traceroute packet. A targeted VPRN service silently discards TCP traceroutes and only responds to UDP traceroutes.
Options	udp, tcp
Default	udp
Introduced	21.10.R1
Platforms	All

### **protocol-owner** *keyword*

Synopsis	Protocol owner
Context	<a href="#">traceroute protocol-owner</a> <i>keyword</i>
Tree	<a href="#">protocol-owner</a>
Description	This command specifies the protocol owner of the SRv6 policy candidate path to traceroute.  The <b>bgp</b> option specifies a BGP SRv6 policy.

The **static** option specifies a locally configured static SRv6 policy.

Options	bgp, static
Introduced	23.10.R1
Platforms	All

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

Synopsis	Router name or VPRN service name
Context	<a href="#">traceroute router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	19.10.R1
Platforms	All

### **segment-list** *number*

Synopsis	SR IPv6 segment list to trace
Context	<a href="#">traceroute segment-list</a> <i>number</i>
Tree	<a href="#">segment-list</a>
Description	This command configures the traceroute probe to target a specific segment list of an SRv6 policy. When the segment list is not specified, the traceroute probe is sent on the lowest available segment list.
Range	1 to 32
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	23.3.R1
Platforms	All

### **size** *number*

Synopsis	Number of pad bytes in each transmitted packet
Context	<a href="#">traceroute size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	0 to 9786

Units	bytes
Default	0
Introduced	21.10.R1
Platforms	All

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

Synopsis	Source address of the probe packets
Context	<a href="#">traceroute source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Description	This command specifies the source address of the probe packets. If the IP address is not one of the interfaces of the device, the system returns an error.
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	19.10.R1
Platforms	All

### **srv6-policy**

Synopsis	Trace an SRv6 policy
Context	<a href="#">traceroute srv6-policy</a>
Tree	<a href="#">srv6-policy</a>
Description	This command launches a traceroute of a Segment Routing IPv6 (SRv6) policy.
Notes	The following elements are part of a mandatory choice: ( <b>destination</b> , <b>router-instance</b> , and <b>source-address</b> ) or ( <b>color</b> , <b>endpoint</b> , <b>segment-list</b> , and <b>srv6-policy</b> ).
Introduced	23.3.R1
Platforms	All

### **tos number**

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

---

Introduced	19.10.R1
Platforms	All

**tll number**

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

**wait number**

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

**tree**

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

**[cli-path] string**

Synopsis	Absolute path or relative path from pwc
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---

Context	<a href="#">tree [cli-path] string</a>
Tree	<a href="#">[cli-path]</a>
Introduced	20.10.R1
Platforms	All

### detail

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

### flat

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

## 2.6 Output modifier commands

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

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

## 2.6.1 Output modifier command descriptions

|

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

### count

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

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

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

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

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

**ignore-case** *boolean*

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

**invert-match** *boolean*

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

**max-count** *number*

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

**post-lines** *number*

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



Platforms All

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

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

### **no-more**

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

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

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

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

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

Introduced 21.7.R1  
Platforms All

**[argument-01] string**

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

**[argument-02] string**

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

**[argument-03] string**

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

**[argument-04] string**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

### **reverse-dns**

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

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

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

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

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

Introduced	16.0.R4
Platforms	All

## 2.7 perform commands

The **perform** commands are YANG-modeled versions of the **tools perform** commands and are available in MD-CLI and NETCONF interfaces. The **perform** commands execute actions in the router, such as:

- force a LAG subgroup to become active
- set an IS-IS overload condition
- terminate a Python script

```
perform
- filter
  - ip-filter reference
    - entry reference
      - activate-primary-action
  - ipv6-filter reference
    - entry reference
      - activate-primary-action
  - mac-filter reference
    - entry reference
      - activate-primary-action
  - redirect-policy reference
    - activate-best-dest
- lag
  - clear-force
    - lag
      - [lag-name] reference
      - sub-group number
    - multi-chassis
      - all
      - peer
        - [ip-address] reference
  - force-active
    - lag
      - [lag-name] reference
      - sub-group number
    - multi-chassis
      - all
      - peer
        - [ip-address] reference
  - force-standby
    - lag
      - [lag-name] reference
      - sub-group number
    - multi-chassis
      - all
      - peer
        - [ip-address] reference
- load-balance
  - class number
  - [lag-name] reference
- python
  - python-policy
    - cache
      - policy
        - hex-key string
        - [name] reference
        - set-lifetime number
        - string-key string
  - python-script
  - protect
```

---

perform python python-script protect hmac-sha256-key

```
    - hmac-sha256-key string
    - input-file string
    - output-file string
  - reload
    - script
      - [name] reference
- router string
- isis reference
  - ldp-sync-exit
  - overload
    - max-metric boolean
    - [seconds] number
  - run-manual-spf
- system
  - script-control
  - script-policy
    - stop
      - all
      - owner reference
      - policy-name reference
  - security
    - secure-boot
      - show
        - uefi-variables
          - card reference
```

## 2.7.1 perform command descriptions

### perform

Synopsis	Perform troubleshooting and debugging
Context	<a href="#">perform</a>
Tree	<a href="#">perform</a>
Introduced	23.7.R1
Platforms	All

### filter

Synopsis	Enter the <b>filter</b> context
Context	<a href="#">perform filter</a>
Tree	<a href="#">filter</a>
Introduced	23.7.R1
Platforms	All

### ip-filter [[filter-name](#)] *reference*

Synopsis	Enter the <b>ip-filter</b> list instance
Context	<a href="#">perform filter ip-filter reference</a>
Tree	<a href="#">ip-filter</a>
Introduced	23.7.R1
Platforms	All

### [[filter-name](#)] *reference*

Synopsis	Name to associate with the IP filter
Context	<a href="#">perform filter ip-filter reference</a>
Tree	<a href="#">ip-filter</a>
Reference	<b>state filter ip-filter string</b>
Notes	This element is part of a list key.
Introduced	23.7.R1



Platforms All

### **entry** [[entry-id](#)] *reference*

Synopsis Enter the **entry** list instance

Context [perform filter ip-filter reference entry reference](#)

Tree [entry](#)

Introduced 23.7.R1

Platforms All

### **[entry-id]** *reference*

Synopsis ID for the IP filter entry

Context [perform filter ip-filter reference entry reference](#)

Tree [entry](#)

Reference **state filter ip-filter string entry number**

Notes This element is part of a list key.

Introduced 23.7.R1

Platforms All

### **activate-primary-action**

Synopsis Switch from the secondary to the primary action

Context [perform filter ip-filter reference entry reference activate-primary-action](#)

Tree [activate-primary-action](#)

Description This command activates the primary action for the specified filter policy entry. If the primary action is already active, the command has no effect. If a secondary action is active, the primary action is activated unless the primary target is down. If the **configure filter redirect sticky-dest** command is configured, the timer expires.

Introduced 23.7.R1

Platforms All

### **ipv6-filter** [[filter-name](#)] *reference*

Synopsis Enter the **ipv6-filter** list instance

Context [perform filter ipv6-filter reference](#)

Tree	<a href="#">ipv6-filter</a>
Introduced	23.7.R1
Platforms	All

**[filter-name] reference**

Synopsis	Name to associate with the IPv6 filter
Context	<a href="#">perform filter ipv6-filter reference</a>
Tree	<a href="#">ipv6-filter</a>
Reference	<b>state filter ipv6-filter string</b>
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

**entry [entry-id] reference**

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">perform filter ipv6-filter reference entry reference</a>
Tree	<a href="#">entry</a>
Introduced	23.7.R1
Platforms	All

**[entry-id] reference**

Synopsis	ID for the IPv6 filter entry
Context	<a href="#">perform filter ipv6-filter reference entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state filter ipv6-filter string entry number</b>
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

**activate-primary-action**

Synopsis	Switch from the secondary to the primary action
----------	---

Context	<a href="#">perform filter ipv6-filter reference entry reference activate-primary-action</a>
Tree	<a href="#">activate-primary-action</a>
Description	This command activates the primary action for the specified filter policy entry. If the primary action is already active, the command has no effect. If a secondary action is active, the primary action is activated unless the primary target is down. If the <b>configure filter redirect sticky-dest</b> command is configured, the timer expires.
Introduced	23.7.R1
Platforms	All

### **mac-filter** [[filter-name](#)] *reference*

Synopsis	Enter the <b>mac-filter</b> list instance
Context	<a href="#">perform filter mac-filter reference</a>
Tree	<a href="#">mac-filter</a>
Introduced	23.7.R1
Platforms	All

### **[filter-name]** *reference*

Synopsis	Name to associate with the MAC filter
Context	<a href="#">perform filter mac-filter reference</a>
Tree	<a href="#">mac-filter</a>
Reference	<b>state filter mac-filter string</b>
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

### **entry** [[entry-id](#)] *reference*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">perform filter mac-filter reference entry reference</a>
Tree	<a href="#">entry</a>
Introduced	23.7.R1
Platforms	All

**[entry-id] reference**

Synopsis	ID for the MAC filter entry
Context	<a href="#">perform filter mac-filter reference entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state filter mac-filter string entry number</b>
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

**activate-primary-action**

Synopsis	Switch from the secondary to the primary action
Context	<a href="#">perform filter mac-filter reference entry reference activate-primary-action</a>
Tree	<a href="#">activate-primary-action</a>
Description	This command activates the primary action for the specified filter policy entry. If the primary action is already active, the command has no effect. If a secondary action is active, the primary action is activated unless the primary target is down. If the <b>configure filter redirect sticky-dest</b> command is configured, the timer expires.
Introduced	23.7.R1
Platforms	All

**redirect-policy [redirect-policy-name] reference**

Synopsis	Enter the <b>redirect-policy</b> list instance
Context	<a href="#">perform filter redirect-policy reference</a>
Tree	<a href="#">redirect-policy</a>
Introduced	23.7.R1
Platforms	All

**[redirect-policy-name] reference**

Synopsis	Name of the redirect policy
Context	<a href="#">perform filter redirect-policy reference</a>
Tree	<a href="#">redirect-policy</a>
Reference	<b>state filter redirect-policy string</b>

Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

### activate-best-dest

Synopsis	Activate the current best destination
Context	<a href="#">perform filter redirect-policy</a> <i>reference</i> <a href="#">activate-best-dest</a>
Tree	<a href="#">activate-best-dest</a>
Description	This command forces a PBR switch to the best destination selected by the redirect policy when that destination is not currently active as result of sticky destination functionality being enabled for the specified redirect policy. If the <b>configure filter redirect sticky-dest</b> command is configured, the timer expires.
Introduced	23.7.R1
Platforms	All

### lag

Synopsis	Perform LAG operations
Context	<a href="#">perform lag</a>
Tree	<a href="#">lag</a>
Introduced	23.7.R1
Platforms	All

### clear-force

Synopsis	Perform LAG clear-force operation
Context	<a href="#">perform lag clear-force</a>
Tree	<a href="#">clear-force</a>
Introduced	23.7.R1
Platforms	All

### lag

Synopsis	Perform LAG operation on the specified LAG
Context	<a href="#">perform lag clear-force lag</a>

---

Tree	<a href="#">lag</a>
Introduced	23.7.R1
Platforms	All

### **[lag-name]** *reference*

Synopsis	LAG name
Context	<a href="#">perform lag clear-force lag [lag-name] reference</a>
Tree	<a href="#">[lag-name]</a>
Reference	<b>state lag string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

### **sub-group** *number*

Synopsis	Sub-group in the LAG
Context	<a href="#">perform lag clear-force lag sub-group number</a>
Tree	<a href="#">sub-group</a>
Range	1 to 16
Default	1
Introduced	23.7.R1
Platforms	All

### **multi-chassis**

Synopsis	Enter the <b>multi-chassis</b> context
Context	<a href="#">perform lag clear-force multi-chassis</a>
Tree	<a href="#">multi-chassis</a>
Introduced	23.7.R1
Platforms	All

### **all**

Synopsis	Perform LAG operation on all multi-chassis LAGs
----------	---

Context	<a href="#">perform lag clear-force multi-chassis all</a>
Tree	<a href="#">all</a>
Introduced	23.7.R1
Platforms	All

## peer

Synopsis	Perform LAG operation on the MC peer
Context	<a href="#">perform lag clear-force multi-chassis peer</a>
Tree	<a href="#">peer</a>
Introduced	23.7.R1
Platforms	All

## [ip-address] reference

Synopsis	Peer IP address
Context	<a href="#">perform lag clear-force multi-chassis peer [ip-address] reference</a>
Tree	<a href="#">[ip-address]</a>
Reference	<b>state redundancy multi-chassis peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

## force-active

Synopsis	Perform LAG force-active operation
Context	<a href="#">perform lag force-active</a>
Tree	<a href="#">force-active</a>
Introduced	23.7.R1
Platforms	All

## lag

Synopsis	Perform LAG operation on the specified LAG
Context	<a href="#">perform lag force-active lag</a>

---

Tree	<a href="#">lag</a>
Introduced	23.7.R1
Platforms	All

**[lag-name] reference**

Synopsis	LAG name
Context	<a href="#">perform lag force-active lag [lag-name] reference</a>
Tree	<a href="#">[lag-name]</a>
Reference	<b>state lag string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

**sub-group number**

Synopsis	Sub-group in the LAG
Context	<a href="#">perform lag force-active lag sub-group number</a>
Tree	<a href="#">sub-group</a>
Range	1 to 16
Default	1
Introduced	23.7.R1
Platforms	All

**multi-chassis**

Synopsis	Enter the <b>multi-chassis</b> context
Context	<a href="#">perform lag force-active multi-chassis</a>
Tree	<a href="#">multi-chassis</a>
Introduced	23.7.R1
Platforms	All

**all**

Synopsis	Perform LAG operation on all multi-chassis LAGs
----------	---



Context	<a href="#">perform lag force-active multi-chassis all</a>
Tree	<a href="#">all</a>
Introduced	23.7.R1
Platforms	All

## peer

Synopsis	Perform LAG operation on the MC peer
Context	<a href="#">perform lag force-active multi-chassis peer</a>
Tree	<a href="#">peer</a>
Introduced	23.7.R1
Platforms	All

## [ip-address] *reference*

Synopsis	Peer IP address
Context	<a href="#">perform lag force-active multi-chassis peer [ip-address] <i>reference</i></a>
Tree	<a href="#">[ip-address]</a>
Reference	<b>state redundancy multi-chassis peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

## force-standby

Synopsis	Perform LAG force-standby operation
Context	<a href="#">perform lag force-standby</a>
Tree	<a href="#">force-standby</a>
Introduced	23.7.R1
Platforms	All

## lag

Synopsis	Perform LAG operation on the specified LAG
Context	<a href="#">perform lag force-standby lag</a>

---

Tree	<a href="#">lag</a>
Introduced	23.7.R1
Platforms	All

### **[lag-name] reference**

Synopsis	LAG name
Context	<a href="#">perform lag force-standby lag [lag-name] reference</a>
Tree	<a href="#">[lag-name]</a>
Reference	<b>state lag string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

### **sub-group number**

Synopsis	Sub-group in the LAG
Context	<a href="#">perform lag force-standby lag sub-group number</a>
Tree	<a href="#">sub-group</a>
Range	1 to 16
Default	1
Introduced	23.7.R1
Platforms	All

### **multi-chassis**

Synopsis	Enter the <b>multi-chassis</b> context
Context	<a href="#">perform lag force-standby multi-chassis</a>
Tree	<a href="#">multi-chassis</a>
Introduced	23.7.R1
Platforms	All

### **all**

Synopsis	Perform LAG operation on all multi-chassis LAGs
----------	---

Context	<a href="#">perform lag force-standby multi-chassis all</a>
Tree	<a href="#">all</a>
Introduced	23.7.R1
Platforms	All

**peer**

Synopsis	Perform LAG operation on the MC peer
Context	<a href="#">perform lag force-standby multi-chassis peer</a>
Tree	<a href="#">peer</a>
Introduced	23.7.R1
Platforms	All

**[ip-address] reference**

Synopsis	Peer IP address
Context	<a href="#">perform lag force-standby multi-chassis peer [ip-address] reference</a>
Tree	<a href="#">[ip-address]</a>
Reference	<b>state redundancy multi-chassis peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

**load-balance**

Synopsis	Perform LAG load-balance operation
Context	<a href="#">perform lag load-balance</a>
Tree	<a href="#">load-balance</a>
Introduced	23.7.R1
Platforms	All

**class number**

Synopsis	Class used for load balancing
Context	<a href="#">perform lag load-balance class number</a>

Tree	<a href="#">class</a>
Range	1 to 3
Default	1
Introduced	23.7.R1
Platforms	All

### **[lag-name] reference**

Synopsis	LAG name
Context	<a href="#">perform lag load-balance [lag-name] reference</a>
Tree	<a href="#">[lag-name]</a>
Reference	<b>state lag string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

### **python**

Synopsis	Enter the <b>python</b> context
Context	<a href="#">perform python</a>
Tree	<a href="#">python</a>
Introduced	23.10.R1
Platforms	All

### **python-policy**

Synopsis	Enter the python-policy context
Context	<a href="#">perform python python-policy</a>
Tree	<a href="#">python-policy</a>
Introduced	23.10.R1
Platforms	All

### **cache**

Synopsis	Enter the cache context
----------	-------------------------

Context	<a href="#">perform python python-policy cache</a>
Tree	<a href="#">cache</a>
Description	Commands in this context operate on python cache entries.
Introduced	23.10.R1
Platforms	All

## policy

Synopsis	Set the lifetime of a specified python cache entry
Context	<a href="#">perform python python-policy cache policy</a>
Tree	<a href="#">policy</a>
Introduced	23.10.R1
Platforms	All

## hex-key *string*

Synopsis	Policy key in hexadecimal format
Context	<a href="#">perform python python-policy cache policy hex-key <i>string</i></a>
Tree	<a href="#">hex-key</a>
String Length	3 to 1026
Notes	The following elements are part of a mandatory choice: <b>hex-key</b> or <b>string-key</b> .
Introduced	23.10.R1
Platforms	All

## [name] *reference*

Synopsis	Name of the Python policy
Context	<a href="#">perform python python-policy cache policy [name] <i>reference</i></a>
Tree	<a href="#">[name]</a>
Reference	<b>state python python-policy <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **set-lifetime** *number*

Synopsis	Lifetime to set for a Python cache entry
Context	<a href="#">perform python python-policy cache policy set-lifetime</a> <i>number</i>
Tree	<a href="#">set-lifetime</a>
Range	1 to 604800
Units	seconds
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **string-key** *string*

Synopsis	Policy key in ASCII format
Context	<a href="#">perform python python-policy cache policy string-key</a> <i>string</i>
Tree	<a href="#">string-key</a>
String Length	1 to 512
Notes	The following elements are part of a mandatory choice: <b>hex-key</b> or <b>string-key</b> .
Introduced	23.10.R1
Platforms	All

### **python-script**

Synopsis	Enter the <b>python-script</b> context
Context	<a href="#">perform python python-script</a>
Tree	<a href="#">python-script</a>
Introduced	23.10.R1
Platforms	All

### **protect**

Synopsis	Convert a Python file into a protected SRPY format
Context	<a href="#">perform python python-script protect</a>
Tree	<a href="#">protect</a>
Description	When invoked, the system converts a normal (unprotected) Python script file into a protected SRPY format using a specified key.

For more information about the SRPY format and protected scripts, see "Python script protection" in the *7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide*.

Introduced 23.10.R1

Platforms All

### **hmac-sha256-key string**

Synopsis Key used to compute the hash

Context [perform python python-script protect hmac-sha256-key string](#)

Tree [hmac-sha256-key](#)

String Length 1 to 128

Notes This element is mandatory.

Introduced 23.10.R1

Platforms All

### **input-file string**

Synopsis URL of the input unprotected script file

Context [perform python python-script protect input-file string](#)

Tree [input-file](#)

String Length 1 to 180

Notes This element is mandatory.

Introduced 23.10.R1

Platforms All

### **output-file string**

Synopsis URL of the output protected script file

Context [perform python python-script protect output-file string](#)

Tree [output-file](#)

String Length 1 to 180

Notes This element is mandatory.

Introduced 23.10.R1

Platforms All

**reload**

Synopsis	Enter the <b>reload</b> context
Context	<a href="#">perform python python-script reload</a>
Tree	<a href="#">reload</a>
Description	<p>Commands in this context reload and recompile the primary, secondary, and tertiary scripts in the specified Python scripts, in that order. The system uses the first script that comes up.</p> <p>Executing these commands may update the last modified time for the system configuration.</p>
Introduced	23.10.R1
Platforms	All

**script**

Synopsis	Reload and recompile the specified script
Context	<a href="#">perform python python-script reload script</a>
Tree	<a href="#">script</a>
Introduced	23.10.R1
Platforms	All

**[name] reference**

Synopsis	Name of the python script to reload
Context	<a href="#">perform python python-script reload script [name] reference</a>
Tree	<a href="#">[name]</a>
Reference	<b>state python python-script <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**router [router-instance] string**

Synopsis	Enter the <b>router</b> list instance
Context	<a href="#">perform router <i>string</i></a>
Tree	<a href="#">router</a>



Introduced	23.10.R1
Platforms	All

**[router-instance] string**

Synopsis	Router name or VPRN service name
Context	<a href="#">perform router string</a>
Tree	<a href="#">router</a>
MD-CLI	Base
Default	
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

**isis [isis-instance] reference**

Synopsis	Enter the <b>isis</b> list instance
Context	<a href="#">perform router string isis reference</a>
Tree	<a href="#">isis</a>
Introduced	23.10.R1
Platforms	All

**[isis-instance] reference**

Synopsis	IS-IS instance
Context	<a href="#">perform router string isis reference</a>
Tree	<a href="#">isis</a>
MD-CLI	0
Default	
Reference	<b>state router string isis number</b>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

## ldp-sync-exit

Synopsis	Terminate LDP synchronization and restore actual cost
Context	<a href="#">perform router string isis reference ldp-sync-exit</a>
Tree	<a href="#">ldp-sync-exit</a>
Introduced	23.10.R1
Platforms	All

## overload

Synopsis	Perform IS-IS overload
Context	<a href="#">perform router string isis reference overload</a>
Tree	<a href="#">overload</a>
Introduced	23.10.R1
Platforms	All

## max-metric *boolean*

Synopsis	Enable advertising max-metric values
Context	<a href="#">perform router string isis reference overload max-metric boolean</a>
Tree	<a href="#">max-metric</a>
Default	false
Introduced	23.10.R1
Platforms	All

## [seconds] *number*

Synopsis	Overload duration
Context	<a href="#">perform router string isis reference overload [seconds] number</a>
Tree	<a href="#">[seconds]</a>
Range	60 to 1800
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## run-manual-spf

Synopsis	Run SPF algorithm
Context	<a href="#">perform router string isis reference run-manual-spf</a>
Tree	<a href="#">run-manual-spf</a>
Introduced	23.10.R1
Platforms	All

## system

Synopsis	Enter the <b>system</b> context
Context	<a href="#">perform system</a>
Tree	<a href="#">system</a>
Introduced	23.7.R1
Platforms	All

## script-control

Synopsis	Enter the <b>script-control</b> context
Context	<a href="#">perform system script-control</a>
Tree	<a href="#">script-control</a>
Introduced	23.10.R1
Platforms	All

## script-policy

Synopsis	Enter the <b>script-policy</b> context
Context	<a href="#">perform system script-control script-policy</a>
Tree	<a href="#">script-policy</a>
Introduced	23.10.R1
Platforms	All

## stop

Synopsis	Stop the execution of scripts
Context	<a href="#">perform system script-control script-policy stop</a>

---

Tree	<a href="#">stop</a>
Introduced	23.10.R1
Platforms	All

## **all**

Synopsis	Stop script execution for all script policies
Context	<a href="#">perform system script-control script-policy stop all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>owner</b> and <b>policy-name</b> ).
Introduced	23.10.R1
Platforms	All

## **owner reference**

Synopsis	Stop script execution for a specific owner
Context	<a href="#">perform system script-control script-policy stop owner reference</a>
Tree	<a href="#">owner</a>
Default	TiMOS CLI
Reference	<b>state system script-control script-policy string owner string</b>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>owner</b> and <b>policy-name</b> ).
Introduced	23.10.R1
Platforms	All

## **policy-name reference**

Synopsis	Stop script execution for a specific policy
Context	<a href="#">perform system script-control script-policy stop policy-name reference</a>
Tree	<a href="#">policy-name</a>
Reference	<b>state system script-control script-policy string owner string</b>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>owner</b> and <b>policy-name</b> ).
Introduced	23.10.R1
Platforms	All

## security

Synopsis	Enter the <b>security</b> context
Context	<a href="#">perform system security</a>
Tree	<a href="#">security</a>
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## secure-boot

Synopsis	Enter the <b>secure-boot</b> context
Context	<a href="#">perform system security secure-boot</a>
Tree	<a href="#">secure-boot</a>
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## show

Synopsis	Enter the <b>show</b> context
Context	<a href="#">perform system security secure-boot show</a>
Tree	<a href="#">show</a>
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## uefi-variables

Synopsis	Display secure-boot UEFI variables
Context	<a href="#">perform system security secure-boot show uefi-variables</a>
Tree	<a href="#">uefi-variables</a>
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

---

**card reference**

Synopsis	CPM slot where UEFI variables are returned
Context	<a href="#">perform system security secure-boot show uefi-variables card</a> <i>reference</i>
Tree	<a href="#">card</a>
Reference	<b>state cpm string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-s, 7950 XRS-20e

## 2.8 reset commands

The **reset** commands are YANG-modeled versions of the **clear** commands and are available in MD-CLI and NETCONF interfaces. The **reset** commands are primarily used to:

- set statistics in a specific area back to a value of zero
- reset specific hardware assemblies, for example, cards
- delete temporary operational state data, for example, contents of a log in memory

```

reset
- filter
- ip-exception
  - direction keyword
  - entry reference
  - [filter-name] reference
- ip-filter
  - direction keyword
  - entry reference
  - [filter-name] reference
- ipv6-exception
  - direction keyword
  - entry reference
  - [filter-name] reference
- ipv6-filter
  - direction keyword
  - entry reference
  - [filter-name] reference
- log
  - [log-id] reference
- mac-filter
  - direction keyword
  - entry reference
  - [filter-name] reference
- lag reference
- bfd-session
  - port
    - family keyword
    - [lag-port] reference
- lacp-statistics
- statistics
- log
- event-handling
  - handlers
    - all
    - handler
      - [name] reference
  - information
- log-events
  - repeating-events
    - all
- log-id
  - [name] reference
- router string
- arp
  - address
    - ipv4-address string
  - all
  - interface
    - interface-name string
- bfd

```

## reset router bfd session

```

- session
- lsp-ldp
  - head
    - session-key
      - prefix (ipv4-prefix | ipv6-prefix)
      - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - tail
    - session-key
      - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - prefix (ipv4-prefix | ipv6-prefix)
- lsp-rsvp
  - head
    - rsvp-session-name
      - rsvp-session-name string
    - session-key
      - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - lsp-id number
      - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - tunnel-id number
  - tail
    - rsvp-session-name
      - rsvp-session-name string
      - sender-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - session-key
      - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - lsp-id number
      - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - tunnel-id number
- mpls-tp
  - lsp-id
    - lsp-name string
    - path keyword
- point-to-multipoint
  - p2mp-interface-name
    - [p2mp-interface-name] string
- point-to-point
  - session-key
    - dst (ipv4-address-no-zone | ipv6-address-no-zone)
    - src (ipv4-address-no-zone | ipv6-address-no-zone)
- seamless-lsp-path
  - all
  - session-key
    - lsp-index number
    - path-lspid number
    - prefix (ipv4-prefix | ipv6-prefix)
    - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- seamless-sr-policy
  - all
  - session-key
    - lsp-index number
    - path-lspid number
    - prefix (ipv4-prefix | ipv6-prefix)
    - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- statistics
  - lsp-ldp
    - head
      - session-key
        - prefix (ipv4-prefix | ipv6-prefix)
        - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - tail
      - session-key
        - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
  - lsp-rsvp

```



reset router bfd statistics lsp-rsvp head

```

- head
  - rsvp-session-name
    - rsvp-session-name string
  - session-key
    - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - lsp-id number
    - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - tunnel-id number
  - tail
    - rsvp-session-name
      - rsvp-session-name string
      - sender-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - session-key
      - dst-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - lsp-id number
      - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
      - tunnel-id number
- mpls-tp
  - lsp-id
    - lsp-name string
    - path keyword
  - point-to-multipoint
  - p2mp-interface-name
    - [p2mp-interface-name] string
  - point-to-point
  - session-key
    - dst (ipv4-address-no-zone | ipv6-address-no-zone)
    - src (ipv4-address-no-zone | ipv6-address-no-zone)
  - seamless-lsp-path
  - all
  - session-key
    - lsp-index number
    - path-lspid number
    - prefix (ipv4-prefix | ipv6-prefix)
    - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - seamless-sr-policy
  - all
  - session-key
    - lsp-index number
    - path-lspid number
    - prefix (ipv4-prefix | ipv6-prefix)
    - src-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- dhcp-server
  - dhcpv4 string
  - declined-addresses
  - address
    - [address] string
    - mask number
  - pool
    - [pool] string
  - failover-pool-statistics
  - all
  - pool
    - [pool] string
  - leases
  - address
    - [address] (ipv4-address-no-zone | ipv6-address-no-zone)
    - state keyword
  - all
    - state keyword
  - prefix
    - [prefix] string
    - state keyword
  - pool-extended-statistics

```

reset router dhcp-server dhcpv4 pool-extended-statistics all

```

- all
- pool
  - [pool] string
- statistics
- sticky-leases
  - host-name
  - [host-name] string
  - host-name-prefix
  - [host-name-prefix] string
- subnet-extended-statistics
  - pool
  - [pool] string
  - prefix
  - [prefix] string
- dhcpv6 string
- failover-pool-statistics
  - all
  - pool
  - [pool] string
- leases
  - address
  - [address] (ipv4-address-no-zone | ipv6-address-no-zone)
  - state keyword
  - type keyword
  - all
  - state keyword
  - type keyword
  - prefix
  - [prefix] string
  - state keyword
  - type keyword
- pool-extended-statistics
  - all
  - pool
  - [pool] string
- pool-threshold-statistics
  - all
  - pool
  - [pool] string
- prefix-extended-statistics
  - pool
  - [pool] string
  - prefix
  - [prefix] string
- prefix-threshold-statistics
  - pool
  - [pool] string
  - prefix
  - [prefix] string
- statistics
- forwarding-table
  - all
  - slot
  - slot-number reference
- grt-lookup
- icmp
  - all
  - global
  - interface
  - interface-name string
- icmp-redirect-route
  - address
  - ipv4-address string
- all

```

## reset router icmp6

```

- icmp6
  - all
  - global
  - interface
    - interface-name string
- icmp6-redirect-route
  - address
    - ipv6-address string
  - all
- interface string
  - hold-time
  - mac
    - address
      - [mac-address] string
    - all
  - policy-accounting
    - all
    - class
      - all
      - index number
      - [name] keyword
    - policer
      - all
      - index
        - [policer-index] number
  - statistics
  - urpf-statistics
- isis reference
  - adjacency
    - all-adjacencies
    - system-id
      - [system-id] string
  - database
    - all-databases
    - system-id
      - [system-id] string
  - export
  - overload
    - [overload-type] keyword
  - sid-egress-stats
    - adj
      - all
      - interface
        - [interface-name] string
    - adj-set
      - all
      - id
        - [id] reference
  - all
  - node
    - all
    - prefix
      - [ip-prefix-prefix-length] (ipv4-address-no-zone | ipv6-address-no-zone |
ipv4-prefix | ipv6-prefix)
  - sid-ingress-stats
    - adj
      - all
      - interface
        - [interface-name] string
    - adj-set
      - all
      - id
        - [id] reference
  - all

```

reset router isis sid-ingress-stats node

```

- node
  - all
  - prefix
    - [ip-prefix-prefix-length] (ipv4-address-no-zone | ipv6-address-no-zone |
ipv4-prefix | ipv6-prefix)
  - spf-log
  - statistics
- neighbor
  - address
    - ipv6-address (ipv4-address-with-zone | ipv6-address-with-zone)
  - all
  - interface
    - interface-name string
- ospf number
  - database
    - purge
  - export
  - neighbor
    - interface-name string
    - router-id string
  - overload
    - [overload-type] keyword
  - sid-egress-stats
    - adj
      - all
      - interface
        - [interface-name] reference
    - adj-set
      - all
      - id
        - [id] reference
    - all
  - node
    - all
    - prefix
      - [prefix] (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix |
ipv6-prefix)
  - sid-ingress-stats
    - adj
      - all
      - interface
        - [interface-name] reference
    - adj-set
      - all
      - id
        - [id] reference
    - all
  - node
    - all
    - prefix
      - [prefix] (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix |
ipv6-prefix)
  - statistics
- ospf3 number
  - database
    - purge
  - export
  - neighbor
    - interface-name string
    - router-id string
  - overload
    - [overload-type] keyword
  - sid-egress-stats
    - adj

```

reset router ospf3 sid-egress-stats adj all

```

    - all
    - interface
      - [interface-name] reference
  - all
  - node
    - all
    - prefix
      - [prefix] (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix |
ipv6-prefix)
  - sid-ingress-stats
    - adj
      - all
      - interface
        - [interface-name] reference
    - all
    - node
      - all
      - prefix
        - [prefix] (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix |
ipv6-prefix)
  - statistics
  - segment-routing
  - sr-policies
    - sr-policies-egress-statistics
      - [color] reference
      - endpoint reference
    - sr-policies-ingress-statistics
      - [color] reference
      - endpoint reference
  - vrrp
    - instances
      - interface string
      - all-vrid
      - ipv4
        - vrid
          - virtual-router-id number
      - ipv6
        - vrid
          - virtual-router-id number
    - statistics
      - all-statistics
      - interface string
      - all-vrid
      - ipv4
        - vrid
          - virtual-router-id number
      - ipv6
        - vrid
          - virtual-router-id number
  - saa
    - owner reference test reference
    - statistics
  - subscriber-management
  - ancp
    - sub-string
      - [value] string
  - errors
  - host-lockout
  - policy
    - [name] string
    - state keyword
  - sap
    - circuit-id string
    - mac string

```

## reset subscriber-management host-lockout sap remote-id

```

- remote-id string
- [sap] string
- state keyword
- state
- [state] keyword
- idle-only-msap
- all
- msap-policy
- name reference
- msap-policy
- name reference
- sap-template string
- idle-saps
- sessions
- diameter
- ccrt-replay
- application-policy
- [name] string
- gtp
- all
- apn string
- all
- imsi
- [imsi] string
- imsi
- [imsi] string
- host-tracking
- subscriber
- all
- id
- [name] reference
- pfc
- nat-member
- [id] reference
- sap
- mac string
- [sap] string
- session-id
- [local-session-id] reference
- statistics
- accumulated
- active-subscribers
- no-accu-stats-policy
- sub-profile
- [name] reference
- inactive-subscribers
- subscriber
- [name] reference
- data-trigger
- system
- diameter
- application-policy
- [name] string
- ccrt-replay
- application-policy
- [name] string
- gtp
- all
- host-and-session
- peakvalues
- card
- all
- recursive
- slot

```

reset subscriber-management statistics host-and-session peakvalues card slot recursive

```

    - recursive
    - [slot-number] reference
- mda
  - all
  - recursive
- card-slot reference
- mda-slot
  - [mda] reference
  - recursive
- xiom-slot
  - mda-slot reference
  - recursive
  - [xiom] reference
- port
  - all
  - lag
  - [name] reference
  - port-id
  - [port-id] reference
- pw-port
  - all
  - pw-port-id
  - [pw-port-id] reference
- service
  - all
  - recursive
  - name string
  - all
  - recursive
  - group-interface
  - all
  - name
  - [name] string
  - subscriber-interface
  - all
  - recursive
  - name
  - [name] string
  - recursive
- system
  - recursive
- host-tracking
  - subscriber
  - all
  - id
  - [name] reference
- interface
  - service string
  - all
  - group-interface
  - [name] string
  - subscriber-interface
  - [name] string
- pfc
  - association
  - [name] reference
- radius
  - authentication
  - coa
  - all
- sla-profile
  - all
  - name
  - [name] reference

```

## reset subscriber-management statistics sub-profile

```

- sub-profile
  - all
  - name
    - [name] reference
- svlan
  - lag reference
    - all
    - vlan-id
      - [svlan-id] reference
  - port reference
    - all
    - vlan-id
      - [svlan-id] reference
  - pw-port reference
    - all
    - vlan-id
      - [svlan-id] reference
- wlan-gw
- cpm-totals
- system
  - management-interface
  - remote-management
    - managers
      - all
      - manager
        - [name] reference
    - statistics
      - all
      - manager
        - [name] reference
- ptp
  - clock-recovery
- satellite
  - ethernet-satellite reference
    - synchronous-interface-timing
      - [reference] keyword
- script-control
  - script-policy
    - completed
      - all
      - policy
        - owner reference
        - [policy-name] reference
- security
  - cpm-filter
    - cpm-queue
      - queue-id reference
  - ip-filter
    - entry reference
  - ipv6-filter
    - entry reference
  - mac-filter
    - entry reference
  - management-access-filter
    - ip-filter
      - entry reference
    - ipv6-filter
      - entry reference
    - mac-filter
      - entry reference

```



## 2.8.1 reset command descriptions

### reset

Synopsis	Clear statistics or reset operational state
Context	<a href="#">reset</a>
Tree	<a href="#">reset</a>
Description	Commands in this context are used to clear specific statistics, reset specific hardware assemblies (for example, cards), and delete temporary operational state data (for example, contents of a log in memory).
Introduced	23.3.R1
Platforms	All

### filter

Synopsis	Enter the <b>filter</b> context
Context	<a href="#">reset filter</a>
Tree	<a href="#">filter</a>
Introduced	23.3.R1
Platforms	All

### ip-exception

Synopsis	Reset operation on the specified IP exception filter
Context	<a href="#">reset filter ip-exception</a>
Tree	<a href="#">ip-exception</a>
Introduced	23.3.R1
Platforms	VSR

### direction *keyword*

Synopsis	Statistics direction for IP exception filter entries
Context	<a href="#">reset filter ip-exception direction <i>keyword</i></a>
Tree	<a href="#">direction</a>
Options	ingress, egress

Introduced 23.3.R1  
Platforms VSR

### **entry** *reference*

Synopsis Entry ID for the filter  
Context [reset filter ip-exception entry reference](#)  
Tree [entry](#)  
Reference **state filter ip-exception** *string entry number*  
Introduced 23.3.R1  
Platforms VSR

### **[filter-name]** *reference*

Synopsis IP exception filter name  
Context [reset filter ip-exception \[filter-name\] reference](#)  
Tree [\[filter-name\]](#)  
Reference **state filter ip-exception** *string*  
Notes This element is mandatory.  
Introduced 23.3.R1  
Platforms VSR

### **ip-filter**

Synopsis Reset operation on the specified IP filter  
Context [reset filter ip-filter](#)  
Tree [ip-filter](#)  
Introduced 23.3.R1  
Platforms All

### **direction** *keyword*

Synopsis Statistics direction for IP filter entries  
Context [reset filter ip-filter direction keyword](#)  
Tree [direction](#)

---

Options	ingress, egress
Introduced	23.3.R1
Platforms	All

### **entry** *reference*

Synopsis	Entry ID for the filter
Context	<a href="#">reset filter ip-filter entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state filter ip-filter string entry number</b>
Introduced	23.3.R1
Platforms	All

### **[filter-name]** *reference*

Synopsis	IP filter name
Context	<a href="#">reset filter ip-filter [filter-name] reference</a>
Tree	<a href="#">[filter-name]</a>
Reference	<b>state filter ip-filter string</b>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **ipv6-exception**

Synopsis	Reset operation on the specified IPv6 exception filter
Context	<a href="#">reset filter ipv6-exception</a>
Tree	<a href="#">ipv6-exception</a>
Introduced	23.3.R1
Platforms	VSR

### **direction** *keyword*

Synopsis	Statistics direction for IPv6 exception filter entries
Context	<a href="#">reset filter ipv6-exception direction keyword</a>

Tree	<a href="#">direction</a>
Options	ingress, egress
Introduced	23.3.R1
Platforms	VSR

### **entry** *reference*

Synopsis	Entry ID for the filter
Context	<a href="#">reset filter ipv6-exception entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state filter ipv6-exception</b> <i>string entry number</i>
Introduced	23.3.R1
Platforms	VSR

### **[filter-name]** *reference*

Synopsis	IPv6 exception filter name
Context	<a href="#">reset filter ipv6-exception [filter-name] reference</a>
Tree	<a href="#">[filter-name]</a>
Reference	<b>state filter ipv6-exception</b> <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	VSR

### **ipv6-filter**

Synopsis	Reset operation on the specified IPv6 filter
Context	<a href="#">reset filter ipv6-filter</a>
Tree	<a href="#">ipv6-filter</a>
Introduced	23.3.R1
Platforms	All

### **direction** *keyword*

Synopsis	Statistics direction of IPv6 filter entries
----------	---

Context	<a href="#">reset filter ipv6-filter direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Options	ingress, egress
Introduced	23.3.R1
Platforms	All

### **entry** *reference*

Synopsis	Entry ID for the IPv6 filter
Context	<a href="#">reset filter ipv6-filter entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Reference	<b>state filter ipv6-filter</b> <i>string entry number</i>
Introduced	23.3.R1
Platforms	All

### **[filter-name]** *reference*

Synopsis	IPv6 exception filter name
Context	<a href="#">reset filter ipv6-filter [filter-name]</a> <i>reference</i>
Tree	<a href="#">[filter-name]</a>
Reference	<b>state filter ipv6-filter</b> <i>string</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

### **log**

Synopsis	Reset the specified filter log
Context	<a href="#">reset filter log</a>
Tree	<a href="#">log</a>
Description	<p>This command reinitializes or rolls over the specified memory filter log. Memory filter logs are reinitialized and cleared of contents.</p> <p>This command is applicable only to filter logs that are directed to memory destinations. Filter logs with destinations other than memory are not affected by this command.</p>
Introduced	23.7.R1

---

Platforms All

### **[log-id] reference**

Synopsis ID of the filter log to reset

Context [reset filter log \[log-id\] reference](#)

Tree [\[log-id\]](#)

Reference **state filter log** *number*

Notes This element is mandatory.

Introduced 23.7.R1

Platforms All

### **mac-filter**

Synopsis Reset operation on the specified MAC filter

Context [reset filter mac-filter](#)

Tree [mac-filter](#)

Introduced 23.3.R1

Platforms All

### **direction keyword**

Synopsis Statistics direction for MAC filter entries

Context [reset filter mac-filter direction keyword](#)

Tree [direction](#)

Options ingress, egress

Introduced 23.3.R1

Platforms All

### **entry reference**

Synopsis Entry ID for the MAC filter

Context [reset filter mac-filter entry reference](#)

Tree [entry](#)

Reference **state filter mac-filter** *string entry number*

Introduced 23.3.R1  
 Platforms All

### **[filter-name]** *reference*

Synopsis MAC filter name  
 Context [reset filter mac-filter \[filter-name\] reference](#)  
 Tree [\[filter-name\]](#)  
 Reference **state filter mac-filter** *string*  
 Notes This element is mandatory.  
 Introduced 23.3.R1  
 Platforms All

### **lag** [\[lag-name\]](#) *reference*

Synopsis Enter the **lag** list instance  
 Context [reset lag reference](#)  
 Tree [lag](#)  
 Description Commands in this context configure LAG reset operations.  
 Introduced 23.3.R1  
 Platforms All

### **[lag-name]** *reference*

Synopsis LAG name, starting with lag-  
 Context [reset lag reference](#)  
 Tree [lag](#)  
 Reference **state lag** *string*  
 Notes This element is part of a list key.  
 Introduced 23.3.R1  
 Platforms All

### **bfd-session**

Synopsis Enter the **bfd-session** context

Context	<a href="#">reset lag</a> <i>reference</i> <a href="#">bfd-session</a>
Tree	<a href="#">bfd-session</a>
Description	Commands in this context reset the LAG BFD session data.
Introduced	23.3.R1
Platforms	All

**port**

Synopsis	Port identifier in the LAG
Context	<a href="#">reset lag</a> <i>reference</i> <a href="#">bfd-session</a> <a href="#">port</a>
Tree	<a href="#">port</a>
Introduced	23.3.R1
Platforms	All

**family** *keyword*

Synopsis	BFD session family type
Context	<a href="#">reset lag</a> <i>reference</i> <a href="#">bfd-session</a> <a href="#">port</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, ipv6
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**[lag-port]** *reference*

Synopsis	Member port of the LAG
Context	<a href="#">reset lag</a> <i>reference</i> <a href="#">bfd-session</a> <a href="#">port</a> <a href="#">[lag-port]</a> <i>reference</i>
Tree	<a href="#">[lag-port]</a>
Reference	<b>state lag</b> <i>string</i> <b>port</b> <i>reference</i>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All



## lACP-statistics

Synopsis	Reset LACP statistics
Context	<a href="#">reset lag</a> <i>reference</i> <a href="#">lACP-statistics</a>
Tree	<a href="#">lACP-statistics</a>
Introduced	23.3.R1
Platforms	All

## statistics

Synopsis	Reset LAG statistics
Context	<a href="#">reset lag</a> <i>reference</i> <a href="#">statistics</a>
Tree	<a href="#">statistics</a>
Introduced	23.3.R1
Platforms	All

## log

Synopsis	Enter the <b>log</b> context
Context	<a href="#">reset log</a>
Tree	<a href="#">log</a>
Description	Commands in this context provide reset operations for events, logs, and the event handling system (EHS).
Introduced	23.7.R1
Platforms	All

## event-handling

Synopsis	Enter the <b>event-handling</b> context
Context	<a href="#">reset log event-handling</a>
Tree	<a href="#">event-handling</a>
Description	Commands in this context provide reset operations for the EHS.
Introduced	23.7.R1
Platforms	All

## handlers

Synopsis	Enter the <b>handlers</b> context
Context	<a href="#">reset log event-handling handlers</a>
Tree	<a href="#">handlers</a>
Description	Commands in this context reset statistics related to EHS handlers.
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Reset statistics for all EHS handlers
Context	<a href="#">reset log event-handling handlers all</a>
Tree	<a href="#">all</a>
Description	This command resets all statistics for all handlers in the <b>state log event-handling handler</b> context and in the output of the <b>show log event-handling handler</b> command.
Introduced	23.7.R1
Platforms	All

## handler

Synopsis	Reset statistics for a specified EHS handler
Context	<a href="#">reset log event-handling handlers handler</a>
Tree	<a href="#">handler</a>
Description	This command resets all statistics for the specified handler in the <b>state log event-handling handler</b> context and in the output of the <b>show log event-handling handler</b> command.
Introduced	23.7.R1
Platforms	All

## [name] reference

Synopsis	Handler name to reset
Context	<a href="#">reset log event-handling handlers handler [name] reference</a>
Tree	<a href="#">[name]</a>
Reference	<b>state log event-handling handler</b> <i>string</i>

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Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

## information

Synopsis	Reset general EHS operational data
Context	<a href="#">reset log event-handling information</a>
Tree	<a href="#">information</a>
Description	This command resets all data in the <b>state log event-handling summary-statistics</b> context and in the output of the <b>show log event-handling information</b> command.
Introduced	23.7.R1
Platforms	All

## log-events

Synopsis	Enter the <b>log-events</b> context
Context	<a href="#">reset log log-events</a>
Tree	<a href="#">log-events</a>
Description	Commands in this context reset the operational state related to log events.
Introduced	23.7.R1
Platforms	All

## repeating-events

Synopsis	Enter the <b>repeating-events</b> context
Context	<a href="#">reset log log-events repeating-events</a>
Tree	<a href="#">repeating-events</a>
Description	Commands in this context reset the operational state related to repeating log events.
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Reset operation for all repeating log events
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Context	<a href="#">reset log log-events repeating-events all</a>
Tree	<a href="#">all</a>
Description	This command cancels the repetition of all log events that are currently repeating. All repeating log events stop repeating.
Introduced	23.7.R1
Platforms	All

## log-id

Synopsis	Reset the specified event log
Context	<a href="#">reset log log-id</a>
Tree	<a href="#">log-id</a>
Description	This command reinitializes or rolls over the specified memory or file event log. Memory logs are reinitialized and cleared of contents. File logs are manually rolled over by this command.  This command is applicable only to event logs that are directed to file destinations and memory destinations. This command does not affect SNMP, syslog, console, CLI, or session logs.
Introduced	23.7.R1
Platforms	All

## [name] *reference*

Synopsis	Name of the event log to reset
Context	<a href="#">reset log log-id [name] <i>reference</i></a>
Tree	<a href="#">[name]</a>
Reference	<b>state log log-id <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

## router [[router-instance](#)] *string*

Synopsis	Enter the <b>router</b> list instance
Context	<a href="#">reset router <i>string</i></a>
Tree	<a href="#">router</a>

Introduced 23.7.R1  
Platforms All

### **[router-instance] string**

Synopsis Router name or VPRN service name  
Context [reset router string](#)  
Tree [router](#)  
MD-CLI Base  
Default  
Notes This element is part of a list key.  
Introduced 23.7.R1  
Platforms All

### **arp**

Synopsis Enter the **arp** context  
Context [reset router string arp](#)  
Tree [arp](#)  
Description Commands in this context reset ARP cache entries.  
Introduced 23.10.R1  
Platforms All

### **address**

Synopsis Reset the ARP cache entries for the IPv4 address  
Context [reset router string arp address](#)  
Tree [address](#)  
Introduced 23.10.R1  
Platforms All

### **ipv4-address string**

Synopsis IPv4 address  
Context [reset router string arp address ipv4-address string](#)

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Tree	<a href="#">ipv4-address</a>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset all ARP cache entries
Context	<a href="#">reset router string arp all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## interface

Synopsis	Reset ARP cache entries for the interface
Context	<a href="#">reset router string arp interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">reset router string arp interface interface-name string</a>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Introduced	23.10.R1
Platforms	All

## bfd

Synopsis	Enter the <b>bfd</b> context
Context	<a href="#">reset router string bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context reset bidirectional forwarding (BFD) sessions and statistics.

Introduced 23.10.R1  
Platforms All

## session

Synopsis Enter the **session** context  
Context [reset router string bfd session](#)  
Tree [session](#)  
Introduced 23.10.R1  
Platforms All

## Isp-ldp

Synopsis Enter the **Isp-ldp** context  
Context [reset router string bfd session Isp-ldp](#)  
Tree [Isp-ldp](#)  
Introduced 23.10.R1  
Platforms All

## head

Synopsis Enter the **head** context  
Context [reset router string bfd session Isp-ldp head](#)  
Tree [head](#)  
Introduced 23.10.R1  
Platforms All

## session-key

Synopsis Reset information for the session key  
Context [reset router string bfd session Isp-ldp head session-key](#)  
Tree [session-key](#)  
Introduced 23.10.R1  
Platforms All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-ldp head</a> <a href="#">session-key</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-ldp head</a> <a href="#">session-key</a> <a href="#">src-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">src-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**tail**

Synopsis	Enter the <b>tail</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-ldp</a> <a href="#">tail</a>
Tree	<a href="#">tail</a>
Introduced	23.10.R1
Platforms	All

**session-key**

Synopsis	Reset information for the session key
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-ldp tail</a> <a href="#">session-key</a>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All



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

Synopsis	Destination address
Context	<a href="#">reset router string bfd session lsp-ldp tail session-key dst-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dst-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix
Context	<a href="#">reset router string bfd session lsp-ldp tail session-key prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**lsp-rsvp**

Synopsis	Enter the <b>lsp-rsvp</b> context
Context	<a href="#">reset router string bfd session lsp-rsvp</a>
Tree	<a href="#">lsp-rsvp</a>
Introduced	23.10.R1
Platforms	All

**head**

Synopsis	Enter the <b>head</b> context
Context	<a href="#">reset router string bfd session lsp-rsvp head</a>
Tree	<a href="#">head</a>
Introduced	23.10.R1
Platforms	All

**rsvp-session-name**

Synopsis	Reset information for the RSVP session name
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-rsvp head</a> <a href="#">rsvp-session-name</a>
Tree	<a href="#">rsvp-session-name</a>
Introduced	23.10.R1
Platforms	All

**rsvp-session-name *string***

Synopsis	RSVP session name
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-rsvp head</a> <a href="#">rsvp-session-name</a> <a href="#">rsvp-session-name</a> <i>string</i>
Tree	<a href="#">rsvp-session-name</a>
String Length	1 to 256
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**session-key**

Synopsis	Reset information for the session key
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-rsvp head</a> <a href="#">session-key</a>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

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

Synopsis	Destination address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-rsvp head</a> <a href="#">session-key</a> <a href="#">dst-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dst-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **lsp-id number**

Synopsis	LSP ID
Context	<code>reset router string bfd session lsp-rsvp head session-key lsp-id number</code>
Tree	<code>lsp-id</code>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<code>reset router string bfd session lsp-rsvp head session-key src-ip (ipv4-address-no-zone   ipv6-address-no-zone)</code>
Tree	<code>src-ip</code>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **tunnel-id number**

Synopsis	Tunnel ID
Context	<code>reset router string bfd session lsp-rsvp head session-key tunnel-id number</code>
Tree	<code>tunnel-id</code>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **tail**

Synopsis	Enter the <b>tail</b> context
Context	<code>reset router string bfd session lsp-rsvp tail</code>
Tree	<code>tail</code>

Introduced 23.10.R1  
 Platforms All

### **rsvp-session-name**

Synopsis Reset information for the RSVP session name  
 Context [reset router](#) *string* [bfd session](#) [lsp-rsvp tail](#) [rsvp-session-name](#)  
 Tree [rsvp-session-name](#)  
 Introduced 23.10.R1  
 Platforms All

### **rsvp-session-name *string***

Synopsis RSVP session name  
 Context [reset router](#) *string* [bfd session](#) [lsp-rsvp tail](#) [rsvp-session-name](#) [rsvp-session-name](#) *string*  
 Tree [rsvp-session-name](#)  
 String Length 1 to 256  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

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

Synopsis RSVP session sender IP address  
 Context [reset router](#) *string* [bfd session](#) [lsp-rsvp tail](#) [rsvp-session-name](#) [sender-ip](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)  
 Tree [sender-ip](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

### **session-key**

Synopsis Reset information for the session key  
 Context [reset router](#) *string* [bfd session](#) [lsp-rsvp tail](#) [session-key](#)

Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

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

Synopsis	Destination address
Context	<a href="#">reset router string bfd session lsp-rsvp tail session-key dst-ip</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">dst-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **lsp-id number**

Synopsis	LSP ID
Context	<a href="#">reset router string bfd session lsp-rsvp tail session-key lsp-id number</a>
Tree	<a href="#">lsp-id</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<a href="#">reset router string bfd session lsp-rsvp tail session-key src-ip</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">src-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**tunnel-id** *number*

Synopsis	Tunnel ID
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">lsp-rsvp tail session-key</a> <b>tunnel-id</b> <i>number</i>
Tree	<a href="#">tunnel-id</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**mpls-tp**

Synopsis	Enter the <b>mpls-tp</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <b>mpls-tp</b>
Tree	<a href="#">mpls-tp</a>
Introduced	23.10.R1
Platforms	All

**lsp-id**

Synopsis	Reset information for the LSP ID
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">mpls-tp</a> <b>lsp-id</b>
Tree	<a href="#">lsp-id</a>
Introduced	23.10.R1
Platforms	All

**lsp-name** *string*

Synopsis	LSP name
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">mpls-tp</a> <a href="#">lsp-id</a> <b>lsp-name</b> <i>string</i>
Tree	<a href="#">lsp-name</a>
String Length	1 to 256
Introduced	23.10.R1
Platforms	All

### **path** *keyword*

Synopsis	Path status
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session mpls-tp lsp-id</a> <i>path</i> <i>keyword</i>
Tree	<a href="#">path</a>
Options	working, protecting
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **point-to-multipoint**

Synopsis	Enter the <b>point-to-multipoint</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">point-to-multipoint</a>
Tree	<a href="#">point-to-multipoint</a>
Introduced	23.10.R1
Platforms	All

### **p2mp-interface-name**

Synopsis	Reset information for the P2MP interface
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">point-to-multipoint</a> <a href="#">p2mp-interface-name</a>
Tree	<a href="#">p2mp-interface-name</a>
Introduced	23.10.R1
Platforms	All

### **[p2mp-interface-name]** *string*

Synopsis	P2MP interface name
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session</a> <a href="#">point-to-multipoint</a> <a href="#">p2mp-interface-name</a> [ <a href="#">p2mp-interface-name</a> ] <i>string</i>
Tree	<a href="#">[p2mp-interface-name]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## point-to-point

Synopsis	Enter the <b>point-to-point</b> context
Context	<a href="#">reset router string bfd session point-to-point</a>
Tree	<a href="#">point-to-point</a>
Introduced	23.10.R1
Platforms	All

## session-key

Synopsis	Reset information for the session key
Context	<a href="#">reset router string bfd session point-to-point session-key</a>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

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

Synopsis	Destination address
Context	<a href="#">reset router string bfd session point-to-point session-key dst (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">dst</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<a href="#">reset router string bfd session point-to-point session-key src (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">src</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All



## seamless-lsp-path

Synopsis	Enter the <b>seamless-lsp-path</b> context
Context	<a href="#">reset router string bfd session seamless-lsp-path</a>
Tree	<a href="#">seamless-lsp-path</a>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset all sessions
Context	<a href="#">reset router string bfd session seamless-lsp-path all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## session-key

Synopsis	Reset information for the session key
Context	<a href="#">reset router string bfd session seamless-lsp-path session-key</a>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

## **lsp-index** *number*

Synopsis	LSP index
Context	<a href="#">reset router string bfd session seamless-lsp-path session-key lsp-index number</a>
Tree	<a href="#">lsp-index</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**path-lspid** *number*

Synopsis	LSP path ID
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session seamless-lsp-path session-key path-lspid</a> <i>number</i>
Tree	<a href="#">path-lspid</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session seamless-lsp-path session-key prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session seamless-lsp-path session-key src-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">src-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**seamless-sr-policy**

Synopsis	Enter the <b>seamless-sr-policy</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd session seamless-sr-policy</a>
Tree	<a href="#">seamless-sr-policy</a>
Introduced	23.10.R1

Platforms All

## all

Synopsis Reset all sessions  
 Context [reset router string bfd session seamless-sr-policy all](#)  
 Tree [all](#)  
 Introduced 23.10.R1  
 Platforms All

## session-key

Synopsis Reset information for the session key  
 Context [reset router string bfd session seamless-sr-policy session-key](#)  
 Tree [session-key](#)  
 Introduced 23.10.R1  
 Platforms All

## lsp-index number

Synopsis LSP index  
 Context [reset router string bfd session seamless-sr-policy session-key lsp-index number](#)  
 Tree [lsp-index](#)  
 Max. Range 0 to 4294967295  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

## path-lspid number

Synopsis LSP path ID  
 Context [reset router string bfd session seamless-sr-policy session-key path-lspid number](#)  
 Tree [path-lspid](#)  
 Max. Range 0 to 4294967295  
 Notes This element is mandatory.

Introduced 23.10.R1  
 Platforms All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Prefix  
 Context [reset router string bfd session seamless-sr-policy session-key prefix](#) (*ipv4-prefix* | *ipv6-prefix*)  
 Tree [prefix](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

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

Synopsis Source address  
 Context [reset router string bfd session seamless-sr-policy session-key src-ip](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [src-ip](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

### **statistics**

Synopsis Enter the **statistics** context  
 Context [reset router string bfd statistics](#)  
 Tree [statistics](#)  
 Introduced 23.10.R1  
 Platforms All

### **Isp-ldp**

Synopsis Enter the **Isp-ldp** context  
 Context [reset router string bfd statistics Isp-ldp](#)  
 Tree [Isp-ldp](#)

Introduced	23.10.R1
Platforms	All

## head

Synopsis	Enter the <b>head</b> context
Context	<a href="#">reset router string bfd statistics lsp-ldp head</a>
Tree	<a href="#">head</a>
Introduced	23.10.R1
Platforms	All

## session-key

Synopsis	Reset information for the session key
Context	<a href="#">reset router string bfd statistics lsp-ldp head session-key</a>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

## prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix
Context	<a href="#">reset router string bfd statistics lsp-ldp head session-key prefix (<i>ipv4-prefix</i>   <i>ipv6-prefix</i>)</a>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<a href="#">reset router string bfd statistics lsp-ldp head session-key src-ip (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">src-ip</a>
Notes	This element is mandatory.

Introduced	23.10.R1
Platforms	All

## tail

Synopsis	Enter the <b>tail</b> context
Context	<a href="#">reset router string bfd statistics lsp-ldp tail</a>
Tree	<a href="#">tail</a>
Introduced	23.10.R1
Platforms	All

## session-key

Synopsis	Reset information for the session key
Context	<a href="#">reset router string bfd statistics lsp-ldp tail session-key</a>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

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

Synopsis	Destination address
Context	<a href="#">reset router string bfd statistics lsp-ldp tail session-key dst-ip (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</a>
Tree	<a href="#">dst-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	Prefix
Context	<a href="#">reset router string bfd statistics lsp-ldp tail session-key prefix (<i>ipv4-prefix   ipv6-prefix</i>)</a>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.

Introduced 23.10.R1  
Platforms All

## **lsp-rsvp**

Synopsis Enter the **lsp-rsvp** context  
Context [reset router \*string\* bfd statistics lsp-rsvp](#)  
Tree [lsp-rsvp](#)  
Introduced 23.10.R1  
Platforms All

## **head**

Synopsis Enter the **head** context  
Context [reset router \*string\* bfd statistics lsp-rsvp head](#)  
Tree [head](#)  
Introduced 23.10.R1  
Platforms All

## **rsvp-session-name**

Synopsis Reset information for the RSVP session name  
Context [reset router \*string\* bfd statistics lsp-rsvp head rsvp-session-name](#)  
Tree [rsvp-session-name](#)  
Introduced 23.10.R1  
Platforms All

## **rsvp-session-name *string***

Synopsis RSVP session name  
Context [reset router \*string\* bfd statistics lsp-rsvp head rsvp-session-name rsvp-session-name \*string\*](#)  
Tree [rsvp-session-name](#)  
String Length 1 to 256  
Notes This element is mandatory.

Introduced	23.10.R1
Platforms	All

### **session-key**

Synopsis	Reset information for the session key
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp head</a> <a href="#">session-key</a>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

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

Synopsis	Destination address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp head</a> <a href="#">session-key</a> <a href="#">dst-ip</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">dst-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **lsp-id number**

Synopsis	LSP ID
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp head</a> <a href="#">session-key</a> <a href="#">lsp-id number</a>
Tree	<a href="#">lsp-id</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp head</a> <a href="#">session-key</a> <a href="#">src-ip</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )



Tree	<a href="#">src-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **tunnel-id** *number*

Synopsis	Tunnel ID
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp head session-key</a> <b>tunnel-id</b> <i>number</i>
Tree	<a href="#">tunnel-id</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **tail**

Synopsis	Enter the <b>tail</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp tail</a>
Tree	<a href="#">tail</a>
Introduced	23.10.R1
Platforms	All

### **rsvp-session-name**

Synopsis	Reset information for the RSVP session name
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp tail</a> <b>rsvp-session-name</b>
Tree	<a href="#">rsvp-session-name</a>
Introduced	23.10.R1
Platforms	All

### **rsvp-session-name** *string*

Synopsis	RSVP session name
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp tail</a> <a href="#">rsvp-session-name</a> <b>rsvp-session-name</b> <i>string</i>

Tree	<a href="#">rsvp-session-name</a>
String Length	1 to 256
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	RSVP session sender IP address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp tail</a> <a href="#">rsvp-session-name</a> <b>sender-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">sender-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **session-key**

Synopsis	Reset information for the session key
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp tail</a> <b>session-key</b>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

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

Synopsis	Destination address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">bfd statistics</a> <a href="#">lsp-rsvp tail</a> <a href="#">session-key</a> <b>dst-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dst-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**lsp-id number**

Synopsis	LSP ID
Context	<a href="#">reset router string bfd statistics lsp-rsvp tail session-key lsp-id number</a>
Tree	<a href="#">lsp-id</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<a href="#">reset router string bfd statistics lsp-rsvp tail session-key src-ip (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">src-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**tunnel-id number**

Synopsis	Tunnel ID
Context	<a href="#">reset router string bfd statistics lsp-rsvp tail session-key tunnel-id number</a>
Tree	<a href="#">tunnel-id</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**mpls-tp**

Synopsis	Enter the <b>mpls-tp</b> context
Context	<a href="#">reset router string bfd statistics mpls-tp</a>
Tree	<a href="#">mpls-tp</a>
Introduced	23.10.R1

Platforms All

### **lsp-id**

Synopsis Reset information for the LSP ID  
Context [reset router string bfd statistics mpls-tp lsp-id](#)  
Tree [lsp-id](#)  
Introduced 23.10.R1  
Platforms All

### **lsp-name string**

Synopsis LSP name  
Context [reset router string bfd statistics mpls-tp lsp-id lsp-name string](#)  
Tree [lsp-name](#)  
String Length 1 to 256  
Introduced 23.10.R1  
Platforms All

### **path keyword**

Synopsis Path status  
Context [reset router string bfd statistics mpls-tp lsp-id path keyword](#)  
Tree [path](#)  
Options working, protecting  
Notes This element is mandatory.  
Introduced 23.10.R1  
Platforms All

### **point-to-multipoint**

Synopsis Enter the **point-to-multipoint** context  
Context [reset router string bfd statistics point-to-multipoint](#)  
Tree [point-to-multipoint](#)  
Introduced 23.10.R1

Platforms All

### **p2mp-interface-name**

Synopsis Reset information for the P2MP interface  
Context [reset router string bfd statistics point-to-multipoint p2mp-interface-name](#)  
Tree [p2mp-interface-name](#)  
Introduced 23.10.R1  
Platforms All

### **[p2mp-interface-name] string**

Synopsis P2MP interface name  
Context [reset router string bfd statistics point-to-multipoint p2mp-interface-name \[p2mp-interface-name\] string](#)  
Tree [\[p2mp-interface-name\]](#)  
Notes This element is mandatory.  
Introduced 23.10.R1  
Platforms All

### **point-to-point**

Synopsis Enter the **point-to-point** context  
Context [reset router string bfd statistics point-to-point](#)  
Tree [point-to-point](#)  
Introduced 23.10.R1  
Platforms All

### **session-key**

Synopsis Reset information for the session key  
Context [reset router string bfd statistics point-to-point session-key](#)  
Tree [session-key](#)  
Introduced 23.10.R1  
Platforms All

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

Synopsis	Destination address
Context	<a href="#">reset router string bfd statistics point-to-point session-key dst</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dst</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

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

Synopsis	Source address
Context	<a href="#">reset router string bfd statistics point-to-point session-key src</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">src</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**seamless-lsp-path**

Synopsis	Enter the <b>seamless-lsp-path</b> context
Context	<a href="#">reset router string bfd statistics seamless-lsp-path</a>
Tree	<a href="#">seamless-lsp-path</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset all sessions
Context	<a href="#">reset router string bfd statistics seamless-lsp-path all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## session-key

Synopsis	Reset information for the session key
Context	<a href="#">reset router string bfd statistics seamless-lsp-path session-key</a>
Tree	<a href="#">session-key</a>
Introduced	23.10.R1
Platforms	All

## lsp-index number

Synopsis	LSP index
Context	<a href="#">reset router string bfd statistics seamless-lsp-path session-key lsp-index number</a>
Tree	<a href="#">lsp-index</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## path-lspid number

Synopsis	LSP path ID
Context	<a href="#">reset router string bfd statistics seamless-lsp-path session-key path-lspid number</a>
Tree	<a href="#">path-lspid</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## prefix (ipv4-prefix | ipv6-prefix)

Synopsis	Prefix
Context	<a href="#">reset router string bfd statistics seamless-lsp-path session-key prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.

Introduced 23.10.R1  
 Platforms All

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

Synopsis Source address  
 Context [reset router string bfd statistics seamless-lsp-path session-key src-ip](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [src-ip](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

### **seamless-sr-policy**

Synopsis Enter the **seamless-sr-policy** context  
 Context [reset router string bfd statistics seamless-sr-policy](#)  
 Tree [seamless-sr-policy](#)  
 Introduced 23.10.R1  
 Platforms All

### **all**

Synopsis Reset all sessions  
 Context [reset router string bfd statistics seamless-sr-policy all](#)  
 Tree [all](#)  
 Introduced 23.10.R1  
 Platforms All

### **session-key**

Synopsis Reset information for the session key  
 Context [reset router string bfd statistics seamless-sr-policy session-key](#)  
 Tree [session-key](#)  
 Introduced 23.10.R1



Platforms All

### **lsp-index number**

Synopsis LSP index  
 Context [reset router string bfd statistics seamless-sr-policy session-key lsp-index number](#)  
 Tree [lsp-index](#)  
 Max. Range 0 to 4294967295  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

### **path-lspid number**

Synopsis LSP path ID  
 Context [reset router string bfd statistics seamless-sr-policy session-key path-lspid number](#)  
 Tree [path-lspid](#)  
 Max. Range 0 to 4294967295  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

### **prefix (ipv4-prefix | ipv6-prefix)**

Synopsis Prefix  
 Context [reset router string bfd statistics seamless-sr-policy session-key prefix \(ipv4-prefix | ipv6-prefix\)](#)  
 Tree [prefix](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

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

Synopsis Source address

Context	<a href="#">reset router string bfd statistics seamless-sr-policy session-key src-ip</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">src-ip</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## dhcp-server

Synopsis	Enter the <b>dhcp-server</b> context
Context	<a href="#">reset router string dhcp-server</a>
Tree	<a href="#">dhcp-server</a>
Description	Commands in this context reset DHCPv4 server entities.
Introduced	23.10.R1
Platforms	All

## dhcpv4 [[server-name](#)] *string*

Synopsis	Enter the <b>dhcpv4</b> list instance
Context	<a href="#">reset router string dhcp-server dhcpv4 string</a>
Tree	<a href="#">dhcpv4</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Server name
Context	<a href="#">reset router string dhcp-server dhcpv4 string</a>
Tree	<a href="#">dhcpv4</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## declined-addresses

Synopsis	Enter the <b>declined-addresses</b> context
Context	<a href="#">reset router string dhcp-server dhcpv4 string declined-addresses</a>
Tree	<a href="#">declined-addresses</a>
Description	Commands in this context make declined DHCPv4 addresses available.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Make the specified declined addresses available
Context	<a href="#">reset router string dhcp-server dhcpv4 string declined-addresses address</a>
Tree	<a href="#">address</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [address] string

Synopsis	IPv4 address
Context	<a href="#">reset router string dhcp-server dhcpv4 string declined-addresses address [address] string</a>
Tree	<a href="#">[address]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mask number

Synopsis	IPv4 address mask
Context	<a href="#">reset router string dhcp-server dhcpv4 string declined-addresses address mask number</a>
Tree	<a href="#">mask</a>
Range	1 to 32
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool**

Synopsis	Make declined addresses in the pool available
Context	<code>reset router string dhcp-server dhcpv4 string declined-addresses pool</code>
Tree	<code>pool</code>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[pool] string**

Synopsis	Pool name
Context	<code>reset router string dhcp-server dhcpv4 string declined-addresses pool [pool] string</code>
Tree	<code>[pool]</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover-pool-statistics**

Synopsis	Enter the <b>failover-pool-statistics</b> context
Context	<code>reset router string dhcp-server dhcpv4 string failover-pool-statistics</code>
Tree	<code>failover-pool-statistics</code>
Description	Commands in this context reset the per pool failover statistics.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset failover statistics for all pools
Context	<code>reset router string dhcp-server dhcpv4 string failover-pool-statistics all</code>
Tree	<code>all</code>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pool

Synopsis	Reset failover statistics for the specified pool
Context	<code>reset router string dhcp-server dhcpv4 string failover-pool-statistics pool</code>
Tree	<code>pool</code>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [pool] string

Synopsis	Pool name
Context	<code>reset router string dhcp-server dhcpv4 string failover-pool-statistics pool [pool] string</code>
Tree	<code>[pool]</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## leases

Synopsis	Enter the <b>leases</b> context
Context	<code>reset router string dhcp-server dhcpv4 string leases</code>
Tree	<code>leases</code>
Description	Commands in this context delete leases in the specified DHCPv4 server.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Delete the specified DHCPv4 lease
Context	<code>reset router string dhcp-server dhcpv4 string leases address</code>
Tree	<code>address</code>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 address
Context	<code>reset router string dhcp-server dhcpv4 string leases address [address]</code> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<code>[address]</code>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**state keyword**

Synopsis	Lease state
Context	<code>reset router string dhcp-server dhcpv4 string leases address state keyword</code>
Tree	<code>state</code>
Options	offered, stable, force-renew-pending, remove-pending, held, internal, internal-orphan, internal-offered, internal-held, sticky
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Delete all DHCPv4 leases
Context	<code>reset router string dhcp-server dhcpv4 string leases all</code>
Tree	<code>all</code>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**state keyword**

Synopsis	Lease state
Context	<code>reset router string dhcp-server dhcpv4 string leases all state keyword</code>
Tree	<code>state</code>
Options	offered, stable, force-renew-pending, remove-pending, held, internal, internal-orphan, internal-offered, internal-held, sticky
Introduced	23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix

Synopsis Delete all DHCPv4 leases in the specified prefix  
 Context [reset router string dhcp-server dhcpv4 string leases prefix](#)  
 Tree [prefix](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [prefix] string

Synopsis IPv4 prefix  
 Context [reset router string dhcp-server dhcpv4 string leases prefix \[prefix\] string](#)  
 Tree [\[prefix\]](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## state keyword

Synopsis Lease state  
 Context [reset router string dhcp-server dhcpv4 string leases prefix state keyword](#)  
 Tree [state](#)  
 Options offered, stable, force-renew-pending, remove-pending, held, internal, internal-orphan, internal-offered, internal-held, sticky  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pool-extended-statistics

Synopsis Enter the **pool-extended-statistics** context  
 Context [reset router string dhcp-server dhcpv4 string pool-extended-statistics](#)  
 Tree [pool-extended-statistics](#)  
 Description Commands in this context reset the pool extended statistics peak values.

Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis Reset extended statistics peak values for all pools  
 Context [reset router string dhcp-server dhcpv4 string pool-extended-statistics all](#)  
 Tree [all](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pool

Synopsis Reset extended statistics peak values for the pool  
 Context [reset router string dhcp-server dhcpv4 string pool-extended-statistics pool](#)  
 Tree [pool](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [pool] string

Synopsis Pool name  
 Context [reset router string dhcp-server dhcpv4 string pool-extended-statistics pool \[pool\] string](#)  
 Tree [\[pool\]](#)  
 String Length 1 to 32  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## statistics

Synopsis Reset DHCPv4 server statistics  
 Context [reset router string dhcp-server dhcpv4 string statistics](#)  
 Tree [statistics](#)  
 Introduced 23.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sticky-leases

Synopsis Enter the **sticky-leases** context

Context [reset router string dhcp-server dhcpv4 string sticky-leases](#)

Tree [sticky-leases](#)

Description Commands in this context delete sticky leases.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-name

Synopsis Delete the sticky lease associated with the hostname

Context [reset router string dhcp-server dhcpv4 string sticky-leases host-name](#)

Tree [host-name](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [host-name] string

Synopsis Hostname

Context [reset router string dhcp-server dhcpv4 string sticky-leases host-name \[host-name\] string](#)

Tree [\[host-name\]](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-name-prefix

Synopsis Delete sticky leases associated with hostnames containing the prefix

Context [reset router string dhcp-server dhcpv4 string sticky-leases host-name-prefix](#)

Tree [host-name-prefix](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[host-name-prefix] string**

Synopsis Hostname prefix

Context [reset router string dhcp-server dhcpv4 string sticky-leases host-name-prefix \[host-name-prefix\] string](#)

Tree [\[host-name-prefix\]](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet-extended-statistics**

Synopsis Enter the **subnet-extended-statistics** context

Context [reset router string dhcp-server dhcpv4 string subnet-extended-statistics](#)

Tree [subnet-extended-statistics](#)

Description Commands in this context reset the per subnet extended statistics peak values.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool**

Synopsis Reset extended statistics peak values for all subnets in the pool

Context [reset router string dhcp-server dhcpv4 string subnet-extended-statistics pool](#)

Tree [pool](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[pool] string**

Synopsis Pool name

Context [reset router string dhcp-server dhcpv4 string subnet-extended-statistics pool \[pool\] string](#)

Tree [\[pool\]](#)

String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix

Synopsis	Reset extended statistics peak values for the specified prefix
Context	<a href="#">reset router string dhcp-server dhcpv4 string subnet-extended-statistics prefix</a>
Tree	<a href="#">prefix</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [prefix] string

Synopsis	IPv4 prefix
Context	<a href="#">reset router string dhcp-server dhcpv4 string subnet-extended-statistics prefix [prefix] string</a>
Tree	<a href="#">[prefix]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcpv6 [server-name] string

Synopsis	Enter the <b>dhcpv6</b> list instance
Context	<a href="#">reset router string dhcp-server dhcpv6 string</a>
Tree	<a href="#">dhcpv6</a>
Description	Commands in this context reset DHCPv6 server entities.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [server-name] string

Synopsis	Server name
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Context	<a href="#">reset router string dhcp-server dhcpv6 string</a>
Tree	<a href="#">dhcpv6</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover-pool-statistics

Synopsis	Enter the <b>failover-pool-statistics</b> context
Context	<a href="#">reset router string dhcp-server dhcpv6 string failover-pool-statistics</a>
Tree	<a href="#">failover-pool-statistics</a>
Description	Commands in this context reset the per pool failover statistics.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Reset failover statistics for all pools
Context	<a href="#">reset router string dhcp-server dhcpv6 string failover-pool-statistics all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pool

Synopsis	Reset failover statistics for the specified pool
Context	<a href="#">reset router string dhcp-server dhcpv6 string failover-pool-statistics pool</a>
Tree	<a href="#">pool</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [pool] string

Synopsis	Pool name
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Context	<code>reset router string dhcp-server dhcpv6 string failover-pool-statistics pool [pool] string</code>
Tree	<code>[pool]</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## leases

Synopsis	Enter the <b>leases</b> context
Context	<code>reset router string dhcp-server dhcpv6 string leases</code>
Tree	<code>leases</code>
Description	Commands in this context delete leases in the specified DHCPv6 server.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Delete the specified DHCPv6 lease
Context	<code>reset router string dhcp-server dhcpv6 string leases address</code>
Tree	<code>address</code>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv6 address
Context	<code>reset router string dhcp-server dhcpv6 string leases address [address] (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</code>
Tree	<code>[address]</code>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**state keyword**

Synopsis	Lease state
Context	<a href="#">reset router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">leases</a> <a href="#">address</a> <a href="#">state</a> <i>keyword</i>
Tree	<a href="#">state</a>
Options	advertised, stable, remove-pending, held, internal, internal-orphan, internal-offered, internal-held
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Lease type
Context	<a href="#">reset router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">leases</a> <a href="#">address</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	pd, slaac, wan
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Delete all DHCPv6 leases
Context	<a href="#">reset router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">leases</a> <a href="#">all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**state keyword**

Synopsis	Lease state
Context	<a href="#">reset router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">leases</a> <a href="#">all</a> <a href="#">state</a> <i>keyword</i>
Tree	<a href="#">state</a>
Options	advertised, stable, remove-pending, held, internal, internal-orphan, internal-offered, internal-held
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Lease type
Context	<a href="#">reset router string dhcp-server dhcpv6 string leases all type keyword</a>
Tree	<a href="#">type</a>
Options	pd, slaac, wan
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix**

Synopsis	Delete all DHCPv6 leases in the specified prefix
Context	<a href="#">reset router string dhcp-server dhcpv6 string leases prefix</a>
Tree	<a href="#">prefix</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[prefix] string**

Synopsis	IPv6 prefix
Context	<a href="#">reset router string dhcp-server dhcpv6 string leases prefix [prefix] string</a>
Tree	<a href="#">[prefix]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**state keyword**

Synopsis	Lease state
Context	<a href="#">reset router string dhcp-server dhcpv6 string leases prefix state keyword</a>
Tree	<a href="#">state</a>
Options	advertised, stable, remove-pending, held, internal, internal-orphan, internal-offered, internal-held
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **type keyword**

Synopsis	Lease type
Context	<a href="#">reset router string dhcp-server dhcpv6 string leases prefix type keyword</a>
Tree	<a href="#">type</a>
Options	pd, slaac, wan
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **pool-extended-statistics**

Synopsis	Enter the <b>pool-extended-statistics</b> context
Context	<a href="#">reset router string dhcp-server dhcpv6 string pool-extended-statistics</a>
Tree	<a href="#">pool-extended-statistics</a>
Description	Commands in this context reset the pool extended statistics extended values.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **all**

Synopsis	Reset extended statistics peak values for all pools
Context	<a href="#">reset router string dhcp-server dhcpv6 string pool-extended-statistics all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **pool**

Synopsis	Reset extended statistics peak values for the specified pool
Context	<a href="#">reset router string dhcp-server dhcpv6 string pool-extended-statistics pool</a>
Tree	<a href="#">pool</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**[pool] string**

Synopsis	Pool name
Context	<a href="#">reset router string dhcp-server dhcpv6 string pool-extended-statistics pool [pool] string</a>
Tree	<a href="#">[pool]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool-threshold-statistics**

Synopsis	Enter the <b>pool-threshold-statistics</b> context
Context	<a href="#">reset router string dhcp-server dhcpv6 string pool-threshold-statistics</a>
Tree	<a href="#">pool-threshold-statistics</a>
Description	Commands in this context reset the per pool threshold statistics peak values.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset threshold statistics peak values for all pools
Context	<a href="#">reset router string dhcp-server dhcpv6 string pool-threshold-statistics all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool**

Synopsis	Reset threshold statistics peak values for the pool
Context	<a href="#">reset router string dhcp-server dhcpv6 string pool-threshold-statistics pool</a>
Tree	<a href="#">pool</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[pool] string**

Synopsis	Pool name
Context	<a href="#">reset router string dhcp-server dhcpv6 string pool-threshold-statistics pool [pool] string</a>
Tree	<a href="#">[pool]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-extended-statistics**

Synopsis	Enter the <b>prefix-extended-statistics</b> context
Context	<a href="#">reset router string dhcp-server dhcpv6 string prefix-extended-statistics</a>
Tree	<a href="#">prefix-extended-statistics</a>
Description	Commands in this context reset the per prefix extended statistics peak values.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool**

Synopsis	Reset extended statistics peak values for all prefixes in the pool
Context	<a href="#">reset router string dhcp-server dhcpv6 string prefix-extended-statistics pool</a>
Tree	<a href="#">pool</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[pool] string**

Synopsis	Pool name
Context	<a href="#">reset router string dhcp-server dhcpv6 string prefix-extended-statistics pool [pool] string</a>
Tree	<a href="#">[pool]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix

Synopsis Reset extended statistics peak values for the prefix  
 Context [reset router string dhcp-server dhcpv6 string prefix-extended-statistics prefix](#)  
 Tree [prefix](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [prefix] string

Synopsis IPv6 prefix  
 Context [reset router string dhcp-server dhcpv6 string prefix-extended-statistics prefix \[prefix\] string](#)  
 Tree [\[prefix\]](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix-threshold-statistics

Synopsis Enter the **prefix-threshold-statistics** context  
 Context [reset router string dhcp-server dhcpv6 string prefix-threshold-statistics](#)  
 Tree [prefix-threshold-statistics](#)  
 Description Commands in this context reset the per prefix threshold statistics peak values.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pool

Synopsis Reset threshold statistics peak values for all prefixes in the pool  
 Context [reset router string dhcp-server dhcpv6 string prefix-threshold-statistics pool](#)  
 Tree [pool](#)  
 Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[pool]** *string*

Synopsis Pool name  
 Context [reset router string dhcp-server dhcpv6 string prefix-threshold-statistics pool \[pool\] string](#)  
 Tree [\[pool\]](#)  
 String Length 1 to 32  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix**

Synopsis Reset threshold statistics peak values for the specified prefix  
 Context [reset router string dhcp-server dhcpv6 string prefix-threshold-statistics prefix](#)  
 Tree [prefix](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[prefix]** *string*

Synopsis IPv6 prefix  
 Context [reset router string dhcp-server dhcpv6 string prefix-threshold-statistics prefix \[prefix\] string](#)  
 Tree [\[prefix\]](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **statistics**

Synopsis Reset DHCPv6 server statistics  
 Context [reset router string dhcp-server dhcpv6 string statistics](#)  
 Tree [statistics](#)

Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## forwarding-table

Synopsis	Enter the <b>forwarding-table</b> context
Context	<a href="#">reset router string forwarding-table</a>
Tree	<a href="#">forwarding-table</a>
Description	Commands in this context reset the router forwarding table for the IOM.
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset all router forwarding tables
Context	<a href="#">reset router string forwarding-table all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## slot

Synopsis	Reset the router forwarding table for the IOM slot
Context	<a href="#">reset router string forwarding-table slot</a>
Tree	<a href="#">slot</a>
Introduced	23.10.R1
Platforms	All

## slot-number *reference*

Synopsis	Slot number
Context	<a href="#">reset router string forwarding-table slot slot-number reference</a>
Tree	<a href="#">slot-number</a>
Reference	<b>state card number</b>
Introduced	23.10.R1

Platforms All

## grt-lookup

Synopsis Re-evaluate the route policies for GRT

Context [reset router string grt-lookup](#)

Tree [grt-lookup](#)

Introduced 23.10.R1

Platforms All

## icmp

Synopsis Enter the **icmp** context

Context [reset router string icmp](#)

Tree [icmp](#)

Introduced 23.10.R1

Platforms All

## all

Synopsis Reset all ICMP router statistics

Context [reset router string icmp all](#)

Tree [all](#)

Introduced 23.10.R1

Platforms All

## global

Synopsis Reset global router statistics

Context [reset router string icmp global](#)

Tree [global](#)

Introduced 23.10.R1

Platforms All

## interface

Synopsis	Reset ICMP statistics for the interface
Context	<a href="#">reset router</a> <i>string</i> <a href="#">icmp</a> <a href="#">interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">reset router</a> <i>string</i> <a href="#">icmp</a> <a href="#">interface</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Introduced	23.10.R1
Platforms	All

## icmp-redirect-route

Synopsis	Enter the <b>icmp-redirect-route</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">icmp-redirect-route</a>
Tree	<a href="#">icmp-redirect-route</a>
Description	Commands in this context remove routes created as a result of ICMP redirects received on the management interface.
Introduced	23.10.R1
Platforms	All

## address

Synopsis	Reset the routes associated with the IP address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">icmp-redirect-route</a> <a href="#">address</a>
Tree	<a href="#">address</a>
Introduced	23.10.R1
Platforms	All

### **ipv4-address** *string*

Synopsis	IPv4 address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">icmp-redirect-route</a> address <a href="#">ipv4-address</a> <i>string</i>
Tree	<a href="#">ipv4-address</a>
Introduced	23.10.R1
Platforms	All

### **all**

Synopsis	Reset all routes
Context	<a href="#">reset router</a> <i>string</i> <a href="#">icmp-redirect-route</a> all
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

### **icmp6**

Synopsis	Enter the <b>icmp6</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">icmp6</a>
Tree	<a href="#">icmp6</a>
Description	Commands in this context reset ICMPv6 statistics.
Introduced	23.10.R1
Platforms	All

### **all**

Synopsis	Reset all ICMPv6 router statistics
Context	<a href="#">reset router</a> <i>string</i> <a href="#">icmp6</a> all
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

### **global**

Synopsis	Reset ICMPv6 global router statistics
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Context	<a href="#">reset router string icmp6 global</a>
Tree	<a href="#">global</a>
Introduced	23.10.R1
Platforms	All

## interface

Synopsis	Reset ICMPv6 router statistics of the interface
Context	<a href="#">reset router string icmp6 interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">reset router string icmp6 interface interface-name string</a>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Introduced	23.10.R1
Platforms	All

## icmp6-redirect-route

Synopsis	Enter the <b>icmp6-redirect-route</b> context
Context	<a href="#">reset router string icmp6-redirect-route</a>
Tree	<a href="#">icmp6-redirect-route</a>
Description	Commands in this context delete routes created from ICMPv6 redirects received on the management interface.
Introduced	23.10.R1
Platforms	All

## address

Synopsis	Reset routes associated with the IPv6 address
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Context	<a href="#">reset router string icmp6-redirect-route address</a>
Tree	<a href="#">address</a>
Introduced	23.10.R1
Platforms	All

### **ipv6-address** *string*

Synopsis	IPv6 address
Context	<a href="#">reset router string icmp6-redirect-route address ipv6-address string</a>
Tree	<a href="#">ipv6-address</a>
Introduced	23.10.R1
Platforms	All

### **all**

Synopsis	Reset all routes
Context	<a href="#">reset router string icmp6-redirect-route all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

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

Synopsis	Enter the <b>interface</b> list instance
Context	<a href="#">reset router string interface string</a>
Tree	<a href="#">interface</a>
Description	Commands in this context reset IP interface statistics.
Introduced	23.7.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	Interface name
Context	<a href="#">reset router string interface string</a>
Tree	<a href="#">interface</a>

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

## hold-time

Synopsis	Reset the IP interface activation hold timers
Context	<a href="#">reset router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>hold-time</b>
Tree	<a href="#">hold-time</a>
Introduced	23.7.R1
Platforms	All

## mac

Synopsis	Enter the <b>mac</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>mac</b>
Tree	<a href="#">mac</a>
Introduced	23.7.R1
Platforms	All

## address

Synopsis	Reset specified MAC address from associated interface
Context	<a href="#">reset router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>mac</b> <b>address</b>
Tree	<a href="#">address</a>
Introduced	23.7.R1
Platforms	All

## [**mac-address**] *string*

Synopsis	MAC address
Context	<a href="#">reset router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>mac</b> <b>address</b> [ <b>mac-address</b> ] <i>string</i>
Tree	<a href="#">[mac-address]</a>
Notes	This element is mandatory.

Introduced 23.7.R1  
Platforms All

## all

Synopsis Reset all MAC addresses for the specified interface  
Context [reset router string interface string mac all](#)  
Tree [all](#)  
Introduced 23.7.R1  
Platforms All

## policy-accounting

Synopsis Enter the **policy-accounting** context  
Context [reset router string interface string policy-accounting](#)  
Tree [policy-accounting](#)  
Description Commands in this context reset the accounting statistics.  
Introduced 23.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## all

Synopsis Reset all the policy-accounting statistics  
Context [reset router string interface string policy-accounting all](#)  
Tree [all](#)  
Description When configured, the system resets all classes, indexes, and policers.  
Introduced 23.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## class

Synopsis Reset the specified policy-accounting class  
Context [reset router string interface string policy-accounting class](#)  
Tree [class](#)  
Introduced 23.7.R1

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

## all

Synopsis Reset all policy-accounting class indexes  
 Context [reset router string interface string policy-accounting class all](#)  
 Tree [all](#)  
 Notes The following elements are part of a mandatory choice: **all** or **index**.  
 Introduced 23.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## index number

Synopsis Policy-accounting class index  
 Context [reset router string interface string policy-accounting class index number](#)  
 Tree [index](#)  
 Range 1 to 255  
 Notes The following elements are part of a mandatory choice: **all** or **index**.  
 Introduced 23.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## [name] keyword

Synopsis Policy-accounting class counters to reset  
 Context [reset router string interface string policy-accounting class \[name\] keyword](#)  
 Tree [\[name\]](#)  
 Options source-class, destination-class  
 Notes This element is mandatory.  
 Introduced 23.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## policer

Synopsis Enter the **policer** context  
 Context [reset router string interface string policy-accounting policer](#)

Tree	<a href="#">policer</a>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**all**

Synopsis	Reset all the policer statistics
Context	<a href="#">reset router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">policy-accounting</a> <a href="#">policer</a> <a href="#">all</a>
Tree	<a href="#">all</a>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**index**

Synopsis	Reset the specified policer
Context	<a href="#">reset router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">policy-accounting</a> <a href="#">policer</a> <a href="#">index</a>
Tree	<a href="#">index</a>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[policer-index] *number***

Synopsis	Policer index
Context	<a href="#">reset router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">policy-accounting</a> <a href="#">policer</a> <a href="#">index</a> <a href="#">[policer-index]</a> <i>number</i>
Tree	<a href="#">[policer-index]</a>
Range	1 to 63
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**statistics**

Synopsis	Reset the interface traffic statistics
Context	<a href="#">reset router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">statistics</a>
Tree	<a href="#">statistics</a>

Introduced 23.7.R1  
 Platforms All

### **urpf-statistics**

Synopsis Reset the interface uRPF statistics  
 Context [reset router string interface string urpf-statistics](#)  
 Tree [urpf-statistics](#)  
 Introduced 23.7.R1  
 Platforms All

### **isis [isis-instance] reference**

Synopsis Enter the **isis** list instance  
 Context [reset router string isis reference](#)  
 Tree [isis](#)  
 Description Commands in this context reset the IS-IS protocol entities.  
 Introduced 23.10.R1  
 Platforms All

### **[isis-instance] reference**

Synopsis IS-IS instance  
 Context [reset router string isis reference](#)  
 Tree [isis](#)  
 MD-CLI 0  
 Default  
 Reference **state router string isis number**  
 Notes This element is part of a list key.  
 Introduced 23.10.R1  
 Platforms All

### **adjacency**

Synopsis Enter the **adjacency** context

---

Context	<a href="#">reset router string isis reference adjacency</a>
Tree	<a href="#">adjacency</a>
Description	Commands in this context reset the entries from the IS-IS adjacency database.
Introduced	23.10.R1
Platforms	All

## all-adjacencies

Synopsis	Reset all IS-IS adjacencies
Context	<a href="#">reset router string isis reference adjacency all-adjacencies</a>
Tree	<a href="#">all-adjacencies</a>
Introduced	23.10.R1
Platforms	All

## system-id

Synopsis	Reset the IS-IS adjacency to a node
Context	<a href="#">reset router string isis reference adjacency system-id</a>
Tree	<a href="#">system-id</a>
Introduced	23.10.R1
Platforms	All

## [system-id] string

Synopsis	System ID for a specific node
Context	<a href="#">reset router string isis reference adjacency system-id [system-id] string</a>
Tree	<a href="#">[system-id]</a>
String Length	14
Default	0000.0000.0000
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All



**database**

Synopsis	Enter the <b>database</b> context
Context	<a href="#">reset router string isis reference database</a>
Tree	<a href="#">database</a>
Description	Commands in this context reset the entries from the IS-IS link-state database.
Introduced	23.10.R1
Platforms	All

**all-databases**

Synopsis	Reset all IS-IS databases system wide
Context	<a href="#">reset router string isis reference database all-databases</a>
Tree	<a href="#">all-databases</a>
Introduced	23.10.R1
Platforms	All

**system-id**

Synopsis	Reset the IS-IS database for a node
Context	<a href="#">reset router string isis reference database system-id</a>
Tree	<a href="#">system-id</a>
Introduced	23.10.R1
Platforms	All

**[system-id] string**

Synopsis	System ID for a specific node
Context	<a href="#">reset router string isis reference database system-id [system-id] string</a>
Tree	<a href="#">[system-id]</a>
String Length	14
Default	0000.0000.0000
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## export

Synopsis	Reset and re-evaluate IS-IS route policies
Context	<a href="#">reset router string isis reference export</a>
Tree	<a href="#">export</a>
Description	When configured, the system re-evaluates route policies participating in the export mechanism, either as importers or exporters of routes.
Introduced	23.10.R1
Platforms	All

## overload

Synopsis	Reset the IS-IS overload
Context	<a href="#">reset router string isis reference overload</a>
Tree	<a href="#">overload</a>
Introduced	23.10.R1
Platforms	All

### [**overload-type**] *keyword*

Synopsis	Overload type
Context	<a href="#">reset router string isis reference overload [<b>overload-type</b>] keyword</a>
Tree	<a href="#">[<b>overload-type</b>]</a>
Options	fib, rtm, prefix-limit
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## sid-egress-stats

Synopsis	Enter the <b>sid-egress-stats</b> context
Context	<a href="#">reset router string isis reference sid-egress-stats</a>
Tree	<a href="#">sid-egress-stats</a>
Introduced	23.10.R1
Platforms	All

## adj

Synopsis	Enter the <b>adj</b> context
Context	<a href="#">reset router string isis reference sid-egress-stats adj</a>
Tree	<a href="#">adj</a>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset all egress SID statistics for all adjacencies
Context	<a href="#">reset router string isis reference sid-egress-stats adj all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## interface

Synopsis	Reset adjacency SID statistics for an interface
Context	<a href="#">reset router string isis reference sid-egress-stats adj interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

## **[interface-name]** *string*

Synopsis	Interface name
Context	<a href="#">reset router string isis reference sid-egress-stats adj interface [interface-name] string</a>
Tree	<a href="#">[interface-name]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**adj-set**

Synopsis	Enter the <b>adj-set</b> context
Context	<a href="#">reset router string isis reference sid-egress-stats adj-set</a>
Tree	<a href="#">adj-set</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset egress SID statistics for all adjacency sets
Context	<a href="#">reset router string isis reference sid-egress-stats adj-set all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**id**

Synopsis	Reset adjacency set ID
Context	<a href="#">reset router string isis reference sid-egress-stats adj-set id</a>
Tree	<a href="#">id</a>
Introduced	23.10.R1
Platforms	All

**[id] reference**

Synopsis	Adjacency set ID
Context	<a href="#">reset router string isis reference sid-egress-stats adj-set id [id] reference</a>
Tree	<a href="#">[id]</a>
Reference	<b>state router string isis number segment-routing adjacency-set number</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset all egress SID statistics
Context	<a href="#">reset router string isis reference sid-egress-stats all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**node**

Synopsis	Enter the <b>node</b> context
Context	<a href="#">reset router string isis reference sid-egress-stats node</a>
Tree	<a href="#">node</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset all egress node SID statistics
Context	<a href="#">reset router string isis reference sid-egress-stats node all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**prefix**

Synopsis	Reset egress statistics for a node prefix SID
Context	<a href="#">reset router string isis reference sid-egress-stats node prefix</a>
Tree	<a href="#">prefix</a>
Introduced	23.10.R1
Platforms	All

**[ip-prefix-prefix-length]** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-prefix* | *ipv6-prefix*)

Synopsis	Node prefix
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Context	<a href="#">reset router string isis reference sid-egress-stats node prefix [ip-prefix-prefix-length] (ipv4-address-no-zone   ipv6-address-no-zone   ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">[ip-prefix-prefix-length]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## sid-ingress-stats

Synopsis	Enter the <b>sid-ingress-stats</b> context
Context	<a href="#">reset router string isis reference sid-ingress-stats</a>
Tree	<a href="#">sid-ingress-stats</a>
Introduced	23.10.R1
Platforms	All

## adj

Synopsis	Enter the <b>adj</b> context
Context	<a href="#">reset router string isis reference sid-ingress-stats adj</a>
Tree	<a href="#">adj</a>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset ingress SID statistics for all adjacencies
Context	<a href="#">reset router string isis reference sid-ingress-stats adj all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## interface

Synopsis	Reset ingress SID statistics for an adjacency
Context	<a href="#">reset router string isis reference sid-ingress-stats adj interface</a>

Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

**[interface-name] string**

Synopsis	Interface name
Context	<a href="#">reset router string isis reference sid-ingress-stats adj interface [interface-name] string</a>
Tree	<a href="#">[interface-name]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**adj-set**

Synopsis	Enter the <b>adj-set</b> context
Context	<a href="#">reset router string isis reference sid-ingress-stats adj-set</a>
Tree	<a href="#">adj-set</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset ingress SID statistics for all adjacency sets
Context	<a href="#">reset router string isis reference sid-ingress-stats adj-set all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**id**

Synopsis	Reset ingress statistics for the adjacency set ID
Context	<a href="#">reset router string isis reference sid-ingress-stats adj-set id</a>
Tree	<a href="#">id</a>
Introduced	23.10.R1

Platforms All

### [id] reference

Synopsis Adjacency set ID  
 Context [reset router string isis reference sid-ingress-stats adj-set id \[id\] reference](#)  
 Tree [\[id\]](#)  
 Reference **state router string isis number segment-routing adjacency-set number**  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

### all

Synopsis Reset all ingress SID statistics  
 Context [reset router string isis reference sid-ingress-stats all](#)  
 Tree [all](#)  
 Introduced 23.10.R1  
 Platforms All

### node

Synopsis Enter the **node** context  
 Context [reset router string isis reference sid-ingress-stats node](#)  
 Tree [node](#)  
 Introduced 23.10.R1  
 Platforms All

### all

Synopsis Reset all ingress node SID statistics  
 Context [reset router string isis reference sid-ingress-stats node all](#)  
 Tree [all](#)  
 Introduced 23.10.R1  
 Platforms All



**prefix**

Synopsis	Reset ingress statistics for a node prefix SID
Context	<a href="#">reset router string isis reference sid-ingress-stats node prefix</a>
Tree	<a href="#">prefix</a>
Introduced	23.10.R1
Platforms	All

**[ip-prefix-prefix-length]** (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix | ipv6-prefix*)

Synopsis	Node prefix
Context	<a href="#">reset router string isis reference sid-ingress-stats node prefix [ip-prefix-prefix-length] (ipv4-address-no-zone   ipv6-address-no-zone   ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">[ip-prefix-prefix-length]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**spf-log**

Synopsis	Reset the IS-IS SPF log
Context	<a href="#">reset router string isis reference spf-log</a>
Tree	<a href="#">spf-log</a>
Introduced	23.10.R1
Platforms	All

**statistics**

Synopsis	Reset IS-IS statistics
Context	<a href="#">reset router string isis reference statistics</a>
Tree	<a href="#">statistics</a>
Introduced	23.10.R1
Platforms	All

## neighbor

Synopsis	Enter the <b>neighbor</b> context
Context	<a href="#">reset router string neighbor</a>
Tree	<a href="#">neighbor</a>
Description	Commands in this context reset neighbor information.
Introduced	23.10.R1
Platforms	All

## address

Synopsis	Reset the IPv6 neighbor information
Context	<a href="#">reset router string neighbor address</a>
Tree	<a href="#">address</a>
Introduced	23.10.R1
Platforms	All

## ipv6-address (*ipv4-address-with-zone | ipv6-address-with-zone*)

Synopsis	IPv6 address
Context	<a href="#">reset router string neighbor address ipv6-address</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
Tree	<a href="#">ipv6-address</a>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset information for all neighbors of all interfaces
Context	<a href="#">reset router string neighbor all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**interface**

Synopsis	Reset all neighbors of the router interface
Context	<a href="#">reset router</a> <i>string</i> <a href="#">neighbor interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

**interface-name** *string*

Synopsis	Interface name
Context	<a href="#">reset router</a> <i>string</i> <a href="#">neighbor interface</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Introduced	23.10.R1
Platforms	All

**ospf** [[ospf-instance](#)] *number*

Synopsis	Enter the <b>ospf</b> list instance
Context	<a href="#">reset router</a> <i>string</i> <a href="#">ospf</a> <i>number</i>
Tree	<a href="#">ospf</a>
Description	Commands in this context clear and reset OSPF protocol entities.
Introduced	23.10.R1
Platforms	All

**[ospf-instance]** *number*

Synopsis	OSPF instance
Context	<a href="#">reset router</a> <i>string</i> <a href="#">ospf</a> <i>number</i>
Tree	<a href="#">ospf</a>
Max. Range	0 to 4294967295
MD-CLI	0
Default	
Notes	This element is part of a list key.
Introduced	23.10.R1

Platforms All

## database

Synopsis Reset and refresh LSAs  
Context [reset router string ospf number database](#)  
Tree [database](#)  
Description When configured, the system clears all LSAs received from other nodes, sets all adjacencies other than two-way to one-way, and refreshes all self-originated LSAs.  
Introduced 23.10.R1  
Platforms All

## purge

Synopsis Reset LSAs  
Context [reset router string ospf number database purge](#)  
Tree [purge](#)  
Introduced 23.10.R1  
Platforms All

## export

Synopsis Reset and re-evaluate export policies  
Context [reset router string ospf number export](#)  
Tree [export](#)  
Introduced 23.10.R1  
Platforms All

## neighbor

Synopsis Reset neighbor adjacencies  
Context [reset router string ospf number neighbor](#)  
Tree [neighbor](#)  
Description This command marks the neighbor as dead and re-initiates the affected adjacencies.  
Introduced 23.10.R1

Platforms All

### **interface-name** *string*

Synopsis Neighbor interface name  
 Context [reset router string ospf number neighbor interface-name string](#)  
 Tree [interface-name](#)  
 Introduced 23.10.R1  
 Platforms All

### **router-id** *string*

Synopsis Neighbor router ID  
 Context [reset router string ospf number neighbor router-id string](#)  
 Tree [router-id](#)  
 Introduced 23.10.R1  
 Platforms All

### **overload**

Synopsis Reset the OSPF overload  
 Context [reset router string ospf number overload](#)  
 Tree [overload](#)  
 Introduced 23.10.R1  
 Platforms All

### **[overload-type]** *keyword*

Synopsis Overload type  
 Context [reset router string ospf number overload \[overload-type\] keyword](#)  
 Tree [\[overload-type\]](#)  
 Options fib, rtm, rtr-adv-lsa-limit  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

## sid-egress-stats

Synopsis	Enter the <b>sid-egress-stats</b> context
Context	<a href="#">reset router string ospf number sid-egress-stats</a>
Tree	<a href="#">sid-egress-stats</a>
Introduced	23.10.R1
Platforms	All

## adj

Synopsis	Enter the <b>adj</b> context
Context	<a href="#">reset router string ospf number sid-egress-stats adj</a>
Tree	<a href="#">adj</a>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset egress statistics for all adjacency SIDs
Context	<a href="#">reset router string ospf number sid-egress-stats adj all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## interface

Synopsis	Reset egress adjacency SID statistics for an interface
Context	<a href="#">reset router string ospf number sid-egress-stats adj interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

## [interface-name] *reference*

Synopsis	Interface name
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Context	<a href="#">reset router string ospf number sid-egress-stats adj interface [interface-name] reference</a>
Tree	<a href="#">[interface-name]</a>
Reference	<b>state router string ospf number area string interface string</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## adj-set

Synopsis	Enter the <b>adj-set</b> context
Context	<a href="#">reset router string ospf number sid-egress-stats adj-set</a>
Tree	<a href="#">adj-set</a>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset egress statistics for all adjacency sets
Context	<a href="#">reset router string ospf number sid-egress-stats adj-set all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## id

Synopsis	Reset egress statistics for an adjacency set
Context	<a href="#">reset router string ospf number sid-egress-stats adj-set id</a>
Tree	<a href="#">id</a>
Introduced	23.10.R1
Platforms	All

## [id] reference

Synopsis	Adjacency set ID
Context	<a href="#">reset router string ospf number sid-egress-stats adj-set id [id] reference</a>

Tree	<a href="#">[id]</a>
Reference	<b>state router</b> <i>string ospf number segment-routing adjacency-set number</i>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset all egress SID statistics
Context	<a href="#">reset router</a> <i>string ospf number sid-egress-stats all</i>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**node**

Synopsis	Enter the <b>node</b> context
Context	<a href="#">reset router</a> <i>string ospf number sid-egress-stats node</i>
Tree	<a href="#">node</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset egress statistics for all prefix SIDs
Context	<a href="#">reset router</a> <i>string ospf number sid-egress-stats node all</i>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**prefix**

Synopsis	Reset egress SID statistics for a prefix
Context	<a href="#">reset router</a> <i>string ospf number sid-egress-stats node prefix</i>
Tree	<a href="#">prefix</a>



Introduced 23.10.R1  
 Platforms All

**[prefix]** (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix | ipv6-prefix*)

Synopsis Node prefix  
 Context [reset router string ospf number sid-egress-stats node prefix \[prefix\]](#) (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix | ipv6-prefix*)  
 Tree [\[prefix\]](#)  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

### sid-ingress-stats

Synopsis Enter the **sid-ingress-stats** context  
 Context [reset router string ospf number sid-ingress-stats](#)  
 Tree [sid-ingress-stats](#)  
 Introduced 23.10.R1  
 Platforms All

### adj

Synopsis Enter the **adj** context  
 Context [reset router string ospf number sid-ingress-stats adj](#)  
 Tree [adj](#)  
 Introduced 23.10.R1  
 Platforms All

### all

Synopsis Reset ingress statistics for all adjacency SIDs  
 Context [reset router string ospf number sid-ingress-stats adj all](#)  
 Tree [all](#)  
 Introduced 23.10.R1

Platforms All

## interface

Synopsis Reset ingress adjacency SID statistics on an interface  
 Context [reset router string ospf number sid-ingress-stats adj interface](#)  
 Tree [interface](#)  
 Introduced 23.10.R1  
 Platforms All

## **[interface-name]** *reference*

Synopsis Interface name  
 Context [reset router string ospf number sid-ingress-stats adj interface \[interface-name\] reference](#)  
 Tree [\[interface-name\]](#)  
 Reference **state router string ospf number area string interface string**  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

## adj-set

Synopsis Enter the **adj-set** context  
 Context [reset router string ospf number sid-ingress-stats adj-set](#)  
 Tree [adj-set](#)  
 Introduced 23.10.R1  
 Platforms All

## all

Synopsis Reset ingress statistics for all adjacency sets  
 Context [reset router string ospf number sid-ingress-stats adj-set all](#)  
 Tree [all](#)  
 Introduced 23.10.R1  
 Platforms All

## id

Synopsis	Reset ingress statistics for a specific adjacency set
Context	<a href="#">reset router string ospf number sid-ingress-stats adj-set id</a>
Tree	<a href="#">id</a>
Introduced	23.10.R1
Platforms	All

## [id] reference

Synopsis	Adjacency set ID
Context	<a href="#">reset router string ospf number sid-ingress-stats adj-set id [id] reference</a>
Tree	<a href="#">[id]</a>
Reference	<b>state router string ospf number segment-routing adjacency-set number</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset all ingress SID statistics
Context	<a href="#">reset router string ospf number sid-ingress-stats all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## node

Synopsis	Enter the <b>node</b> context
Context	<a href="#">reset router string ospf number sid-ingress-stats node</a>
Tree	<a href="#">node</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset ingress statistics for all prefix SIDs
Context	<a href="#">reset router string ospf number sid-ingress-stats node all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**prefix**

Synopsis	Reset ingress statistics for a prefix SID
Context	<a href="#">reset router string ospf number sid-ingress-stats node prefix</a>
Tree	<a href="#">prefix</a>
Introduced	23.10.R1
Platforms	All

**[prefix]** (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix | ipv6-prefix*)

Synopsis	Node prefix
Context	<a href="#">reset router string ospf number sid-ingress-stats node prefix [prefix] (ipv4-address-no-zone   ipv6-address-no-zone   ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">[prefix]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**statistics**

Synopsis	Reset OSPF statistics
Context	<a href="#">reset router string ospf number statistics</a>
Tree	<a href="#">statistics</a>
Description	When configured, the system clears all neighbor, router, interface, SPF and global statistics of this OSPF instance.
Introduced	23.10.R1
Platforms	All

**ospf3** [[ospf-instance](#)] *number*

Synopsis	Enter the <b>ospf3</b> list instance
Context	<a href="#">reset router string ospf3 number</a>
Tree	<a href="#">ospf3</a>
Description	Commands in this context clear and reset OSPFv3 protocol entities.
Introduced	23.10.R1
Platforms	All

**[ospf-instance]** *number*

Synopsis	OSPFv3 instance
Context	<a href="#">reset router string ospf3 number</a>
Tree	<a href="#">ospf3</a>
Max. Range	0 to 4294967295
MD-CLI Default	0
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

**database**

Synopsis	Reset and refresh LSAs
Context	<a href="#">reset router string ospf3 number database</a>
Tree	<a href="#">database</a>
Description	When configured, the system clears all LSAs received from other nodes, sets all adjacencies other than two-way to one-way, and refreshes all self-originated LSAs.
Introduced	23.10.R1
Platforms	All

**purge**

Synopsis	Reset LSAs
Context	<a href="#">reset router string ospf3 number database purge</a>
Tree	<a href="#">purge</a>

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Introduced	23.10.R1
Platforms	All

## **export**

Synopsis	Reset and re-evaluate export policies
Context	<a href="#">reset router string ospf3 number export</a>
Tree	<a href="#">export</a>
Introduced	23.10.R1
Platforms	All

## **neighbor**

Synopsis	Reset neighbor adjacencies
Context	<a href="#">reset router string ospf3 number neighbor</a>
Tree	<a href="#">neighbor</a>
Description	When configured, this command marks the neighbor as dead and reinitiates the affected adjacencies.
Introduced	23.10.R1
Platforms	All

## **interface-name *string***

Synopsis	Neighbor interface name
Context	<a href="#">reset router string ospf3 number neighbor interface-name string</a>
Tree	<a href="#">interface-name</a>
Introduced	23.10.R1
Platforms	All

## **router-id *string***

Synopsis	Router ID of the neighbor to reset
Context	<a href="#">reset router string ospf3 number neighbor router-id string</a>
Tree	<a href="#">router-id</a>
Introduced	23.10.R1

Platforms All

## overload

Synopsis Reset the OSPF overload  
 Context [reset router string ospf3 number overload](#)  
 Tree [overload](#)  
 Introduced 23.10.R1  
 Platforms All

### [**overload-type**] *keyword*

Synopsis Overload type  
 Context [reset router string ospf3 number overload \[\*\*overload-type\*\*\] keyword](#)  
 Tree [\[\*\*overload-type\*\*\]](#)  
 Options fib, rtm, rtr-adv-lsa-limit  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms All

## sid-egress-stats

Synopsis Enter the **sid-egress-stats** context  
 Context [reset router string ospf3 number sid-egress-stats](#)  
 Tree [sid-egress-stats](#)  
 Introduced 23.10.R1  
 Platforms All

## adj

Synopsis Enter the **adj** context  
 Context [reset router string ospf3 number sid-egress-stats adj](#)  
 Tree [adj](#)  
 Introduced 23.10.R1  
 Platforms All

**all**

Synopsis	Reset egress statistics for all adjacency SIDs
Context	<a href="#">reset router string ospf3 number sid-egress-stats adj all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**interface**

Synopsis	Reset statistics for adjacency SIDs on an interface
Context	<a href="#">reset router string ospf3 number sid-egress-stats adj interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

**[interface-name] reference**

Synopsis	Interface name
Context	<a href="#">reset router string ospf3 number sid-egress-stats adj interface [interface-name] reference</a>
Tree	<a href="#">[interface-name]</a>
Reference	<b>state router string ospf3 number area string interface string</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset all egress SID statistics
Context	<a href="#">reset router string ospf3 number sid-egress-stats all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All



**node**

Synopsis	Enter the <b>node</b> context
Context	<a href="#">reset router string ospf3 number sid-egress-stats node</a>
Tree	<a href="#">node</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset egress statistics for all prefix SIDs
Context	<a href="#">reset router string ospf3 number sid-egress-stats node all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**prefix**

Synopsis	Reset egress statistics for SIDs of a specific prefix
Context	<a href="#">reset router string ospf3 number sid-egress-stats node prefix</a>
Tree	<a href="#">prefix</a>
Introduced	23.10.R1
Platforms	All

**[prefix]** (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-prefix | ipv6-prefix*)

Synopsis	Node prefix
Context	<a href="#">reset router string ospf3 number sid-egress-stats node prefix [prefix] (ipv4-address-no-zone   ipv6-address-no-zone   ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">[prefix]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## sid-ingress-stats

Synopsis	Enter the <b>sid-ingress-stats</b> context
Context	<a href="#">reset router string ospf3 number sid-ingress-stats</a>
Tree	<a href="#">sid-ingress-stats</a>
Introduced	23.10.R1
Platforms	All

## adj

Synopsis	Enter the <b>adj</b> context
Context	<a href="#">reset router string ospf3 number sid-ingress-stats adj</a>
Tree	<a href="#">adj</a>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Reset ingress statistics for all adjacency SIDs
Context	<a href="#">reset router string ospf3 number sid-ingress-stats adj all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

## interface

Synopsis	Reset statistics for adjacency SIDs on an interface
Context	<a href="#">reset router string ospf3 number sid-ingress-stats adj interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

## [interface-name] reference

Synopsis	Interface name
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Context	<a href="#">reset router string ospf3 number sid-ingress-stats adj interface [interface-name]</a> <i>reference</i>
Tree	<a href="#">[interface-name]</a>
Reference	<b>state router string ospf3 number area string interface string</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset all ingress SID statistics
Context	<a href="#">reset router string ospf3 number sid-ingress-stats all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**node**

Synopsis	Enter the <b>node</b> context
Context	<a href="#">reset router string ospf3 number sid-ingress-stats node</a>
Tree	<a href="#">node</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Reset ingress SID statistics for all prefix SIDs
Context	<a href="#">reset router string ospf3 number sid-ingress-stats node all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	All

**prefix**

Synopsis	Reset ingress statistics for specific prefix SIDs
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Context	<a href="#">reset router string ospf3 number sid-ingress-stats node prefix</a>
Tree	<a href="#">prefix</a>
Introduced	23.10.R1
Platforms	All

### **[prefix]** ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#) | [ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis	Node prefix
Context	<a href="#">reset router string ospf3 number sid-ingress-stats node prefix [prefix]</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a>   <a href="#">ipv4-prefix</a>   <a href="#">ipv6-prefix</a> )
Tree	<a href="#">[prefix]</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## **statistics**

Synopsis	Reset OSPF statistics
Context	<a href="#">reset router string ospf3 number statistics</a>
Tree	<a href="#">statistics</a>
Description	When configured, the system clears all neighbor, router, interface, SPF and global statistics of this OSPF instance.
Introduced	23.10.R1
Platforms	All

## **segment-routing**

Synopsis	Enter the <b>segment-routing</b> context
Context	<a href="#">reset router string segment-routing</a>
Tree	<a href="#">segment-routing</a>
Description	Commands in this context reset segment-routing statistics.
Introduced	23.10.R1
Platforms	All

## sr-policies

Synopsis	Enter the <b>sr-policies</b> context
Context	<a href="#">reset router string segment-routing sr-policies</a>
Tree	<a href="#">sr-policies</a>
Description	Commands in this context reset segment-routing policy statistics.
Introduced	23.10.R1
Platforms	All

## sr-policies-egress-statistics

Synopsis	Reset egress traffic statistics
Context	<a href="#">reset router string segment-routing sr-policies sr-policies-egress-statistics</a>
Tree	<a href="#">sr-policies-egress-statistics</a>
Description	This command resets traffic statistics collected on egress of segment-routing policies, identified by their color and endpoint address, if any.
Introduced	23.10.R1
Platforms	All

## [color] reference

Synopsis	Color for the SR policy
Context	<a href="#">reset router string segment-routing sr-policies sr-policies-egress-statistics [color] reference</a>
Tree	<a href="#">[color]</a>
Reference	<b>state router string segment-routing sr-policies sr-policy-egress-statistics number endpoint</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>segment-index number</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## endpoint reference

Synopsis	Endpoint address of the SR policy
Context	<a href="#">reset router string segment-routing sr-policies sr-policies-egress-statistics endpoint reference</a>
Tree	<a href="#">endpoint</a>

Reference	<b>state router</b> <i>string</i> <b>segment-routing sr-policies sr-policy-egress-statistics</b> <i>number</i> <b>endpoint</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>segment-index</b> <i>number</i>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## sr-policies-ingress-statistics

Synopsis	Reset ingress traffic statistics
Context	<a href="#">reset router</a> <i>string</i> <a href="#">segment-routing sr-policies sr-policies-ingress-statistics</a>
Tree	<a href="#">sr-policies-ingress-statistics</a>
Description	This command resets traffic statistics collected on ingress of segment-routing policies, identified by their color and endpoint address, if any.
Introduced	23.10.R1
Platforms	All

### [color] reference

Synopsis	Color for the SR policy
Context	<a href="#">reset router</a> <i>string</i> <a href="#">segment-routing sr-policies sr-policies-ingress-statistics</a> <a href="#">[color]</a> <i>reference</i>
Tree	<a href="#">[color]</a>
Reference	<b>state router</b> <i>string</i> <b>segment-routing sr-policies sr-policy-ingress-statistics</b> <i>number</i> <b>endpoint</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### endpoint reference

Synopsis	Endpoint of the SR policy
Context	<a href="#">reset router</a> <i>string</i> <a href="#">segment-routing sr-policies sr-policies-ingress-statistics</a> <a href="#">endpoint</a> <i>reference</i>
Tree	<a href="#">endpoint</a>
Reference	<b>state router</b> <i>string</i> <b>segment-routing sr-policies sr-policy-ingress-statistics</b> <i>number</i> <b>endpoint</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )

Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## **vrrp**

Synopsis	Enter the <b>vrrp</b> context
Context	<a href="#">reset router string vrrp</a>
Tree	<a href="#">vrrp</a>
Introduced	23.10.R1
Platforms	All

## **instances**

Synopsis	Enter the <b>instances</b> context
Context	<a href="#">reset router string vrrp instances</a>
Tree	<a href="#">instances</a>
Description	Commands in this context reset VRRP protocol instances.
Introduced	23.10.R1
Platforms	All

## **interface** [\[interface-name\]](#) *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<a href="#">reset router string vrrp instances interface string</a>
Tree	<a href="#">interface</a>
Description	Commands in this context reset VRRP protocol instances on an IP interface.
Introduced	23.10.R1
Platforms	All

## **[interface-name]** *string*

Synopsis	Interface name
Context	<a href="#">reset router string vrrp instances interface string</a>
Tree	<a href="#">interface</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

### **all-vrid**

Synopsis	Reset all VRRP instances on the interface
Context	<a href="#">reset router</a> <i>string</i> <a href="#">vrrp instances</a> <a href="#">interface</a> <i>string</i> <b>all-vrid</b>
Tree	<a href="#">all-vrid</a>
Introduced	23.10.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">reset router</a> <i>string</i> <a href="#">vrrp instances</a> <a href="#">interface</a> <i>string</i> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	23.10.R1
Platforms	All

### **vrid**

Synopsis	Reset the IPv4 VRRP instance
Context	<a href="#">reset router</a> <i>string</i> <a href="#">vrrp instances</a> <a href="#">interface</a> <i>string</i> <b>ipv4 vrid</b>
Tree	<a href="#">vrid</a>
Introduced	23.10.R1
Platforms	All

### **virtual-router-id** *number*

Synopsis	VRRP instance to reset
Context	<a href="#">reset router</a> <i>string</i> <a href="#">vrrp instances</a> <a href="#">interface</a> <i>string</i> <b>ipv4 vrid</b> <b>virtual-router-id</b> <i>number</i>
Tree	<a href="#">virtual-router-id</a>
Max. Range	-2147483648 to 2147483647



Introduced	23.10.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<a href="#">reset router string vrrp instances interface string ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	23.10.R1
Platforms	All

## vrid

Synopsis	Reset the IPv6 VRRP instance
Context	<a href="#">reset router string vrrp instances interface string ipv6 vrid</a>
Tree	<a href="#">vrid</a>
Introduced	23.10.R1
Platforms	All

## virtual-router-id *number*

Synopsis	VRRP instance to reset
Context	<a href="#">reset router string vrrp instances interface string ipv6 vrid virtual-router-id number</a>
Tree	<a href="#">virtual-router-id</a>
Max. Range	-2147483648 to 2147483647
Introduced	23.10.R1
Platforms	All

## statistics

Synopsis	Enter the <b>statistics</b> context
Context	<a href="#">reset router string vrrp statistics</a>
Tree	<a href="#">statistics</a>
Description	Commands in this context reset statistics for VRRP instances on an IP interface or VRRP priority control policies.

Introduced 23.10.R1  
 Platforms All

### **all-statistics**

Synopsis Reset statistics of VRRP instances on all interfaces  
 Context [reset router string vrrp statistics all-statistics](#)  
 Tree [all-statistics](#)  
 Introduced 23.10.R1  
 Platforms All

### **interface** [\[interface-name\]](#) *string*

Synopsis Enter the **interface** list instance  
 Context [reset router string vrrp statistics interface string](#)  
 Tree [interface](#)  
 Introduced 23.10.R1  
 Platforms All

### **[interface-name]** *string*

Synopsis Interface name  
 Context [reset router string vrrp statistics interface string](#)  
 Tree [interface](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 23.10.R1  
 Platforms All

### **all-vrid**

Synopsis Reset statistics of all VRRP instances on the interface  
 Context [reset router string vrrp statistics interface string all-vrid](#)  
 Tree [all-vrid](#)  
 Introduced 23.10.R1

Platforms All

## ipv4

Synopsis Enter the **ipv4** context  
Context [reset router string vrrp statistics interface string ipv4](#)  
Tree [ipv4](#)  
Introduced 23.10.R1  
Platforms All

## vrid

Synopsis Reset statistics of the IPv4 VRRP instance  
Context [reset router string vrrp statistics interface string ipv4 vrid](#)  
Tree [vrid](#)  
Introduced 23.10.R1  
Platforms All

## virtual-router-id *number*

Synopsis VRRP instance to reset  
Context [reset router string vrrp statistics interface string ipv4 vrid virtual-router-id number](#)  
Tree [virtual-router-id](#)  
Max. Range -2147483648 to 2147483647  
Introduced 23.10.R1  
Platforms All

## ipv6

Synopsis Enter the **ipv6** context  
Context [reset router string vrrp statistics interface string ipv6](#)  
Tree [ipv6](#)  
Introduced 23.10.R1  
Platforms All

**vrid**

Synopsis	Reset statistics of the IPv6 VRRP instance
Context	<a href="#">reset router</a> <i>string</i> <a href="#">vrrp statistics</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrid</a>
Tree	<a href="#">vrid</a>
Introduced	23.10.R1
Platforms	All

**virtual-router-id** *number*

Synopsis	VRRP instance to reset
Context	<a href="#">reset router</a> <i>string</i> <a href="#">vrrp statistics</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrid</a> <a href="#">virtual-router-id</a> <i>number</i>
Tree	<a href="#">virtual-router-id</a>
Max. Range	-2147483648 to 2147483647
Introduced	23.10.R1
Platforms	All

**saa**

Synopsis	Enter the <b>saa</b> context
Context	<a href="#">reset saa</a>
Tree	<a href="#">saa</a>
Introduced	23.3.R1
Platforms	All

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

Synopsis	Enter the <b>owner</b> list instance
Context	<a href="#">reset saa owner</a> <i>reference</i> <a href="#">test</a> <i>reference</i>
Tree	<a href="#">owner</a>
Introduced	23.3.R1
Platforms	All

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

Synopsis	Name of SAA test owner for which to reset statistics
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Context	<a href="#">reset saa owner reference test reference</a>
Tree	<a href="#">owner</a>
MD-CLI Default	TIMOS CLI
Reference	<b>state saa owner string test string</b>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

### **test reference**

Synopsis	Name of the SAA test for which to reset statistics
Context	<a href="#">reset saa owner reference test reference</a>
Tree	<a href="#">owner</a>
Reference	<b>state saa owner string test string</b>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

### **statistics**

Synopsis	Clear the SAA test statistics
Context	<a href="#">reset saa owner reference test reference statistics</a>
Tree	<a href="#">statistics</a>
Description	This command clears historical statistics for a completed run. If this option is not configured, the reset operation has no impact.
Introduced	23.3.R1
Platforms	All

### **subscriber-management**

Synopsis	Enter the <b>subscriber-management</b> context
Context	<a href="#">reset subscriber-management</a>
Tree	<a href="#">subscriber-management</a>
Introduced	23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **ancp**

Synopsis Enter the **ancp** context

Context [reset subscriber-management ancp](#)

Tree [ancp](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **sub-string**

Synopsis Delete the ANCP association for matching ANCP strings

Context [reset subscriber-management ancp sub-string](#)

Tree [sub-string](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **[value] string**

Synopsis Substring to match

Context [reset subscriber-management ancp sub-string \[value\] string](#)

Tree [\[value\]](#)

String Length 1 to 63

Notes This element is mandatory.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **errors**

Synopsis Delete subscriber management errors

Context [reset subscriber-management errors](#)

Tree [errors](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-lockout

Synopsis	Enter the <b>host-lockout</b> context
Context	<a href="#">reset subscriber-management host-lockout</a>
Tree	<a href="#">host-lockout</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policy

Synopsis	Delete matching host lockout contexts from the policy
Context	<a href="#">reset subscriber-management host-lockout policy</a>
Tree	<a href="#">policy</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [name] *string*

Synopsis	Host lockout policy name
Context	<a href="#">reset subscriber-management host-lockout policy [name] <i>string</i></a>
Tree	<a href="#">[name]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## state *keyword*

Synopsis	Lockout state to match
Context	<a href="#">reset subscriber-management host-lockout policy state <i>keyword</i></a>
Tree	<a href="#">state</a>
Options	all, active, graceful
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap**

Synopsis	Delete matching host lockout contexts from the SAP
Context	<a href="#">reset subscriber-management host-lockout sap</a>
Tree	<a href="#">sap</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**circuit-id string**

Synopsis	Circuit ID to match
Context	<a href="#">reset subscriber-management host-lockout sap circuit-id string</a>
Tree	<a href="#">circuit-id</a>
String Length	1 to 253
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac string**

Synopsis	MAC address to match
Context	<a href="#">reset subscriber-management host-lockout sap mac string</a>
Tree	<a href="#">mac</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-id string**

Synopsis	Remote ID to match
Context	<a href="#">reset subscriber-management host-lockout sap remote-id string</a>
Tree	<a href="#">remote-id</a>
String Length	1 to 253
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**[sap] string**

Synopsis	SAP ID
Context	<a href="#">reset subscriber-management host-lockout sap [sap] string</a>
Tree	<a href="#">[sap]</a>
String Length	1 to 45
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**state keyword**

Synopsis	Lockout state to match
Context	<a href="#">reset subscriber-management host-lockout sap state keyword</a>
Tree	<a href="#">state</a>
Options	all, active, graceful
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**state**

Synopsis	Delete all host lockout contexts in the state
Context	<a href="#">reset subscriber-management host-lockout state</a>
Tree	<a href="#">state</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[state] keyword**

Synopsis	Lockout state
Context	<a href="#">reset subscriber-management host-lockout state [state] keyword</a>
Tree	<a href="#">[state]</a>
Options	all, active, graceful
Notes	This element is mandatory.

Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## idle-only-msap

Synopsis Enter the **idle-only-msap** context  
 Context [reset subscriber-management idle-only-msap](#)  
 Tree [idle-only-msap](#)  
 Description Commands in this context remove idle MSAPs without active subscribers.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis Delete all sticky MSAPs in the idle state  
 Context [reset subscriber-management idle-only-msap all](#)  
 Tree [all](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## msap-policy

Synopsis Delete idle state sticky MSAPs created by the policy  
 Context [reset subscriber-management idle-only-msap msap-policy](#)  
 Tree [msap-policy](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## name *reference*

Synopsis MSAP policy name  
 Context [reset subscriber-management idle-only-msap msap-policy name \*reference\*](#)  
 Tree [name](#)  
 Reference **state subscriber-mgmt msap-policy *string***  
 Notes This element is mandatory.

Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## msap-policy

Synopsis Delete MSAPs created by the policy  
 Context [reset subscriber-management msap-policy](#)  
 Tree [msap-policy](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## name *reference*

Synopsis MSAP policy name  
 Context [reset subscriber-management msap-policy name \*reference\*](#)  
 Tree [name](#)  
 Reference **state subscriber-mgmt msap-policy** *string*  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-template [[name](#)] *string*

Synopsis Enter the **sap-template** list instance  
 Context [reset subscriber-management sap-template \*string\*](#)  
 Tree [sap-template](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis SAP template name  
 Context [reset subscriber-management sap-template \*string\*](#)  
 Tree [sap-template](#)  
 String Length 1 to 32

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Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## idle-saps

Synopsis	Delete SAPs that use this template and have no sessions
Context	<a href="#">reset subscriber-management sap-template</a> <i>string</i> <b>idle-saps</b>
Tree	<a href="#">idle-saps</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sessions

Synopsis	Enter the <b>sessions</b> context
Context	<a href="#">reset subscriber-management sessions</a>
Tree	<a href="#">sessions</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## diameter

Synopsis	Enter the <b>diameter</b> context
Context	<a href="#">reset subscriber-management sessions diameter</a>
Tree	<a href="#">diameter</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ccrt-replay

Synopsis	Enter the <b>ccrt-replay</b> context
Context	<a href="#">reset subscriber-management sessions diameter ccrt-replay</a>
Tree	<a href="#">ccrt-replay</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## application-policy

Synopsis	Delete sessions in CCR-T replay mode
Context	<a href="#">reset subscriber-management sessions diameter ccrt-replay application-policy</a>
Tree	<a href="#">application-policy</a>
Description	This command deletes sessions in CCR-T replay mode and that are associated with the application policy.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [name] string

Synopsis	Diameter application policy name
Context	<a href="#">reset subscriber-management sessions diameter ccrt-replay application-policy [name] string</a>
Tree	<a href="#">[name]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gtp

Synopsis	Enter the <b>gtp</b> context
Context	<a href="#">reset subscriber-management sessions gtp</a>
Tree	<a href="#">gtp</a>
Description	Commands in this context delete the GPRS Tunnelling Protocol (GTP) sessions matching the specified criteria. Associated objects, such as the ESM subscriber in a GTP uplink scenario, are also removed.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Delete all GTP sessions
Context	<a href="#">reset subscriber-management sessions gtp all</a>

Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**apn** [[apn](#)] *string*

Synopsis	Enter the <b>apn</b> list instance
Context	<a href="#">reset subscriber-management sessions gtp apn string</a>
Tree	<a href="#">apn</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[apn]** *string*

Synopsis	Access point name
Context	<a href="#">reset subscriber-management sessions gtp apn string</a>
Tree	<a href="#">apn</a>
String Length	1 to 100
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Delete all GTP sessions associated with the APN
Context	<a href="#">reset subscriber-management sessions gtp apn string all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**imsi**

Synopsis	Delete the GTP session with the specified IMSI
Context	<a href="#">reset subscriber-management sessions gtp apn string imsi</a>
Tree	<a href="#">imsi</a>

Description	This command deletes the GTP session with the specified IMSI and associated with the APN.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[imsi] string**

Synopsis	International Mobile Subscriber Identity
Context	<a href="#">reset subscriber-management sessions gtp apn string imsi [imsi] string</a>
Tree	<a href="#">[imsi]</a>
String Length	0 to 15
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**imsi**

Synopsis	Delete the GTP session with the specified IMSI
Context	<a href="#">reset subscriber-management sessions gtp imsi</a>
Tree	<a href="#">imsi</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[imsi] string**

Synopsis	International Mobile Subscriber Identity
Context	<a href="#">reset subscriber-management sessions gtp imsi [imsi] string</a>
Tree	<a href="#">[imsi]</a>
String Length	0 to 15
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-tracking

Synopsis	Enter the <b>host-tracking</b> context
Context	<a href="#">reset subscriber-management sessions host-tracking</a>
Tree	<a href="#">host-tracking</a>
Description	Commands in this context delete host-tracking table entries.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber

Synopsis	Enter the <b>subscriber</b> context
Context	<a href="#">reset subscriber-management sessions host-tracking subscriber</a>
Tree	<a href="#">subscriber</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Delete host tracking table entry for all subscribers
Context	<a href="#">reset subscriber-management sessions host-tracking subscriber all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## id

Synopsis	Delete host tracking table entry for the subscriber
Context	<a href="#">reset subscriber-management sessions host-tracking subscriber id</a>
Tree	<a href="#">id</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [name] reference

Synopsis	Subscriber ID
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Context	<a href="#">reset subscriber-management sessions host-tracking subscriber id [name] reference</a>
Tree	<a href="#">[name]</a>
Reference	<b>state subscriber-mgmt subscriber string</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pfcp

Synopsis	Enter the <b>pfcp</b> context
Context	<a href="#">reset subscriber-management sessions pfcp</a>
Tree	<a href="#">pfcp</a>
Description	Commands in this context delete Packet Forwarding Control Protocol (PFCP) sessions matching the specified criteria.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## nat-member

Synopsis	Delete PFCP session matching the NAT group member ID
Context	<a href="#">reset subscriber-management sessions pfcp nat-member</a>
Tree	<a href="#">nat-member</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [id] reference

Synopsis	NAT group member ID
Context	<a href="#">reset subscriber-management sessions pfcp nat-member [id] reference</a>
Tree	<a href="#">[id]</a>
Reference	<b>state isa nat-group number member number</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap

Synopsis	Delete the PFCP session matching the SAP and MAC
Context	<a href="#">reset subscriber-management sessions pfcap sap</a>
Tree	<a href="#">sap</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac string

Synopsis	MAC address
Context	<a href="#">reset subscriber-management sessions pfcap sap mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [sap] string

Synopsis	SAP ID
Context	<a href="#">reset subscriber-management sessions pfcap sap [sap] string</a>
Tree	<a href="#">[sap]</a>
String Length	1 to 45
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## session-id

Synopsis	Delete the PFCP session with the local SEID
Context	<a href="#">reset subscriber-management sessions pfcap session-id</a>
Tree	<a href="#">session-id</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[local-session-id] reference**

Synopsis	Local assigned PFCP session ID
Context	<a href="#">reset subscriber-management sessions pfcp session-id [local-session-id] reference</a>
Tree	<a href="#">[local-session-id]</a>
Reference	<b>state subscriber-mgmt pfcp association string session string</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**statistics**

Synopsis	Enter the <b>statistics</b> context
Context	<a href="#">reset subscriber-management statistics</a>
Tree	<a href="#">statistics</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accumulated**

Synopsis	Enter the <b>accumulated</b> context
Context	<a href="#">reset subscriber-management statistics accumulated</a>
Tree	<a href="#">accumulated</a>
Description	Commands in this context reset accumulated statistics for a subscriber.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**active-subscribers**

Synopsis	Enter the <b>active-subscribers</b> context
Context	<a href="#">reset subscriber-management statistics accumulated active-subscribers</a>
Tree	<a href="#">active-subscribers</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**no-accu-stats-policy**

Synopsis	Reset accumulated statistics for active subscribers
Context	<a href="#">reset subscriber-management statistics accumulated active-subscribers no-accu-stats-policy</a>
Tree	<a href="#">no-accu-stats-policy</a>
Description	This command resets the accumulated statistics that are no longer associated with an accumulated statistics policy. These statistics apply to active subscribers that are referencing a subscriber profile where the accumulated statistics policy is removed.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-profile**

Synopsis	Reset active subscribers statistics without a policy
Context	<a href="#">reset subscriber-management statistics accumulated active-subscribers sub-profile</a>
Tree	<a href="#">sub-profile</a>
Description	This command resets the accumulated statistics that are no longer associated with an accumulated statistics policy. These statistics apply to active subscribers that are referencing the specified subscriber profile where the accumulated statistics policy is removed.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name] reference**

Synopsis	Subscriber profile name
Context	<a href="#">reset subscriber-management statistics accumulated active-subscribers sub-profile [name] reference</a>
Tree	<a href="#">[name]</a>
Reference	<b>state subscriber-mgmt sub-profile <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## inactive-subscribers

Synopsis	Reset accumulated statistics for all inactive subscribers
Context	<a href="#">reset subscriber-management statistics accumulated inactive-subscribers</a>
Tree	<a href="#">inactive-subscribers</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber

Synopsis	Reset accumulated statistics for specified subscriber
Context	<a href="#">reset subscriber-management statistics accumulated subscriber</a>
Tree	<a href="#">subscriber</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [name] *reference*

Synopsis	Subscriber ID
Context	<a href="#">reset subscriber-management statistics accumulated subscriber [name] <i>reference</i></a>
Tree	<a href="#">[name]</a>
Reference	<b>state subscriber-mgmt subscriber <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## data-trigger

Synopsis	Enter the <b>data-trigger</b> context
Context	<a href="#">reset subscriber-management statistics data-trigger</a>
Tree	<a href="#">data-trigger</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## system

Synopsis	Reset data-trigger statistics
Context	<a href="#">reset subscriber-management statistics data-trigger system</a>
Tree	<a href="#">system</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## diameter

Synopsis	Enter the <b>diameter</b> context
Context	<a href="#">reset subscriber-management statistics diameter</a>
Tree	<a href="#">diameter</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## application-policy

Synopsis	Reset Diameter application policy statistics
Context	<a href="#">reset subscriber-management statistics diameter application-policy</a>
Tree	<a href="#">application-policy</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [name] *string*

Synopsis	Diameter application policy name
Context	<a href="#">reset subscriber-management statistics diameter application-policy [name] string</a>
Tree	<a href="#">[name]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ccrt-replay

Synopsis	Enter the <b>ccrt-replay</b> context
Context	<a href="#">reset subscriber-management statistics diameter ccrt-replay</a>
Tree	<a href="#">ccrt-replay</a>
Description	Commands in this context reset CCR-T replay statistics.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## application-policy

Synopsis	Reset CCR-T replay stats for the application policy
Context	<a href="#">reset subscriber-management statistics diameter ccrt-replay application-policy</a>
Tree	<a href="#">application-policy</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [name] *string*

Synopsis	Diameter application policy name
Context	<a href="#">reset subscriber-management statistics diameter ccrt-replay application-policy [name] string</a>
Tree	<a href="#">[name]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gtp

Synopsis	Enter the <b>gtp</b> context
Context	<a href="#">reset subscriber-management statistics gtp</a>
Tree	<a href="#">gtp</a>
Description	Commands in this context reset GTP statistics.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Reset GTP messaging statistics
Context	<a href="#">reset subscriber-management statistics gtp all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-and-session

Synopsis	Enter the <b>host-and-session</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session</a>
Tree	<a href="#">host-and-session</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## peakvalues

Synopsis	Enter the <b>peakvalues</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues</a>
Tree	<a href="#">peakvalues</a>
Description	Commands in this context reset the peak values of subscriber management host and session statistics  <b>Note:</b> Peak values statistics can be reset at each level independently. For example, clearing the most recent peak value for an IOM does not impact the MDA peak value.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## card

Synopsis	Enter the <b>card</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues card</a>
Tree	<a href="#">card</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**all**

Synopsis	Reset the peak value statistics for all cards
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues card all</a>
Tree	<a href="#">all</a>
Description	This command resets the subscriber management statistics peak values for all cards.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recursive**

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues card all recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**slot**

Synopsis	Reset peak values statistics for the specified card
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues card slot</a>
Tree	<a href="#">slot</a>
Description	This command resets the subscriber management statistics peak values for the specified card.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recursive**

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues card slot recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[slot-number] reference**

Synopsis	Slot number
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues card slot [slot-number] reference</a>
Tree	<a href="#">[slot-number]</a>
Reference	<b>state card number</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mda**

Synopsis	Enter the <b>mda</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda</a>
Tree	<a href="#">mda</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset peak value statistics for all MDAs
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda all</a>
Tree	<a href="#">all</a>
Description	This command resets the subscriber management statistics peak values for all MDA.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recursive**

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda all recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**card-slot** [[slot-number](#)] *reference*

Synopsis	Enter the <b>card-slot</b> list instance
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference</a>
Tree	<a href="#">card-slot</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[slot-number]** *reference*

Synopsis	Slot number
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference</a>
Tree	<a href="#">card-slot</a>
Reference	<b>state card number</b>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mda-slot**

Synopsis	Reset peak value statistics for the specified MDA
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference mda-slot</a>
Tree	<a href="#">mda-slot</a>
Description	This command resets the subscriber management statistics peak values for the specified MDA.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[mda]** *reference*

Synopsis	MDA slot number
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference mda-slot [mda] reference</a>

Tree	<a href="#">[mda]</a>
Reference	<b>state card</b> <i>number mda number</i>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### recursive

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference mda-slot recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### xiom-slot

Synopsis	Reset peak value statistics for the specified XIOM MDA
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference xiom-slot</a>
Tree	<a href="#">xiom-slot</a>
Description	This command resets the subscriber management statistics peak values for the specified XIOM MDA.
Introduced	23.10.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### mda-slot reference

Synopsis	MDA slot number
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference xiom-slot mda-slot reference</a>
Tree	<a href="#">mda-slot</a>
Reference	<b>state card</b> <i>number xiom string mda number</i>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**recursive**

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference xiom-slot recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**[xiom] reference**

Synopsis	XIOM slot number
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues mda card-slot reference xiom-slot [xiom] reference</a>
Tree	<a href="#">[xiom]</a>
Reference	<b>state card number xiom string</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**port**

Synopsis	Enter the <b>port</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues port</a>
Tree	<a href="#">port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset peak values statistics for all ports
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues port all</a>
Tree	<a href="#">all</a>
Description	This command resets the subscriber management statistics peak values for all ports.
Introduced	23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lag

Synopsis Reset peak value statistics for the specified LAG

Context [reset subscriber-management statistics host-and-session peakvalues port lag](#)

Tree [lag](#)

Description This command resets the subscriber management statistics peak values for the specified LAG.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [name] reference

Synopsis LAG name

Context [reset subscriber-management statistics host-and-session peakvalues port lag \[name\] reference](#)

Tree [\[name\]](#)

Reference **state lag string**

Notes This element is mandatory.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## port-id

Synopsis Reset peak value statistics for the specified port

Context [reset subscriber-management statistics host-and-session peakvalues port port-id](#)

Tree [port-id](#)

Description This command resets the subscriber management statistics peak values for the specified port.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [port-id] reference

Synopsis Port ID

Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues port port-id [port-id]</a> <i>reference</i>
Tree	<a href="#">[port-id]</a>
Reference	<b>state port string</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pw-port

Synopsis	Enter the <b>pw-port</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues pw-port</a>
Tree	<a href="#">pw-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Reset peak value statistics for all PW ports
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues pw-port all</a>
Tree	<a href="#">all</a>
Description	This command resets the subscriber management statistics peak values for all PW ports.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pw-port-id

Synopsis	Reset peak value statistics for the PW port
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues pw-port pw-port-id</a>
Tree	<a href="#">pw-port-id</a>
Description	This command resets the subscriber management statistics peak values for the specified PW port.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[pw-port-id] reference**

Synopsis	PW port ID
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues pw-port pw-port-id [pw-port-id] reference</a>
Tree	<a href="#">[pw-port-id]</a>
Reference	<b>state pw-port number</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service**

Synopsis	Enter the <b>service</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service</a>
Tree	<a href="#">service</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset peak value statistics for all services
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service all</a>
Tree	<a href="#">all</a>
Description	This command resets the subscriber management statistics peak values for all services.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recursive**

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service all recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Enter the **name** list instance

Context [reset subscriber-management statistics host-and-session peakvalues service name](#)  
*string*

Tree [name](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[service-name]** *string*

Synopsis Service name

Context [reset subscriber-management statistics host-and-session peakvalues service name](#)  
*string*

Tree [name](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all**

Synopsis Reset all peak value statistics for the service

Context [reset subscriber-management statistics host-and-session peakvalues service name](#)  
*string all*

Tree [all](#)

Description This command resets all subscriber management statistics peak values for the specified service.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **recursive**

Synopsis Reset the statistics recursively

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Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name</a> <i>string</i> <a href="#">all recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## group-interface

Synopsis	Enter the <b>group-interface</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name</a> <i>string</i> <a href="#">group-interface</a>
Tree	<a href="#">group-interface</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Reset peak value statistics for all group interfaces
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name</a> <i>string</i> <a href="#">group-interface all</a>
Tree	<a href="#">all</a>
Description	This command resets the subscriber management statistics peak values for all group interfaces.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## name

Synopsis	Reset peak value statistics for the group interface
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name</a> <i>string</i> <a href="#">group-interface name</a>
Tree	<a href="#">name</a>
Description	This command resets the subscriber management statistics peak values for the specified group interface.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Group interface name
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name</a> <i>string</i> <a href="#">group-interface name</a> <b>[name]</b> <i>string</i>
Tree	<a href="#">[name]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-interface**

Synopsis	Enter the <b>subscriber-interface</b> context
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name</a> <i>string</i> <a href="#">subscriber-interface</a>
Tree	<a href="#">subscriber-interface</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset peak value stats for all subscriber interfaces
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name</a> <i>string</i> <a href="#">subscriber-interface all</a>
Tree	<a href="#">all</a>
Description	This command resets the subscriber management statistics peak values for all subscriber interfaces.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recursive**

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name</a> <i>string</i> <a href="#">subscriber-interface all recursive</a>

Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name**

Synopsis	Reset peak values stats for the subscriber interface
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name string subscriber-interface name</a>
Tree	<a href="#">name</a>
Description	This command resets the subscriber management statistics peak values for the specified subscriber interface.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name] string**

Synopsis	Subscriber interface name
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name string subscriber-interface name [name] string</a>
Tree	<a href="#">[name]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recursive**

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues service name string subscriber-interface name recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## system

Synopsis	Reset peak value statistics for the system
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues system</a>
Tree	<a href="#">system</a>
Description	This command resets the subscriber management statistics peak values for the system.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recursive

Synopsis	Reset the statistics recursively
Context	<a href="#">reset subscriber-management statistics host-and-session peakvalues system recursive</a>
Tree	<a href="#">recursive</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-tracking

Synopsis	Enter the <b>host-tracking</b> context
Context	<a href="#">reset subscriber-management statistics host-tracking</a>
Tree	<a href="#">host-tracking</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber

Synopsis	Enter the <b>subscriber</b> context
Context	<a href="#">reset subscriber-management statistics host-tracking subscriber</a>
Tree	<a href="#">subscriber</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Reset the host-tracking statistics for all subscribers
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Context [reset subscriber-management statistics host-tracking subscriber all](#)  
 Tree [all](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**id**

Synopsis Reset the host-tracking stats of the subscriber  
 Context [reset subscriber-management statistics host-tracking subscriber id](#)  
 Tree [id](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name] reference**

Synopsis Subscriber ID  
 Context [reset subscriber-management statistics host-tracking subscriber id \[name\] reference](#)  
 Tree [\[name\]](#)  
 Reference **state subscriber-mgmt subscriber string**  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface**

Synopsis Enter the **interface** context  
 Context [reset subscriber-management statistics interface](#)  
 Tree [interface](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service [service-name] string**

Synopsis Enter the **service** list instance  
 Context [reset subscriber-management statistics interface service string](#)

Tree	<a href="#">service</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[service-name] string**

Synopsis	Service name
Context	<a href="#">reset subscriber-management statistics interface service string</a>
Tree	<a href="#">service</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset traffic statistics for all service interfaces
Context	<a href="#">reset subscriber-management statistics interface service string all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-interface**

Synopsis	Reset subscriber traffic stats for a group interface
Context	<a href="#">reset subscriber-management statistics interface service string group-interface</a>
Tree	<a href="#">group-interface</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name] string**

Synopsis	Group interface name
Context	<a href="#">reset subscriber-management statistics interface service string group-interface [name] string</a>

Tree	<a href="#">[name]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-interface

Synopsis	Reset traffic statistics for the subscriber interface
Context	<a href="#">reset subscriber-management statistics interface service</a> <i>string</i> <a href="#">subscriber-interface</a>
Tree	<a href="#">subscriber-interface</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [name] *string*

Synopsis	Subscriber interface name
Context	<a href="#">reset subscriber-management statistics interface service</a> <i>string</i> <a href="#">subscriber-interface</a> <a href="#">[name]</a> <i>string</i>
Tree	<a href="#">[name]</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pfcp

Synopsis	Enter the <b>pfcp</b> context
Context	<a href="#">reset subscriber-management statistics pfcp</a>
Tree	<a href="#">pfcp</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## association

Synopsis	Reset the PFCP statistics for the specified association
Context	<a href="#">reset subscriber-management statistics pfcpc association</a>
Tree	<a href="#">association</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [name] reference

Synopsis	PFCP association name
Context	<a href="#">reset subscriber-management statistics pfcpc association [name] reference</a>
Tree	<a href="#">[name]</a>
Reference	<b>state subscriber-mgmt pfcpc association</b> <i>string</i>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## radius

Synopsis	Enter the <b>radius</b> context
Context	<a href="#">reset subscriber-management statistics radius</a>
Tree	<a href="#">radius</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## authentication

Synopsis	Enter the <b>authentication</b> context
Context	<a href="#">reset subscriber-management statistics radius authentication</a>
Tree	<a href="#">authentication</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## coa

Synopsis	Enter the <b>coa</b> context
Context	<a href="#">reset subscriber-management statistics radius authentication coa</a>
Tree	<a href="#">coa</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Reset RADIUS CoA statistics
Context	<a href="#">reset subscriber-management statistics radius authentication coa all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sla-profile

Synopsis	Enter the <b>sla-profile</b> context
Context	<a href="#">reset subscriber-management statistics sla-profile</a>
Tree	<a href="#">sla-profile</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Reset all SLA profile statistics
Context	<a href="#">reset subscriber-management statistics sla-profile all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## name

Synopsis	Reset SLA profile statistics for the sla-profile
Context	<a href="#">reset subscriber-management statistics sla-profile name</a>

Tree	<a href="#">name</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name] reference**

Synopsis	SLA profile name
Context	<a href="#">reset subscriber-management statistics sla-profile name [name] reference</a>
Tree	<a href="#">[name]</a>
Reference	<b>state subscriber-mgmt sla-profile string</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-profile**

Synopsis	Enter the <b>sub-profile</b> context
Context	<a href="#">reset subscriber-management statistics sub-profile</a>
Tree	<a href="#">sub-profile</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset all subscriber profile statistics
Context	<a href="#">reset subscriber-management statistics sub-profile all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name**

Synopsis	Reset subscriber profile statistics for the specified sub-profile
Context	<a href="#">reset subscriber-management statistics sub-profile name</a>
Tree	<a href="#">name</a>

Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name] reference**

Synopsis Subscriber profile name  
 Context [reset subscriber-management statistics sub-profile name \[name\] reference](#)  
 Tree [\[name\]](#)  
 Reference **state subscriber-mgmt sub-profile string**  
 Notes This element is mandatory.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **svlan**

Synopsis Enter the **svlan** context  
 Context [reset subscriber-management statistics svlan](#)  
 Tree [svlan](#)  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lag [name] reference**

Synopsis Enter the **lag** list instance  
 Context [reset subscriber-management statistics svlan lag reference](#)  
 Tree [lag](#)  
 Description Commands in this context reset the statistics for the S-VLANs on the specified LAG.  
 Introduced 23.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name] reference**

Synopsis LAG name  
 Context [reset subscriber-management statistics svlan lag reference](#)  
 Tree [lag](#)

Reference	<b>state lag string</b>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset all S-VLAN statistics on this LAG
Context	<a href="#">reset subscriber-management statistics svlan lag reference all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vlan-id**

Synopsis	Reset the specified S-VLAN statistics on this LAG
Context	<a href="#">reset subscriber-management statistics svlan lag reference vlan-id</a>
Tree	<a href="#">vlan-id</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[svlan-id] reference**

Synopsis	VLAN ID
Context	<a href="#">reset subscriber-management statistics svlan lag reference vlan-id [svlan-id] reference</a>
Tree	<a href="#">[svlan-id]</a>
Reference	<b>state lag string subscriber-management svlan number</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**port [port-id] reference**

Synopsis	Enter the <b>port</b> list instance
Context	<a href="#">reset subscriber-management statistics svlan port reference</a>

Tree	<a href="#">port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[port-id] reference**

Synopsis	Port ID
Context	<a href="#">reset subscriber-management statistics svlan port reference</a>
Tree	<a href="#">port</a>
Reference	<b>state port string</b>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Reset all S-VLAN statistics on this port
Context	<a href="#">reset subscriber-management statistics svlan port reference all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vlan-id**

Synopsis	Reset the specified S-VLAN statistics on this port
Context	<a href="#">reset subscriber-management statistics svlan port reference vlan-id</a>
Tree	<a href="#">vlan-id</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[svlan-id] reference**

Synopsis	VLAN ID
Context	<a href="#">reset subscriber-management statistics svlan port reference vlan-id [svlan-id] reference</a>
Tree	<a href="#">[svlan-id]</a>

Reference	<b>state port <i>string</i> subscriber-management svlan <i>number</i></b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pw-port** [[pw-port-id](#)] *reference*

Synopsis	Enter the <b>pw-port</b> list instance
Context	<a href="#">reset subscriber-management statistics svlan pw-port <i>reference</i></a>
Tree	<a href="#">pw-port</a>
Description	Commands in this context reset PW port statistics.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[pw-port-id]** *reference*

Synopsis	PW port ID
Context	<a href="#">reset subscriber-management statistics svlan pw-port <i>reference</i></a>
Tree	<a href="#">pw-port</a>
Reference	<b>state pw-port <i>number</i></b>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all**

Synopsis	Reset all S-VLAN statistics on this PW port
Context	<a href="#">reset subscriber-management statistics svlan pw-port <i>reference</i> all</a>
Tree	<a href="#">all</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vlan-id**

Synopsis	Reset the specified S-VLAN statistics on this PW port
----------	---

Context	<a href="#">reset subscriber-management statistics svlan pw-port reference vlan-id</a>
Tree	<a href="#">vlan-id</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[svlan-id] reference**

Synopsis	VLAN ID
Context	<a href="#">reset subscriber-management statistics svlan pw-port reference vlan-id [svlan-id] reference</a>
Tree	<a href="#">[svlan-id]</a>
Reference	<b>state pw-port number subscriber-management svlan number</b>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw**

Synopsis	Enter the <b>wlan-gw</b> context
Context	<a href="#">reset subscriber-management statistics wlan-gw</a>
Tree	<a href="#">wlan-gw</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cpm-totals**

Synopsis	Reset the WLAN GW statistics peak values
Context	<a href="#">reset subscriber-management statistics wlan-gw cpm-totals</a>
Tree	<a href="#">cpm-totals</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **system**

Synopsis	Enter the <b>system</b> context
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Context	<a href="#">reset system</a>
Tree	<a href="#">system</a>
Introduced	23.3.R1
Platforms	All

### **management-interface**

Synopsis	Enter the <b>management-interface</b> context
Context	<a href="#">reset system management-interface</a>
Tree	<a href="#">management-interface</a>
Introduced	23.7.R1
Platforms	All

### **remote-management**

Synopsis	Enter the <b>remote-management</b> context
Context	<a href="#">reset system management-interface remote-management</a>
Tree	<a href="#">remote-management</a>
Description	Commands in this context reset operational information related to the remote management feature that is used with the Network Interface Shell (NISH) Tool.
Introduced	23.7.R1
Platforms	All

### **managers**

Synopsis	Enter the <b>managers</b> context
Context	<a href="#">reset system management-interface remote-management managers</a>
Tree	<a href="#">managers</a>
Description	Commands in this context reset and restart the remote management manager connection process for NISH managers.
Introduced	23.7.R1
Platforms	All

### **all**

Synopsis	Reset connections for all remote NISH managers
----------	--

Context	<a href="#">reset system management-interface remote-management managers all</a>
Tree	<a href="#">all</a>
Description	This command resets and restarts the remote management manager connection process for all NISH managers.
Introduced	23.7.R1
Platforms	All

## manager

Synopsis	Reset connection for a remote NISH manager
Context	<a href="#">reset system management-interface remote-management managers manager</a>
Tree	<a href="#">manager</a>
Description	This command resets and restarts the remote management manager connection process for the specified NISH manager.
Introduced	23.7.R1
Platforms	All

## [name] reference

Synopsis	Name of the manager
Context	<a href="#">reset system management-interface remote-management managers manager [name] reference</a>
Tree	<a href="#">[name]</a>
Reference	<b>state system management-interface remote-management manager <i>string</i></b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

## statistics

Synopsis	Enter the <b>statistics</b> context
Context	<a href="#">reset system management-interface remote-management statistics</a>
Tree	<a href="#">statistics</a>
Description	Commands in this context reset statistics for NISH remote management managers.
Introduced	23.7.R1

Platforms All

## all

Synopsis Reset statistics for all remote NISH managers  
 Context [reset system management-interface remote-management statistics all](#)  
 Tree [all](#)  
 Introduced 23.7.R1  
 Platforms All

## manager

Synopsis Reset statistics for the specified remote NISH manager  
 Context [reset system management-interface remote-management statistics manager](#)  
 Tree [manager](#)  
 Introduced 23.7.R1  
 Platforms All

## [name] *reference*

Synopsis Name of the manager  
 Context [reset system management-interface remote-management statistics manager \[name\] reference](#)  
 Tree [\[name\]](#)  
 Reference **state system management-interface remote-management manager *string***  
 Notes This element is mandatory.  
 Introduced 23.7.R1  
 Platforms All

## ptp

Synopsis Enter the **ptp** context  
 Context [reset system ptp](#)  
 Tree [ptp](#)  
 Introduced 23.10.R1

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

## clock-recovery

Synopsis Reset PTP clock recovery algorithm

Context [reset system ptp clock-recovery](#)

Tree [clock-recovery](#)

Description This command resets the algorithms involved in PTP frequency and time recovery to initial conditions. This clears out any previous history and can be used to ensure a consistent starting state for a test or can be used to clear any unexpected behavior in the algorithm.

Introduced 23.10.R1

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

## satellite

Synopsis Enter the **satellite** context

Context [reset system satellite](#)

Tree [satellite](#)

Description Commands in this context reset satellite information.

Introduced 23.10.R1

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

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

Synopsis Enter the **ethernet-satellite** list instance

Context [reset system satellite ethernet-satellite reference](#)

Tree [ethernet-satellite](#)

Description Commands in this context reset Ethernet satellite information.

Introduced 23.10.R1

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

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

Synopsis Satellite ID

Context [reset system satellite ethernet-satellite reference](#)

Tree	<a href="#">ethernet-satellite</a>
Reference	<b>state satellite ethernet-satellite</b> <i>number</i>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## synchronous-interface-timing

Synopsis	Reset a failed reference on the Ethernet satellite
Context	<a href="#">reset system satellite ethernet-satellite</a> <i>reference</i> <a href="#">synchronous-interface-timing</a>
Tree	<a href="#">synchronous-interface-timing</a>
Description	This command resets (re-enables) a previously failed reference on the Ethernet satellite.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## [reference] *keyword*

Synopsis	Synchronous timing reference
Context	<a href="#">reset system satellite ethernet-satellite</a> <i>reference</i> <a href="#">synchronous-interface-timing</a> <a href="#">[reference]</a> <i>keyword</i>
Tree	<a href="#">[reference]</a>
Options	ref1, ref2
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## script-control

Synopsis	Enter the <b>script-control</b> context
Context	<a href="#">reset system script-control</a>
Tree	<a href="#">script-control</a>
Introduced	23.7.R1
Platforms	All

## script-policy

Synopsis	Enter the <b>script-policy</b> context
Context	<a href="#">reset system script-control script-policy</a>
Tree	<a href="#">script-policy</a>
Introduced	23.7.R1
Platforms	All

## completed

Synopsis	Enter the <b>completed</b> context
Context	<a href="#">reset system script-control script-policy completed</a>
Tree	<a href="#">completed</a>
Description	Commands in this context delete completed script run history entries.
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Delete script run entries for all script policies
Context	<a href="#">reset system script-control script-policy completed all</a>
Tree	<a href="#">all</a>
Introduced	23.7.R1
Platforms	All

## policy

Synopsis	Delete script run entries for specific policies
Context	<a href="#">reset system script-control script-policy completed policy</a>
Tree	<a href="#">policy</a>
Introduced	23.7.R1
Platforms	All

## owner reference

Synopsis	Script-policy owner for run history deletion
----------	--

Context	<a href="#">reset system script-control script-policy completed policy owner</a> <i>reference</i>
Tree	<a href="#">owner</a>
Description	This command specifies the script policy owner for run history deletion. The system only deletes run history entries for script policies with this owner and the specified policy name.
Default	TIMOS CLI
Reference	<b>state system script-control script-policy</b> <i>string owner string</i>
Introduced	23.7.R1
Platforms	All

### **[policy-name]** *reference*

Synopsis	Script-policy name for run history deletion
Context	<a href="#">reset system script-control script-policy completed policy [policy-name]</a> <i>reference</i>
Tree	<a href="#">[policy-name]</a>
Reference	<b>state system script-control script-policy</b> <i>string owner string</i>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	All

### **security**

Synopsis	Enter the <b>security</b> context
Context	<a href="#">reset system security</a>
Tree	<a href="#">security</a>
Introduced	23.3.R1
Platforms	All

### **cpm-filter**

Synopsis	Enter the <b>cpm-filter</b> context
Context	<a href="#">reset system security cpm-filter</a>
Tree	<a href="#">cpm-filter</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## cpm-queue

Synopsis	Reset CPM queue information
Context	<a href="#">reset system security cpm-filter cpm-queue</a>
Tree	<a href="#">cpm-queue</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## queue-id *reference*

Synopsis	Queue ID for the CPM queue
Context	<a href="#">reset system security cpm-filter cpm-queue queue-id reference</a>
Tree	<a href="#">queue-id</a>
Reference	<b>state system security cpm-queue queue number</b>
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ip-filter

Synopsis	Reset IP filter information
Context	<a href="#">reset system security cpm-filter ip-filter</a>
Tree	<a href="#">ip-filter</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## entry *reference*

Synopsis	Entry ID for IP filter
Context	<a href="#">reset system security cpm-filter ip-filter entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state system security cpm-filter ip-filter entry number</b>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## ipv6-filter

Synopsis	Reset IPv6 filter information
Context	<a href="#">reset system security cpm-filter ipv6-filter</a>
Tree	<a href="#">ipv6-filter</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## entry reference

Synopsis	Entry ID for IPv6 filter
Context	<a href="#">reset system security cpm-filter ipv6-filter entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state system security cpm-filter ipv6-filter entry number</b>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mac-filter

Synopsis	Reset MAC filter information
Context	<a href="#">reset system security cpm-filter mac-filter</a>
Tree	<a href="#">mac-filter</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## entry reference

Synopsis	Entry ID for the MAC filter
Context	<a href="#">reset system security cpm-filter mac-filter entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state system security cpm-filter mac-filter entry number</b>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## management-access-filter

Synopsis	Enter the <b>management-access-filter</b> context
Context	<a href="#">reset system security management-access-filter</a>
Tree	<a href="#">management-access-filter</a>
Introduced	23.3.R1
Platforms	All

## ip-filter

Synopsis	Reset operation on the specified IP filter
Context	<a href="#">reset system security management-access-filter ip-filter</a>
Tree	<a href="#">ip-filter</a>
Introduced	23.3.R1
Platforms	All

## entry reference

Synopsis	Entry ID for the IP filter
Context	<a href="#">reset system security management-access-filter ip-filter entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state system security management-access-filter ip-filter entry <i>number</i></b>
Introduced	23.3.R1
Platforms	All

## ipv6-filter

Synopsis	Reset operation on the specified IPv6 filter
Context	<a href="#">reset system security management-access-filter ipv6-filter</a>
Tree	<a href="#">ipv6-filter</a>
Introduced	23.3.R1
Platforms	All

## entry reference

Synopsis	Entry ID for the IPv6 filter
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---

Context	<a href="#">reset system security management-access-filter ipv6-filter entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state system security management-access-filter ipv6-filter entry number</b>
Introduced	23.3.R1
Platforms	All

### mac-filter

Synopsis	Reset operation on the specified MAC filter
Context	<a href="#">reset system security management-access-filter mac-filter</a>
Tree	<a href="#">mac-filter</a>
Introduced	23.3.R1
Platforms	All

### entry reference

Synopsis	Entry ID for the MAC filter
Context	<a href="#">reset system security management-access-filter mac-filter entry reference</a>
Tree	<a href="#">entry</a>
Reference	<b>state system security management-access-filter mac-filter entry number</b>
Introduced	23.3.R1
Platforms	All

## 3 Configuration commands

This section lists MD-CLI configuration commands.

### 3.1 aaa commands

```

configure
- aaa
  - apply-groups reference
  - apply-groups-exclude reference
  - diameter
    - node string
      - apply-groups reference
      - apply-groups-exclude reference
      - connection
        - ipv4
          - allow-connections boolean
          - local-address string
        - ipv6
          - allow-connections boolean
          - local-address string
        - timer number
      - description string
      - origin-realm string
      - peer index number
        - address (ipv4-address-no-zone | ipv6-address-no-zone)
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - connection-timer number
        - default-peer boolean
        - destination-host string
        - preference number
        - route index number
          - application keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - preference number
          - realm string
        - watchdog-timer number
      - python-policy reference
      - router-instance string
    - radius
      - acct-on-off-group string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - coa-port number
      - isa-policy string
      - accounting
        - include-attributes
          - acct-delay-time boolean
          - acct-triggered-reason boolean
          - called-station-id boolean
          - calling-station-id boolean
          - circuit-id boolean
          - class boolean
          - credit-control-quota boolean
          - dhcp-options boolean
          - dhcp-vendor-class-id boolean
          - frame-counters boolean
          - framed-ip-address boolean
          - framed-ip-netmask boolean
          - framed-ipv6-prefix boolean
          - hardware-timestamp boolean

```

configure aaa radius isa-policy accounting include-attributes ipv6-address

```

- ipv6-address boolean
- mac-address boolean
- millisecond-event-timestamp boolean
- multi-session-id boolean
- nas-identifier boolean
- nas-ip-address boolean
- nas-ipv6-address boolean
- nas-port boolean
- nas-port-id boolean
- nas-port-type boolean
- nat-inside-service-id boolean
- nat-outside-ip-address boolean
- nat-outside-service-id boolean
- nat-port-range-block boolean
- nat-subscriber-string boolean
- octet-counters boolean
- proxied-subscriber-data boolean
- release-reason boolean
- remote-id boolean
- rsi boolean
- session-time boolean
- subscriber-id boolean
- toserver-dhcp6-options boolean
- ue-creation-type boolean
- user-name boolean
- wlan-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- xconnect-tunnel-local-ipv6-address boolean
- xconnect-tunnel-remote-ipv6-address boolean
- xconnect-tunnel-service boolean
- xconnect-tunnel-type boolean
- nat-periodic-update
- interval number
- rate-limit (number | keyword)
- update-triggers
- address-state boolean
- soft-quota-exhausted boolean
- apply-groups reference
- apply-groups-exclude reference
- authentication
- include-attributes
- called-station-id boolean
- calling-station-id boolean
- circuit-id boolean
- dhcp-vendor-class-id boolean
- framed-ip-address boolean
- ipv6-address boolean
- mac-address boolean
- nas-identifier boolean
- nas-ip-address boolean
- nas-ipv6-address boolean
- nas-port boolean
- nas-port-id boolean
- nas-port-type boolean
- remote-id boolean
- toserver-dhcp-options boolean
- toserver-dhcp6-options boolean
- wlan-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- description string
- nas-ip-address-origin keyword
- password string
- python-policy reference
- servers

```

configure aaa radius isa-policy servers access-algorithm

- **access-algorithm** *keyword*
- **ipv6**
  - **mtu** *number*
  - **source-prefix** *string*
- **router-instance** *string*
- **server** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **purpose**
    - **accounting**
      - **udp-port** *number*
    - **authentication**
      - **udp-port** *number*
    - **coa**
      - **udp-port** *number*
  - **secret** *string*
- **source-address-range** *string*
- **timeout** *number*
- **total-tries** *number*
- **user-name**
  - **format** *keyword*
  - **mac-format** *keyword*
- **l2tp-accounting-policy** *string*
  - **accounting-type**
    - **session** *boolean*
    - **tunnel** *boolean*
  - **acct-tunnel-connection-fmt** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **include-radius-attribute**
    - **calling-station-id** *boolean*
    - **nas-identifier** *boolean*
    - **nas-port**
      - **bit-spec** *string*
    - **nas-port-id**
      - **prefix-string** *string*
      - **suffix** *keyword*
    - **nas-port-type**
      - **type** (*keyword* | *number*)
  - **radius-server-policy** *reference*
- **route-downloader** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **base-user-name** *string*
  - **default-metric** *number*
  - **default-tag** *number*
  - **description** *string*
  - **download-interval** *number*
  - **max-routes** *number*
  - **password** *string*
  - **radius-server-policy** *reference*
  - **retry-interval**
    - **max** *number*
    - **min** *number*
- **server-policy** *string*
  - **acct-on-off**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **monitor** *reference*
    - **oper-state-change**

configure aaa radius server-policy acct-on-off oper-state-change group

- **group** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **python-policy** *reference*
- **servers**
  - **access-algorithm** *keyword*
  - **buffering**
    - **acct-interim**
      - **lifetime** *number*
      - **max** *number*
      - **min** *number*
    - **acct-start**
      - **lifetime** *number*
      - **max** *number*
      - **min** *number*
    - **acct-stop**
      - **lifetime** *number*
      - **max** *number*
      - **min** *number*
  - **health-check**
    - **down-timeout** *number*
    - **test-account**
      - **admin-state** *keyword*
      - **interval** *number*
      - **password** *string*
      - **user-name** *string*
  - **hold-down-time** *number*
  - **ipv6-source-address** *string*
  - **retry-count** *number*
  - **router-instance** *string*
  - **server** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **server-name** *string*
  - **source-address** *string*
  - **stickiness** *boolean*
  - **timeout** *number*
- **wpp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **portal-group** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **description** *string*
  - **portal** *string name string*
  - **system-name** *string*



### 3.1.1 aaa command descriptions

#### aaa

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

#### diameter

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

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

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

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

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

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

## connection

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

## ipv4

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

## allow-connections *boolean*

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

**local-address** *string*

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

**ipv6**

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

**allow-connections** *boolean*

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

**local-address** *string*

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

**timer number**

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

**description string**

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

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

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

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

**peer index number**

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

**index number**

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

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

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

**admin-state** *keyword*

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

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

**connection-timer** *number*

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

**default-peer** *boolean*

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

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

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

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

**preference number**

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

**route index number**

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

**index number**

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

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

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

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

**preference** *number*

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

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

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



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

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

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

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

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

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

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

## radius

Synopsis	Enter the <b>radius</b> context
Context	<b>configure</b> <a href="#">aaa radius</a>
Tree	<a href="#">radius</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## acct-on-off-group [[name](#)] *string*

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

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

Synopsis	Group name for accounting on/off
Context	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i>
Tree	<a href="#">acct-on-off-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **coa-port** *number*

Synopsis RADIUS listening port for CoA and Disconnect messages  
 Context **configure** *aaa radius coa-port number*  
 Tree [coa-port](#)  
 Range 1647 | 1700 | 1812 | 3799  
 Default 3799  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **isa-policy** [*name*] *string*

Synopsis Enter the **isa-policy** list instance  
 Context **configure** *aaa radius isa-policy string*  
 Tree [isa-policy](#)  
 Max. Instances 8  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis ISA RADIUS policy name referenced by a NAT application  
 Context **configure** *aaa radius isa-policy string*  
 Tree [isa-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting**

Synopsis Enter the **accounting** context

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Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting</a>
Tree	<a href="#">accounting</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **include-attributes**

Synopsis	Enter the <b>include-attributes</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes</a>
Tree	<a href="#">include-attributes</a>
Description	Commands in this context specify the attributes to include in the RADIUS accounting messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **acct-delay-time** *boolean*

Synopsis	Include the accounting delay time attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes acct-delay-time boolean</a>
Tree	<a href="#">acct-delay-time</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **acct-triggered-reason** *boolean*

Synopsis	Include the accounting triggered reason attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes acct-triggered-reason boolean</a>
Tree	<a href="#">acct-triggered-reason</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**called-station-id** *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">called-station-id</a> <i>boolean</i>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**calling-station-id** *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">calling-station-id</a> <i>boolean</i>
Tree	<a href="#">calling-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**circuit-id** *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">circuit-id</a> <i>boolean</i>
Tree	<a href="#">circuit-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**class** *boolean*

Synopsis	Include the Class attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">class</a> <i>boolean</i>
Tree	<a href="#">class</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **credit-control-quota** *boolean*

Synopsis Add unconsumed volume quota to Credit-Control-Quota

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [credit-control-quota](#) *boolean*

Tree [credit-control-quota](#)

Default false

Introduced 21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-options** *boolean*

Synopsis Include the Alc-ToServer-Dhcp-Options attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [dhcp-options](#) *boolean*

Tree [dhcp-options](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-vendor-class-id** *boolean*

Synopsis Include the Alc-Dhcp-Vendor-Class-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [dhcp-vendor-class-id](#) *boolean*

Tree [dhcp-vendor-class-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **frame-counters** *boolean*

Synopsis Include Acct-Input-Packets and Acct-Output-Packets

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [frame-counters](#) *boolean*

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Tree	<a href="#">frame-counters</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **framed-ip-address** *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">framed-ip-address</a> <i>boolean</i>
Tree	<a href="#">framed-ip-address</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **framed-ip-netmask** *boolean*

Synopsis	Include the Framed-IP-Netmask attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">framed-ip-netmask</a> <i>boolean</i>
Tree	<a href="#">framed-ip-netmask</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **framed-ipv6-prefix** *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">framed-ipv6-prefix</a> <i>boolean</i>
Tree	<a href="#">framed-ipv6-prefix</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### hardware-timestamp *boolean*

Synopsis	Include the Event-Timestamp attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">hardware-timestamp</a> <i>boolean</i>
Tree	<a href="#">hardware-timestamp</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv6-address *boolean*

Synopsis	Include the Alc-Ipv6-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">ipv6-address</a> <i>boolean</i>
Tree	<a href="#">ipv6-address</a>
Description	When configured to <b>true</b> , the IA_NA address of the UE is included in the accounting message if an active IA_NA lease exists. When configured to <b>false</b> , the address is not included.
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### mac-address *boolean*

Synopsis	Include the Alc-Client-Hardware-Addr attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">mac-address</a> <i>boolean</i>
Tree	<a href="#">mac-address</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### millisecond-event-timestamp *boolean*

Synopsis	Include the Alc-Millisecond-Event-Timestamp attribute
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Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes millisecond-event-timestamp</a> <i>boolean</i>
Tree	<a href="#">millisecond-event-timestamp</a>
Description	When configured to <b>true</b> , the router includes the Alc-Millisecond-Event-Timestamp attribute in the accounting message. This attribute includes the time the accounting event was logged in milliseconds since Jan 1, 1970 00:00:00 UTC. When configured to <b>false</b> , the router does not include this attribute.
Default	false
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**multi-session-id** *boolean*

Synopsis	Include the Acct-Multi-Session-Id attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes multi-session-id</a> <i>boolean</i>
Tree	<a href="#">multi-session-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-identifier** *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-ip-address** *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy string accounting include-attributes nas-ip-address</a> <i>boolean</i>
Tree	<a href="#">nas-ip-address</a>

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

### **nas-ipv6-address** *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">accounting include-attributes nas-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">nas-ipv6-address</a>
Description	<p>When configured to <b>true</b>, the router includes the NAS-IPv6-Address attribute in RADIUS accounting messages using the address specified in the <b>configure aaa radius isa-policy nas-ip-address-origin</b> command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections.</p> <p>When configured to <b>false</b>, the router does not include the NAS-IPv6-Address attribute in RADIUS accounting messages.</p>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port** *boolean*

Synopsis	Include the NAS-Port attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">accounting include-attributes nas-port</a> <i>boolean</i>
Tree	<a href="#">nas-port</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id** *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i> <a href="#">accounting include-attributes nas-port-id</a> <i>boolean</i>
Tree	<a href="#">nas-port-id</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type** *boolean*

Synopsis Include the NAS-Port-Type attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nas-port-type](#) *boolean*

Tree [nas-port-type](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-inside-service-id** *boolean*

Synopsis Include NAT inside service ID in Alc-Serv-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-inside-service-id](#) *boolean*

Tree [nat-inside-service-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-outside-ip-address** *boolean*

Synopsis Include the Alc-Nat-Outside-Ip-Addr attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-outside-ip-address](#) *boolean*

Tree [nat-outside-ip-address](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-outside-service-id** *boolean*

Synopsis Include NAT outside service ID in Alc-Serv-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [accounting](#) [include-attributes](#) [nat-outside-service-id](#) *boolean*

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Tree	<a href="#">nat-outside-service-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-port-range-block** *boolean*

Synopsis	Include the Alc-Nat-Port-Range attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">nat-port-range-block</a> <i>boolean</i>
Tree	<a href="#">nat-port-range-block</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-subscriber-string** *boolean*

Synopsis	Include the Alc-Subsc-ID-Str attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">nat-subscriber-string</a> <i>boolean</i>
Tree	<a href="#">nat-subscriber-string</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **octet-counters** *boolean*

Synopsis	Include Acct-Input-Octets and Acct-Output-Octets
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">octet-counters</a> <i>boolean</i>
Tree	<a href="#">octet-counters</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxied-subscriber-data** *boolean*

Synopsis	Include subscriber data as RADIUS attributes
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">proxied-subscriber-data</a> <i>boolean</i>
Tree	<a href="#">proxied-subscriber-data</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**release-reason** *boolean*

Synopsis	Include reason in the Acct-Terminate-Cause attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">release-reason</a> <i>boolean</i>
Tree	<a href="#">release-reason</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remote-id** *boolean*

Synopsis	Include the Agent-Remote-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">remote-id</a> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rsi** *boolean*

Synopsis	Include the Alc-RSSI attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">rsi</a> <i>boolean</i>
Tree	<a href="#">rsi</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-time** *boolean*

Synopsis Include the Acct-Session-Time attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [accounting](#) [include-attributes](#) [session-time](#) *boolean*

Tree [session-time](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id** *boolean*

Synopsis Include the Alc-Subsc-ID-Str attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [accounting](#) [include-attributes](#) [subscriber-id](#) *boolean*

Tree [subscriber-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **toserver-dhcp6-options** *boolean*

Synopsis Include the Alc-ToServer-Dhcp6-Options attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [accounting](#) [include-attributes](#) [toserver-dhcp6-options](#) *boolean*

Tree [toserver-dhcp6-options](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ue-creation-type** *boolean*

Synopsis Include the Alc-Wlan-Ue-Creation-Type attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#) [accounting](#) [include-attributes](#) [ue-creation-type](#) *boolean*

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Tree	<a href="#">ue-creation-type</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **user-name** *boolean*

Synopsis	Include the User-Name attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">user-name</a> <i>boolean</i>
Tree	<a href="#">user-name</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-ssid-vlan** *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">wlan-ssid-vlan</a> <i>boolean</i>
Tree	<a href="#">wlan-ssid-vlan</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect-tunnel-home-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-home-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-home-address</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-local-ipv6-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Local-Ipv6 attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-local-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-local-ipv6-address</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-remote-ipv6-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Remote-Ipv6 attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-remote-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-remote-ipv6-address</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-service** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Service attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-service</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-service</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-type** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Type attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">accounting</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-type</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-type</a>
Default	false



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

### **nat-periodic-update**

Synopsis Enter the **nat-periodic-update** context  
Context **configure** [aaa radius isa-policy string accounting nat-periodic-update](#)  
Tree [nat-periodic-update](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis Interval for periodic RADIUS Interim-Update messages  
Context **configure** [aaa radius isa-policy string accounting nat-periodic-update interval number](#)  
Tree [interval](#)  
Range 1 to 72  
Units hours  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** (*number* | *keyword*)

Synopsis Rate limit for periodic RADIUS Interim-Update messages  
Context **configure** [aaa radius isa-policy string accounting nat-periodic-update rate-limit \(number | keyword\)](#)  
Tree [rate-limit](#)  
Range 1 to 100000  
Units packets per second  
Options unlimited  
Default unlimited  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## update-triggers

Synopsis	Enter the <b>update-triggers</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">update-triggers</a>
Tree	<a href="#">update-triggers</a>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address-state *boolean*

Synopsis	Send an Interim-Update when address allocated or freed
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">update-triggers</a> <a href="#">address-state</a> <i>boolean</i>
Tree	<a href="#">address-state</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## soft-quota-exhausted *boolean*

Synopsis	Send interim update when soft volume quota is reached
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">accounting</a> <a href="#">update-triggers</a> <a href="#">soft-quota-exhausted</a> <i>boolean</i>
Tree	<a href="#">soft-quota-exhausted</a>
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication

Synopsis	Enter the <b>authentication</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a>
Tree	<a href="#">authentication</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## include-attributes

Synopsis	Enter the <b>include-attributes</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a>
Tree	<a href="#">include-attributes</a>
Description	Commands in this context specify the attributes to include in the RADIUS authentication messages.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## called-station-id *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">called-station-id</a> <i>boolean</i>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## calling-station-id *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">calling-station-id</a> <i>boolean</i>
Tree	<a href="#">calling-station-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## circuit-id *boolean*

Synopsis	Include the Agent-Circuit-Id attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">circuit-id</a> <i>boolean</i>
Tree	<a href="#">circuit-id</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-vendor-class-id** *boolean*

Synopsis Include the Alc-DHCP-Vendor-Class-Id attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [dhcp-vendor-class-id](#) *boolean*

Tree [dhcp-vendor-class-id](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **framed-ip-address** *boolean*

Synopsis Include the Framed-IP-Address attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [framed-ip-address](#) *boolean*

Tree [framed-ip-address](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *boolean*

Synopsis Include the Alc-IPv6-address attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [ipv6-address](#) *boolean*

Tree [ipv6-address](#)

Default false

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-address** *boolean*

Synopsis Include the Alc-Client-Hardware-Addr attribute

Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [mac-address](#) *boolean*

Tree	<a href="#">mac-address</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-identifier** *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-ip-address** *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">nas-ip-address</a> <i>boolean</i>
Tree	<a href="#">nas-ip-address</a>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-ipv6-address** *boolean*

Synopsis	Include the NAS-IPv6-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">nas-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">nas-ipv6-address</a>
Description	<p>When configured to <b>true</b>, the router includes the NAS-IPv6-Address attribute in RADIUS authentication messages using the address specified in the <b>configure aaa radius isa-policy nas-ip-address-origin</b> command. The NAS-IPv6-Address attribute is included in both IPv4 and IPv6 RADIUS connections.</p> <p>When configured to <b>false</b>, the router does not include the NAS-IPv6-Address attribute in RADIUS authentication messages.</p>

Introduced 22.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port** *boolean*

Synopsis Include the NAS-Port attribute  
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [nas-port](#) *boolean*  
Tree [nas-port](#)  
Default false  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id** *boolean*

Synopsis Include the NAS-Port-Id attribute  
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [nas-port-id](#) *boolean*  
Tree [nas-port-id](#)  
Default false  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type** *boolean*

Synopsis Include the NAS-Port-Type attribute  
Context **configure** [aaa](#) [radius](#) [isa-policy](#) *string* [authentication](#) [include-attributes](#) [nas-port-type](#) *boolean*  
Tree [nas-port-type](#)  
Default false  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **remote-id** *boolean*

Synopsis Include the Agent-Remote-Id attribute

Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">remote-id</a> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**toserver-dhcp-options** *boolean*

Synopsis	Include the Alc-ToServer-Dhcp-Options attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">toserver-dhcp-options</a> <i>boolean</i>
Tree	<a href="#">toserver-dhcp-options</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**toserver-dhcp6-options** *boolean*

Synopsis	Include the Alc-ToServer-Dhcp6-Options attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">toserver-dhcp6-options</a> <i>boolean</i>
Tree	<a href="#">toserver-dhcp6-options</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wlan-ssid-vlan** *boolean*

Synopsis	Include per-SSID VLAN in Alc-Wlan-SSID-VLAN attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">wlan-ssid-vlan</a> <i>boolean</i>
Tree	<a href="#">wlan-ssid-vlan</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect-tunnel-home-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">authentication</a> <a href="#">include-attributes</a> <a href="#">xconnect-tunnel-home-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-home-address</a>
Default	false
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

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

**nas-ip-address-origin** *keyword*

Synopsis	NAS-IP-Address attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">nas-ip-address-origin</a> <i>keyword</i>
Tree	<a href="#">nas-ip-address-origin</a>
Options	system-ip, isa-ip
Default	system-ip
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**password** *string*

Synopsis	Password used in the RADIUS access requests
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 42



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

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

Synopsis Python policy used for modifying RADIUS messages  
 Context **configure** [aaa radius isa-policy string python-policy reference](#)  
 Tree [python-policy](#)  
 Reference **configure** [python python-policy string](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **servers**

Synopsis Enter the **servers** context  
 Context **configure** [aaa radius isa-policy string servers](#)  
 Tree [servers](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **access-algorithm** *keyword*

Synopsis Algorithm that accesses the RADIUS servers  
 Context **configure** [aaa radius isa-policy string servers access-algorithm keyword](#)  
 Tree [access-algorithm](#)  
 Options direct, round-robin, hash-based, direct-priority  
 Default direct  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6**

Synopsis Enter the **ipv6** context  
 Context **configure** [aaa radius isa-policy string servers ipv6](#)  
 Tree [ipv6](#)

Description	Commands in this context configure how to communicate with IPv6 RADIUS servers.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu number**

Synopsis	MTU used to fragment outgoing IPv6 RADIUS packets
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers ipv6 mtu number</a>
Tree	<a href="#">mtu</a>
Range	1280 to 9000
Default	9000
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-prefix string**

Synopsis	Prefix containing individual source addresses per ISA
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers ipv6 source-prefix string</a>
Tree	<a href="#">source-prefix</a>
Description	This command configures an IPv6 prefix containing individual /128 addresses. These addresses are used as the source address for connections to IPv6 RADIUS servers.  The prefix must be large enough to accommodate all BB-ISAs or ESA VMs in the system.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance string**

Synopsis	Routing instance
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers router-instance string</a>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [[index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Max. Instances	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[index]** *number*

Synopsis	RADIUS server ID
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Range	1 to 10
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the ISA RADIUS server
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">server</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

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

Synopsis	IP address of the RADIUS server
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Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## purpose



### WARNING:

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

Synopsis	Enter the <b>purpose</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number purpose</a>
Tree	<a href="#">purpose</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting



### WARNING:

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

Synopsis	Enable the <b>accounting</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number purpose accounting</a>
Tree	<a href="#">accounting</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## udp-port *number*



### WARNING:

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

Synopsis	ISA RADIUS server accounting UDP port
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Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">servers</a> <a href="#">server</a> <a href="#">number</a> <a href="#">purpose</a> <a href="#">accounting</a> <a href="#">udp-port</a> <a href="#">number</a>
Tree	<a href="#">udp-port</a>
Range	1 to 65535
Default	1813
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication



### WARNING:

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

Synopsis	Enable the <b>authentication</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">servers</a> <a href="#">server</a> <a href="#">number</a> <a href="#">purpose</a> <a href="#">authentication</a>
Tree	<a href="#">authentication</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## udp-port *number*



### WARNING:

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

Synopsis	ISA RADIUS server authentication UDP port
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a> <a href="#">servers</a> <a href="#">server</a> <a href="#">number</a> <a href="#">purpose</a> <a href="#">authentication</a> <a href="#">udp-port</a> <a href="#">number</a>
Tree	<a href="#">udp-port</a>
Range	1 to 65535
Default	1812
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**coa****WARNING:**

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

Synopsis	Enable the <b>coa</b> context
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number purpose coa</a>
Tree	<a href="#">coa</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**udp-port** *number***WARNING:**

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

Synopsis	ISA RADIUS server change of authorization UDP port
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number purpose coa udp-port number</a>
Tree	<a href="#">udp-port</a>
Range	1 to 65535
Default	3799
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**secret** *string***WARNING:**

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

Synopsis	Secret key to access the RADIUS server
Context	<b>configure</b> <a href="#">aaa radius isa-policy string servers server number secret string</a>
Tree	<a href="#">secret</a>
String Length	1 to 115
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-address-range** *string*

Synopsis Starting IP address of the IP address range  
Context **configure** [aaa radius isa-policy](#) *string* [servers](#) [source-address-range](#) *string*  
Tree [source-address-range](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Timeout for a response from the RADIUS server  
Context **configure** [aaa radius isa-policy](#) *string* [servers](#) [timeout](#) *number*  
Tree [timeout](#)  
Range 1 to 90  
Units seconds  
Default 5  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **total-tries** *number*

Synopsis Maximum number of tries toward the same RADIUS server  
Context **configure** [aaa radius isa-policy](#) *string* [servers](#) [total-tries](#) *number*  
Tree [total-tries](#)  
Range 1 to 10  
Default 3  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **user-name**

Synopsis Enter the **user-name** context  
Context **configure** [aaa radius isa-policy](#) *string* [user-name](#)

Tree	<a href="#">user-name</a>
Description	Commands in this context define the format of the username field in the UE authentication request sent to the RADIUS server. For authentication of IPv6 triggers (ICMPv6, DHCPv6, IPv6 data-trigger) the username format will always fall back to MAC only.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **format** *keyword*

Synopsis	Username format in RADIUS message
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">user-name</a> <b>format</b> <i>keyword</i>
Tree	<a href="#">format</a>
Options	mac, mac-ip, dhcp-vendor, circuit-id
Default	mac
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-format** *keyword*

Synopsis	MAC address format when contacting RADIUS server
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i> <a href="#">user-name</a> <b>mac-format</b> <i>keyword</i>
Tree	<a href="#">mac-format</a>
Options	alu, ieee
Default	alu
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **l2tp-accounting-policy** [[name](#)] *string*

Synopsis	Enter the <b>l2tp-accounting-policy</b> list instance
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <b>l2tp-accounting-policy</b> <i>string</i>
Tree	<a href="#">l2tp-accounting-policy</a>
Max. Instances	32
Introduced	16.0.R4



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis L2TP RADIUS accounting policy name  
 Context **configure** [aaa radius l2tp-accounting-policy](#) *string*  
 Tree [l2tp-accounting-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-type**

Synopsis Enter the **accounting-type** context  
 Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [accounting-type](#)  
 Tree [accounting-type](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session** *boolean*

Synopsis Enable per-session accounting  
 Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [accounting-type](#) [session](#) *boolean*  
 Tree [session](#)  
 Default true  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tunnel** *boolean*

Synopsis Enable per-tunnel accounting  
 Context **configure** [aaa radius l2tp-accounting-policy](#) *string* [accounting-type](#) [tunnel](#) *boolean*  
 Tree [tunnel](#)  
 Default true

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

### **acct-tunnel-connection-fmt** *string*

Synopsis	Accounting tunnel connection ASCII specification
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">acct-tunnel-connection-fmt</a> <i>string</i>
Tree	<a href="#">acct-tunnel-connection-fmt</a>
String Length	1 to 253
Default	%n
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **include-radius-attribute**

Synopsis	Enter the <b>include-radius-attribute</b> context
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a>
Tree	<a href="#">include-radius-attribute</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **calling-station-id** *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a> <i>boolean</i>
Tree	<a href="#">calling-station-id</a>

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

**nas-identifier** *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nas-port**

Synopsis	Enable the <b>nas-port</b> context
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port</a>
Tree	<a href="#">nas-port</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bit-spec** *string*

Synopsis	RADIUS NAS-Port attribute
Context	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port</a> <a href="#">bit-spec</a> <i>string</i>
Tree	<a href="#">bit-spec</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nas-port-id**

Synopsis	Enable the <b>nas-port-id</b> context
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Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy string include-radius-attribute nas-port-id</a>
Tree	<a href="#">nas-port-id</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-string** *string*

Synopsis	Prefix string added to RADIUS NAS-Port attribute
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy string include-radius-attribute nas-port-id prefix-string string</a>
Tree	<a href="#">prefix-string</a>
String Length	1 to 8
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix** *keyword*

Synopsis	NAS-Port-Id suffix type
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy string include-radius-attribute nas-port-id suffix keyword</a>
Tree	<a href="#">suffix</a>
Options	circuit-id, remote-id
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type**

Synopsis	Enable the <b>nas-port-type</b> context
Context	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy string include-radius-attribute nas-port-type</a>
Tree	<a href="#">nas-port-type</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** (*keyword* | *number*)

Synopsis	Value for RADIUS NAS-Port-Type attribute
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Context	<b>configure</b> <b>aaa radius l2tp-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>nas-port-type</b> <b>type</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>type</b>
Range	0 to 255
Options	rfc-aligned
Default	rfc-aligned
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy** *reference*

Synopsis	RADIUS server policy referenced
Context	<b>configure</b> <b>aaa radius l2tp-accounting-policy</b> <i>string</i> <b>radius-server-policy</b> <i>reference</i>
Tree	<b>radius-server-policy</b>
Reference	<b>configure</b> <b>aaa radius server-policy</b> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **route-downloader** [**name**] *string*

Synopsis	Enter the <b>route-downloader</b> list instance
Context	<b>configure</b> <b>aaa radius route-downloader</b> <i>string</i>
Tree	<b>route-downloader</b>
Max. Instances	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	RADIUS route downloader name
Context	<b>configure</b> <b>aaa radius route-downloader</b> <i>string</i>
Tree	<b>route-downloader</b>
String Length	1 to 32
Notes	This element is part of a list key.

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

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

Synopsis	Administrative state of this route downloader
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **base-user-name** *string*

Synopsis	Prefix of the username used as access requests
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i> <b>base-user-name</b> <i>string</i>
Tree	<a href="#">base-user-name</a>
Description	This command sets the prefix for the username that is used for access requests. The actual name used is a concatenation of this string, the "-" (dash) character and a monotonically increasing integer.
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-metric** *number*

Synopsis	Default metric that RTM imported routes acquire
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string</i> <b>default-metric</b> <i>number</i>
Tree	<a href="#">default-metric</a>
Range	0 to 254
Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-tag** *number*

Synopsis	Default tag of this route downloader
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string default-tag number</i>
Tree	<a href="#">default-tag</a>
Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

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

**download-interval** *number*

Synopsis	Wait time between consecutive runs of the process
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string download-interval number</i>
Tree	<a href="#">download-interval</a>
Range	1 to 1440
Units	minutes
Default	720
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-routes** *number*

Synopsis	Maximum routes imported by this route downloader
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string max-routes number</i>
Tree	<a href="#">max-routes</a>
Range	1 to 200000

Default	200000
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis	Route downloader password for RADIUS access requests
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string password string</i>
Tree	<a href="#">password</a>
String Length	1 to 71
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy** *reference*



#### **WARNING:**

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

Synopsis	RADIUS server policy referenced
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string radius-server-policy reference</i>
Tree	<a href="#">radius-server-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retry-interval**

Synopsis	Enter the <b>retry-interval</b> context
Context	<b>configure</b> <a href="#">aaa radius route-downloader</a> <i>string retry-interval</i>
Tree	<a href="#">retry-interval</a>
Description	Commands in this context configure parameters of the retry interval timer, which is an exponential backoff timer. The system retries sending an Access Request message after the previous message was unanswered (for example, a RADIUS failure or ICMP port unreachable error).
Introduced	16.0.R4



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max number**

Synopsis Maximum duration of the retry interval

Context **configure** [aaa radius route-downloader](#) *string* [retry-interval](#) **max** *number*

Tree [max](#)

Range 1 to 1440

Units minutes

Default 20

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min number**

Synopsis Minimum duration of the retry interval

Context **configure** [aaa radius route-downloader](#) *string* [retry-interval](#) **min** *number*

Tree [min](#)

Description This command specifies the minimum duration of the retry interval. This duration grows exponentially after each sequential failure.

Range 1 to 1440

Units minutes

Default 10

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server-policy** [[name](#)] *string*

Synopsis Enter the **server-policy** list instance

Context **configure** [aaa radius server-policy](#) *string*

Tree [server-policy](#)

Max. Instances 32

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

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

**acct-on-off**

Synopsis	Enable the <b>acct-on-off</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <b>acct-on-off</b>
Tree	<a href="#">acct-on-off</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**monitor** *reference***WARNING:**

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

Synopsis	Accounting on/off group name
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <b>acct-on-off</b> <b>monitor</b> <i>reference</i>
Tree	<a href="#">monitor</a>
Reference	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor</b> or <b>oper-state-change</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**oper-state-change**

Synopsis	Enable the <b>oper-state-change</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <b>acct-on-off</b> <b>oper-state-change</b>

Tree	<a href="#">oper-state-change</a>
Notes	The following elements are part of a choice: <b>monitor</b> or <b>oper-state-change</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### group *reference*



#### **WARNING:**

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

Synopsis	Operational state for a group
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">acct-on-off oper-state-change group</a> <i>reference</i>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">aaa radius acct-on-off-group</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### description *string*

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

### python-policy *reference*

Synopsis	Python policy for RADIUS packets to/from RADIUS servers
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## servers

Synopsis	Enter the <b>servers</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a>
Tree	<a href="#">servers</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## access-algorithm *keyword*

Synopsis	Algorithm to select a RADIUS server from the pool
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">access-algorithm</a> <i>keyword</i>
Tree	<a href="#">access-algorithm</a>
Options	direct, round-robin, hash-based
Default	direct
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## buffering

Synopsis	Enter the <b>buffering</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">buffering</a>
Tree	<a href="#">buffering</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## acct-interim

Synopsis	Enable the <b>acct-interim</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">buffering</a> <a href="#">acct-interim</a>
Tree	<a href="#">acct-interim</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lifetime number**

Synopsis	Time accounting message can be in retransmission buffer
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-interim lifetime number</a>
Tree	<a href="#">lifetime</a>
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max number**

Synopsis	Maximum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-interim max number</a>
Tree	<a href="#">max</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min number**

Synopsis	Minimum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-interim min number</a>
Tree	<a href="#">min</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## acct-start

Synopsis	Enable the <b>acct-start</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-start</a>
Tree	<a href="#">acct-start</a>
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lifetime number

Synopsis	Time accounting message can be in retransmission buffer
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-start lifetime</a> <i>number</i>
Tree	<a href="#">lifetime</a>
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## max number

Synopsis	Maximum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-start max</a> <i>number</i>
Tree	<a href="#">max</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## min number

Synopsis	Minimum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-start min</a> <i>number</i>
Tree	<a href="#">min</a>
Range	1 to 3600

Units	seconds
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-stop**

Synopsis	Enable the <b>acct-stop</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-stop</a>
Tree	<a href="#">acct-stop</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lifetime number**

Synopsis	Time accounting message can be in retransmission buffer
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-stop lifetime number</a>
Tree	<a href="#">lifetime</a>
Range	1 to 25
Units	hours
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max number**

Synopsis	Maximum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-stop max number</a>
Tree	<a href="#">max</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min number**

Synopsis	Minimum time between accounting message resend attempts
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers buffering acct-stop</a> <i>min number</i>
Tree	<a href="#">min</a>
Range	1 to 3600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **health-check**

Synopsis	Enter the <b>health-check</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check</a>
Tree	<a href="#">health-check</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **down-timeout number**

Synopsis	Wait time before declaring RADIUS server out-of-service
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check down-timeout</a> <i>number</i>
Tree	<a href="#">down-timeout</a>
Range	1 to 340
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **test-account**

Synopsis	Enter the <b>test-account</b> context
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check test-account</a>
Tree	<a href="#">test-account</a>
Introduced	16.0.R4



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of the health check

Context **configure** [aaa radius server-policy](#) *string* [servers health-check test-account admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis Time for test account to check health of RADIUS servers

Context **configure** [aaa radius server-policy](#) *string* [servers health-check test-account interval](#) *number*

Tree [interval](#)

Range 1 to 60

Units seconds

Default 3

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis Test account password for RADIUS server health check

Context **configure** [aaa radius server-policy](#) *string* [servers health-check test-account password](#) *string*

Tree [password](#)

String Length 1 to 115

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-name** *string*

Synopsis	Username to send access requests to probe RADIUS server
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers health-check test-account user-name</a> <i>string</i>
Tree	<a href="#">user-name</a>
String Length	1 to 64
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hold-down-time** *number*

Synopsis	Hold time before reusing a RADIUS server that was down
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers hold-down-time</a> <i>number</i>
Tree	<a href="#">hold-down-time</a>
Range	30 to 86400
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6-source-address** *string*

Synopsis	Source address for IPv6 RADIUS datagrams
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers ipv6-source-address</a> <i>string</i>
Tree	<a href="#">ipv6-source-address</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retry-count** *number*

Synopsis	Number of retries for contacting the RADIUS server
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers retry-count</a> <i>number</i>
Tree	<a href="#">retry-count</a>
Range	1 to 256
Default	3

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

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

Synopsis RADIUS routing instance  
 Context **configure** [aaa radius server-policy](#) *string* [servers router-instance](#) *string*  
 Tree [router-instance](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** [[server-index](#)] *number*

Synopsis Enter the **server** list instance  
 Context **configure** [aaa radius server-policy](#) *string* [servers server](#) *number*  
 Tree [server](#)  
 Max. Instances 32  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[server-index]** *number*

Synopsis RADIUS server index  
 Context **configure** [aaa radius server-policy](#) *string* [servers server](#) *number*  
 Tree [server](#)  
 Range 1 to 16  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server-name** *string*

Synopsis RADIUS server name  
 Context **configure** [aaa radius server-policy](#) *string* [servers server](#) *number* [server-name](#) *string*

Tree	<a href="#">server-name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-address** *string*

Synopsis	Source address of RADIUS messages
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stickiness** *boolean*

Synopsis	Allow stickiness in a multi-server application
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">stickiness</a> <i>boolean</i>
Tree	<a href="#">stickiness</a>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Time until the next retry to the RADIUS server
Context	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i> <a href="#">servers</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 340
Units	seconds
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## wpp

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

## portal-group [[group-name](#)] *string*

Synopsis	Enter the <b>portal-group</b> list instance
Context	<b>configure</b> <a href="#">aaa wpp portal-group</a> <i>string</i>
Tree	<a href="#">portal-group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Portal group name
Context	<b>configure</b> <a href="#">aaa wpp portal-group</a> <i>string</i>
Tree	<a href="#">portal-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the portal group
Context	<b>configure</b> <a href="#">aaa wpp portal-group</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

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

**portal** [[router-instance](#)] *string* [name](#) *string*

Synopsis	Add a list entry for <b>portal</b>
Context	<b>configure</b> <a href="#">aaa wpp portal-group</a> <i>string</i> <a href="#">portal</a> <i>string</i> <a href="#">name</a> <i>string</i>
Tree	<a href="#">portal</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[[router-instance](#)]** *string*

Synopsis	Router on which the portal is configured
Context	<b>configure</b> <a href="#">aaa wpp portal-group</a> <i>string</i> <a href="#">portal</a> <i>string</i> <a href="#">name</a> <i>string</i>
Tree	<a href="#">portal</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name** *string*

Synopsis	Web portal server name
Context	<b>configure</b> <a href="#">aaa wpp portal-group</a> <i>string</i> <a href="#">portal</a> <i>string</i> <a href="#">name</a> <i>string</i>
Tree	<a href="#">portal</a>
String Length	1 to 32
Notes	This element is part of a list key.

---

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

### **system-name** *string*

Synopsis System name used in WPP protocol messages  
Context **configure** *aaa wpp system-name string*  
Tree *system-name*  
String Length 1 to 16  
Introduced 16.0.R6  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## 3.2 anysec commands

```
configure
- anysec
  - apply-groups reference
  - apply-groups-exclude reference
  - mka-over-ip
    - mka-udp-port number
  - reserved-label-block reference
  - tunnel-encryption
    - encryption-group string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - ca-name reference
      - encryption-label number
      - peer (ipv4-address-no-zone | ipv6-address-no-zone)
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
      - peer-tunnel-attributes
        - flex-algo-id number
        - igp-instance-id number
        - protocol keyword
      - security-termination-policy reference
    - security-termination-policy string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - flex-algo-id number
      - igp-instance-id number
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - protocol keyword
      - rx-must-be-encrypted boolean
```



### 3.2.1 anysec command descriptions

#### anysec

Synopsis	Enter the <b>anysec</b> context
Context	<b>configure anysec</b>
Tree	<a href="#">anysec</a>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

#### mka-over-ip

Synopsis	Enter the <b>mka-over-ip</b> context
Context	<b>configure anysec mka-over-ip</b>
Tree	<a href="#">mka-over-ip</a>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

#### mka-udp-port *number*

Synopsis	ANYSec MKA UDP port
Context	<b>configure anysec mka-over-ip mka-udp-port <i>number</i></b>
Tree	<a href="#">mka-udp-port</a>
Description	This command configures the UDP port that identifies the MKA packet on the system. Nokia recommends configuring this UDP port network wide. In addition, ensure the UDP port is not used by any other protocols in the network.
Range	1024 to 49151
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

#### reserved-label-block *reference*

Synopsis	ANYSec reserved label block
----------	-----------------------------

Context	<b>configure anysec reserved-label-block</b> <i>reference</i>
Tree	<a href="#">reserved-label-block</a>
Description	<p>This command assigns the label block that is reserved for the ANYsec encryption SID. Without this reserved block, ANYsec cannot assign any encryption SIDs. The encryption SID uniquely identifies the encrypting node within a network and avoids double encryption scenarios. The encryption SID can be assigned per encryption group. However, all encryption groups can have the same encryption SID.</p> <p>To save label space, Nokia recommends limiting the number of encryption SIDs within a network.</p>
Reference	<b>configure router</b> <i>string</i> <a href="#">mpls-labels reserved-label-block</a> <i>string</i>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

## tunnel-encryption

Synopsis	Enter the <b>tunnel-encryption</b> context
Context	<b>configure anysec tunnel-encryption</b>
Tree	<a href="#">tunnel-encryption</a>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

## encryption-group [[group-name](#)] *string*

Synopsis	Enter the <b>encryption-group</b> list instance
Context	<b>configure anysec tunnel-encryption encryption-group</b> <i>string</i>
Tree	<a href="#">encryption-group</a>
Description	<p>Commands in this context create an encryption group.</p> <p>An encryption group is a group of LSPs that use the same CA and preshared keys (PSK). For ease of PSK management, SR OS allows a group of LSPs to use the same CA with the same PSKs. The PSK is used to secure the SAK for distribution to other PEERs.</p> <p>Note: Although the LSPs are unidirectional, ANYsec is a bidirectional concept where a pair of LSPs between two peers are encrypted and decrypted. Each pair of LSPs uses its own SAK for maximum security, although they may share the same CA and PSK with all other LSPs in the encryption group to secure the SAK.</p>
Max. Instances	1023

Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **[group-name]** *string*

Synopsis	ANYsec encryption group name
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">encryption-group</a> <i>string</i>
Tree	<a href="#">encryption-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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

Synopsis	Administrative state of the encryption group
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">encryption-group</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.3.R2
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **ca-name** *reference*



#### **WARNING:**

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

Synopsis	Connectivity association for the encryption group
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">encryption-group</a> <i>string</i> <b>ca-name</b> <i>reference</i>
Tree	<a href="#">ca-name</a>
Description	This command configures the CA used for this encryption group. A CA must be configured with the keyword <b>anysec</b> for use in the encryption group.

Reference	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

## encryption-label *number*



### WARNING:

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

Synopsis	Label identifying packets sent from the node to peers
Context	<b>configure</b> <a href="#">anysec tunnel-encryption encryption-group</a> <i>string encryption-label number</i>
Tree	<a href="#">encryption-label</a>
Description	<p>This command creates an encryption SD for the encryption group.</p> <p>The encryption SID uniquely identifies the encrypting node within a network to avoid double encryption scenarios. The encryption SID can be assigned per encryption group. However, all encryption groups can have the same encryption SID. To save label space, Nokia recommends limiting the number of encryption SIDs within a network. To configure the encryption SID, a <b>reserved-label-block</b> command must be configured under the <b>anysec</b> context. The encryption SID is programmed at the bottom of the stack with the S-it set.</p>
Range	32 to 1048575
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

## peer [[peer-ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">anysec tunnel-encryption encryption-group</a> <i>string peer (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">peer</a>
Max. Instances	1023
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**[peer-ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer IP address of the node SID
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">encryption-group</a> <i>string</i> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Description	<p>This command configures the IPv4 or IPv6 address of the node SID of the peer that is part of this encryption group.</p> <p>This configuration identifies the segment routing node SID of the peer and programs the egress label stack for matching on the FP5 for encrypting the LSP.</p> <p>When the label stack is downloaded, the encryption SID is also included at the bottom of the stack with the S-bit set.</p>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**admin-state** *keyword*

Synopsis	Administrative state of the encryption group peer
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">encryption-group</a> <i>string</i> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**peer-tunnel-attributes****WARNING:**

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

Synopsis	Enter the <b>peer-tunnel-attributes</b> context
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">encryption-group</a> <i>string</i> <a href="#">peer-tunnel-attributes</a>
Tree	<a href="#">peer-tunnel-attributes</a>

Description	Commands in this context configure the peer-tunnel attributes. Tunnel attributes are used to match and identify the outgoing tunnels for encryptoin with ANYsec. A single tunnel attribute is used for multiple peers. Since an LSP is unidirectional, the outgoing tunnel can have different attributes from the incoming tunnel (for example, security termination policy).
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### flex-algo-id *number*



#### WARNING:

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

Synopsis	Flexible algorithm ID
Context	<b>configure</b> anysec tunnel-encryption encryption-group <i>string</i> peer-tunnel-attributes flex-algo-id <i>number</i>
Tree	flex-algo-id
Description	This command configures the flexible algorithm ID. This ID must match the local terminating ANYsec tunnel.
Range	128 to 255
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### igp-instance-id *number*



#### WARNING:

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

Synopsis	IGP instance ID
Context	<b>configure</b> anysec tunnel-encryption encryption-group <i>string</i> peer-tunnel-attributes igp-instance-id <i>number</i>
Tree	igp-instance-id
Description	This command configures the IGP instance ID. This IGP instance ID must match the IGP instance that the incoming encrypted LSP was signaled on.
Range	0 to 31   64 to 95

Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **protocol** *keyword*



#### **WARNING:**

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

Synopsis	Protocol used to advertise node SID of incoming tunnel
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">encryption-group</a> <i>string</i> <a href="#">peer-tunnel-attributes</a> <b>protocol</b> <i>keyword</i>
Tree	<a href="#">protocol</a>
Options	sr-ospf, sr-ospf3, sr-isis
Default	sr-isis
Introduced	23.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **security-termination-policy** *reference*



#### **WARNING:**

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

Synopsis	Security termination policy used by encryption group
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">encryption-group</a> <i>string</i> <a href="#">security-termination-policy</a> <i>reference</i>
Tree	<a href="#">security-termination-policy</a>
Reference	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">security-termination-policy</a> <i>string</i>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **security-termination-policy** [[policy-name](#)] *string*

Synopsis	Enter the <b>security-termination-policy</b> list instance
----------	--

Context	<b>configure anysec tunnel-encryption security-termination-policy</b> <i>string</i>
Tree	<a href="#">security-termination-policy</a>
Max. Instances	1023
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **[policy-name]** *string*

Synopsis	ANYsec security termination policy name
Context	<b>configure anysec tunnel-encryption security-termination-policy</b> <i>string</i>
Tree	<a href="#">security-termination-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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

Synopsis	Administrative state of the security termination policy
Context	<b>configure anysec tunnel-encryption security-termination-policy</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **flex-algo-id** *number*



#### **WARNING:**

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



Synopsis	Flexible algorithm ID
Context	<b>configure</b> anysec tunnel-encryption security-termination-policy <i>string</i> flex-algo-id <i>number</i>
Tree	flex-algo-id
Description	This command configures the flexible algorithm ID. This ID must match the local terminating ANYsec tunnel.
Range	128 to 255
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### igp-instance-id *number*



**WARNING:**

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

Synopsis	IGP instance ID
Context	<b>configure</b> anysec tunnel-encryption security-termination-policy <i>string</i> igp-instance-id <i>number</i>
Tree	igp-instance-id
Description	This command configures the IGP instance ID. This IGP instance ID must match the IGP instance that the incoming encrypted LSP was signaled on.
Range	0 to 31   64 to 95
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

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



**WARNING:**

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

Synopsis	Local address of node SID associated with ANYsec tunnel
Context	<b>configure</b> anysec tunnel-encryption security-termination-policy <i>string</i> local-address ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	local-address

Description	This command configures the local IPv4 or IPv6 address for the system IP or loopback node SID. This is used to program the FP5 label stack to match the incoming ANYsec tunnel and decryption of the tunnel.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **protocol** *keyword*



#### **WARNING:**

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

Synopsis	Protocol used to advertise node SID of incoming tunnel
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">security-termination-policy</a> <i>string</i> <b>protocol</b> <i>keyword</i>
Tree	<a href="#">protocol</a>
Options	sr-ospf, sr-ospf3, sr-isis
Default	sr-isis
Introduced	23.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **rx-must-be-encrypted** *boolean*

Synopsis	Enforce encryption for received packets
Context	<b>configure</b> <a href="#">anysec</a> <a href="#">tunnel-encryption</a> <a href="#">security-termination-policy</a> <i>string</i> <b>rx-must-be-encrypted</b> <i>boolean</i>
Tree	<a href="#">rx-must-be-encrypted</a>
Description	When configured to <b>true</b> , the router accepts all arriving traffic that is ANYsec secured on the port. All other traffic is dropped. When configured to <b>false</b> , the router accepts all arriving traffic on the port.
Default	false
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### 3.3 application-assurance commands

```

configure
- application-assurance
  - aarp number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - master-selection-mode keyword
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - peer-endpoint
      - sap
        - encap-type keyword
        - sap-id string
      - spoke-sdp string
    - priority number
  - apply-groups reference
  - apply-groups-exclude reference
  - cflowd
    - field string
      - apply-groups reference
      - apply-groups-exclude reference
      - comment string
  - flow-attribute
    - attribute string
      - apply-groups reference
      - apply-groups-exclude reference
      - comment string
  - group number
    - apply-groups reference
    - apply-groups-exclude reference
    - certificate-profile string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - file string
  - cflowd
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
    - comprehensive
      - apply-groups reference
      - apply-groups-exclude reference
      - flow-rate number
      - flow-rate-2 number
      - template
        - apply-groups reference
        - apply-groups-exclude reference
        - dynamic-fields
          - admin-state keyword
          - field string
        - field-selection keyword
  - direct-export
    - collector number

```

configure application-assurance group cflowd direct-export collector address

```

- address (ipv4-address-no-zone | ipv6-address-no-zone) port number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - vlan-id number
- export-override
  - mode keyword
  - prefix string
- obfuscation
  - aes-128-encryption-key string
  - aes-256-encryption-key string
- rtp-performance
  - apply-groups reference
  - apply-groups-exclude reference
  - audio-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
  - flow-rate number
  - flow-rate-2 number
  - video-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
  - voice-template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- tcp-performance
  - apply-groups reference
  - apply-groups-exclude reference
  - flow-rate number
  - flow-rate-2 number
  - template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- template-retransmit number
- volume
  - rate number
  - template
    - apply-groups reference
    - apply-groups-exclude reference
    - dynamic-fields
      - admin-state keyword
      - field string
    - field-selection keyword
- dns-ip-cache string
  - admin-state keyword

```

configure application-assurance group dns-ip-cache apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **dns-match**
  - **domain** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **expression** *string*
  - **trusted-server-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **server-name** *string*
- **ip-cache**
  - **high-watermark** *number*
  - **low-watermark** *number*
  - **size** *number*
  - **static-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **http-enrich** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **field** *string*
    - **aes-initialization-vector** *string*
    - **anti-spoof** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **calling-line-id** *boolean*
    - **encode**
      - **cert-base64** *reference*
      - **cert-profile** *reference*
      - **key**
        - **type** *keyword*
        - **value** *string*
    - **md5-salt** *string*
    - **name** *string*
    - **static-string** *string*
  - **rat-type-enrichment**
    - **rat-type** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rat-string** *string*
- **http-error-redirect** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **error-code** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **custom-message-size** *number*
  - **http-host** *string*
  - **participant-id** *string*
  - **template** *number*
- **http-notification** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **interval** (*number | keyword*)
  - **script-url** *string*
  - **template** *number*
- **http-redirect** *string*
  - **admin-state** *keyword*

configure application-assurance group http-redirect apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **captive-redirect**
  - **vlan-id** *number*
- **description** *string*
- **redirect-https** *boolean*
- **redirect-url** *string*
- **tcp-client-reset** *boolean*
- **template** *number*
- **ip-identification-assist**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **passive-dns**
    - **monitor** *boolean*
    - **trusted-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **comment** *string*
  - **positive-app-id**
    - **enabled** *boolean*
- **partition** *number*
- **aa-sub-congestion-detection**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **rat-type** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **rtt-threshold** (*number* | *keyword*)
  - **rtt-threshold** (*number* | *keyword*)
  - **rtt-threshold-tolerance** *number*
- **aa-sub-remote** *boolean*
- **access-network-location**
  - **source** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **rat-type** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rtt-threshold** (*number* | *keyword*)
    - **rtt-threshold** (*number* | *keyword*)
    - **rtt-threshold-tolerance** *number*
    - **source-level** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **aqp-initial-lookup** *boolean*
- **cflowd**
  - **export-type** *keyword*
    - **admin-state** *keyword*
    - **app-group** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **rate-choice** *keyword*
  - **application** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **rate-choice** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **description** *string*
- **event-log** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*

configure application-assurance group partition event-log apply-groups-exclude

```

- apply-groups-exclude reference
- buffer-type keyword
- max-entries number
- syslog
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - description string
  - facility keyword
  - port number
  - severity keyword
  - vlan-id number
- gtp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gtp-filter string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gtp-in-gtp keyword
    - gtp-tunnel-database
      - default-tunnel-endpoint-limit number
      - validate-gtp-tunnels boolean
      - validate-sequence-number boolean
      - validate-source-ip-addr boolean
  - imsi-apn-filter
    - default-action keyword
    - entry number
      - action keyword
      - apn string
      - apply-groups reference
      - apply-groups-exclude reference
      - imsi-mcc-mnc-prefix string
      - src-gsn
        - ip-prefix (ipv4-prefix | ipv6-prefix)
        - ip-prefix-list reference
  - log
    - action keyword
    - event-log reference
  - max-payload-length number
  - message-type
    - default-action keyword
    - entry number
      - action keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - value (number | keyword)
  - message-type-gtp-v2
    - default-action keyword
    - entry number
      - action keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - value (number | keyword)
  - gtpc-inspection boolean
  - log
    - action keyword
    - event-log reference
  - mode keyword
- http-match-all-requests boolean
- http-x-online-host boolean
- ip-identification-contribute boolean
- ip-prefix-list string
  - apply-groups reference
  - apply-groups-exclude reference

```

configure application-assurance group partition ip-prefix-list description

```

- description string
- prefix (ipv4-prefix | ipv6-prefix)
  - apply-groups reference
  - apply-groups-exclude reference
  - name string
- policy
  - app-filter
    - entry number
      - admin-state keyword
      - application reference
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - expression number
        - apply-groups reference
        - apply-groups-exclude reference
        - eq string
        - neq string
        - type keyword
      - flow-setup-direction keyword
      - http-match-all-requests boolean
      - http-port
        - eq
          - port-list reference
          - port-number number
        - neq
          - port-list reference
          - port-number number
      - ip-identification-assist boolean
      - ip-protocol
        - eq (number | keyword)
        - neq (number | keyword)
      - network-address
        - eq
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
        - neq
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
      - protocol
        - eq (string | named-item)
        - neq (string | named-item)
      - server-address
        - eq
          - dns-ip-cache reference
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
          - masked-ip
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - netmask (ipv4-address-no-zone | ipv6-address-no-zone)
        - neq
          - dns-ip-cache reference
          - ip-prefix (ipv4-prefix | ipv6-prefix)
          - ip-prefix-list reference
          - masked-ip
            - address (ipv4-address-no-zone | ipv6-address-no-zone)
            - netmask (ipv4-address-no-zone | ipv6-address-no-zone)
      - server-port
        - eq
          - first-packet-policy keyword
          - port-list reference
          - port-number number
          - range
            - end number

```



configure application-assurance group partition policy app-filter entry server-port eq range start

- **start** *number*
- **gt**
  - **port-number** *number*
- **lt**
  - **port-number** *number*
- **neq**
  - **port-list** *reference*
  - **port-number** *number*
  - **range**
    - **end** *number*
    - **start** *number*
- **app-group** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **charging-group** *reference*
- **description** *string*
- **export-id** *number*
- **app-profile** *string*
  - **aa-sub-suppressible** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **capacity-cost** *number*
  - **characteristic** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **value** *reference*
  - **description** *string*
  - **divert** *boolean*
- **app-qos-policy**
  - **entry** *number*
    - **action**
      - **abandon-tcp-optimization** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth-policer**
        - **anl** *reference*
        - **dual-bucket** *reference*
        - **single-bucket** *reference*
      - **dns-ip-cache** *reference*
      - **drop** *boolean*
      - **error-drop**
        - **event-log** *reference*
      - **flow-count-limit-policer**
        - **event-log** *reference*
        - **policer-name** *reference*
      - **flow-setup-rate-policer**
        - **event-log** *reference*
        - **policer-name** *reference*
      - **fragment-drop**
        - **drop-scope** *keyword*
        - **event-log** *reference*
      - **gtp-filter** *reference*
      - **http-enrich** *reference*
      - **http-error-redirect** *reference*
      - **http-notification** *reference*
      - **http-redirect**
        - **flow-type** *keyword*
        - **name** *reference*
      - **mirror-source**
        - **all-inclusive** *boolean*
        - **mirror-service** *reference*
      - **overload-drop**
        - **event-log** *reference*
    - **remark**

configure application-assurance group partition policy app-qos-policy entry action remark dscp

```

- dscp
  - in-profile keyword
  - out-profile keyword
- fc keyword
- priority keyword
- sctp-filter reference
- session-filter reference
- tcp-mss-adjust number
- tcp-validate reference
- tls-enrich reference
- url-filter
  - characteristic reference
  - name reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- aa-sub
  - esm
    - eq string
    - neq string
  - esm-mac
    - eq string
    - neq string
  - sap
    - eq string
    - neq string
  - spoke-sdp
    - eq string
    - neq string
  - transit
    - eq string
    - neq string
- aa-sub-tethering keyword
- app-group
  - eq reference
  - neq reference
- application
  - eq reference
  - neq reference
- apply-groups reference
- apply-groups-exclude reference
- characteristic reference
  - apply-groups reference
  - apply-groups-exclude reference
  - eq reference
  - neq reference
- charging-group
  - eq reference
  - neq reference
- dscp
  - eq keyword
  - neq keyword
- dst-ip
  - eq
    - ip-prefix (ipv4-prefix | ipv6-prefix)
    - ip-prefix-list reference
  - neq
    - ip-prefix (ipv4-prefix | ipv6-prefix)
    - ip-prefix-list reference
- dst-port
  - eq
    - port-list reference

```

configure application-assurance group partition policy app-qos-policy entry match dst-port eq port-number

```

    - port-number number
    - range
      - end number
      - start number
  - neq
    - port-list reference
    - port-number number
    - range
      - end number
      - start number
  - flow-attribute string
  - apply-groups reference
  - apply-groups-exclude reference
  - confidence
    - eq number
    - gte number
    - lt number
  - ip-protocol
    - eq (number | keyword)
    - neq (number | keyword)
  - src-ip
    - eq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
    - neq
      - ip-prefix (ipv4-prefix | ipv6-prefix)
      - ip-prefix-list reference
  - src-port
    - eq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
    - neq
      - port-list reference
      - port-number number
      - range
        - end number
        - start number
  - traffic-direction keyword
- app-service-options
- characteristic string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-value string
  - value string
- application string
  - app-group reference
  - apply-groups reference
  - apply-groups-exclude reference
  - charging-group reference
  - description string
  - export-id number
- apply-groups reference
- apply-groups-exclude reference
- charging-filter
  - entry number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - charging-group reference
  - description string
  - match

```

configure application-assurance group partition policy charging-filter entry match app-group

```

    - app-group
      - eq reference
      - neq reference
    - application
      - eq reference
      - neq reference
    - flow-attribute string
      - apply-groups reference
      - apply-groups-exclude reference
    - confidence
      - eq number
      - gte number
      - lt number
    - tethered-flow
  - charging-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - export-id number
    - notify-start-stop keyword
  - custom-protocol string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - expression number
      - apply-groups reference
      - apply-groups-exclude reference
    - direction keyword
    - eq string
    - offset number
    - ip-protocol keyword
  - default-charging-group reference
  - default-tethered-charging-group reference
- policy-override
  - aa-sub
    - sap string
      - apply-groups reference
      - apply-groups-exclude reference
      - characteristic reference
        - apply-groups reference
        - apply-groups-exclude reference
        - value reference
    - spoke-sdp string
      - apply-groups reference
      - apply-groups-exclude reference
      - characteristic reference
        - apply-groups reference
        - apply-groups-exclude reference
        - value reference
    - transit string
      - apply-groups reference
      - apply-groups-exclude reference
      - characteristic reference
        - apply-groups reference
        - apply-groups-exclude reference
        - value reference
  - port-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port number
    - range start number end number
  - sctp-filter string

```

configure application-assurance group partition sctp-filter apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **event-log** *reference*
- **ppid**
  - **default-action** *keyword*
  - **entry** *number*
    - **action** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **value** (*number* | *keyword*)
- **ppid-range**
  - **max** *number*
  - **min** *number*
- **session-filter** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action**
    - **action** *keyword*
    - **event-log** *reference*
  - **description** *string*
  - **entry** *number*
    - **action**
      - **deny**
      - **event-log** *reference*
      - **http-redirect** *reference*
      - **permit**
      - **tcp-optimizer** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **match**
    - **dst-ip**
      - **dns-ip-cache** *reference*
      - **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)
      - **ip-prefix-list** *reference*
    - **dst-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **port-list** *reference*
      - **range**
        - **end** *number*
        - **start** *number*
    - **ip-protocol** (*number* | *keyword*)
    - **src-ip**
      - **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)
      - **ip-prefix-list** *reference*
    - **src-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **port-list** *reference*
      - **range**
        - **end** *number*
        - **start** *number*
  - **shallow-inspection** *boolean*
  - **statistics**
    - **aa-admit-deny**
      - **accounting-policy** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **collect-stats** *boolean*
      - **gtp-filter-stats** *boolean*

configure application-assurance group partition statistics aa-admit-deny policer-stats

- **policer-stats** *boolean*
- **policer-stats-resources** *boolean*
- **sctp-filter-stats** *boolean*
- **session-filter-stats** *boolean*
- **tcp-validate-stats** *boolean*
- **aa-app-group**
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
- **aa-application**
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
- **aa-partition**
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
  - **tethering-stats** *boolean*
  - **traffic-type-stats** *boolean*
- **aa-protocol**
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
- **aa-sub**
  - **accounting-policy** *reference*
  - **aggregate-stats-export-using** *keyword*
  - **app-group** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-using** *keyword*
  - **application** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-using** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **charging-group** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-using** *keyword*
  - **collect-stats** *boolean*
  - **exclude-tcp-retrans** *boolean*
  - **max-throughput-stats** *boolean*
  - **protocol** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-using** *keyword*
  - **radius-accounting-policy** *reference*
  - **usage-monitoring** *boolean*
- **aa-sub-study** *keyword*
  - **aa-sub**
    - **esm** *string*
    - **esm-mac** *string*
    - **sap** *string*
    - **spoke-sdp** *string*
    - **transit** *string*
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

configure application-assurance group partition statistics aa-sub-study collect-stats

```

-   - collect-stats boolean
- tcp-validate string
-   - apply-groups reference
-   - apply-groups-exclude reference
-   - description string
-   - log
-     - all boolean
-     - event-log reference
-   - strict boolean
- tethering-detection
-   - admin-state keyword
-   - apply-groups reference
-   - apply-groups-exclude reference
-   - single-device
-     - expected-ttl number
-     - invert-match boolean
- ttl-monitor
-   - tcp-protocols keyword
-   - udp-protocols keyword
- threshold-crossing-alert
-   - criteria keyword direction keyword
-   - apply-groups reference
-   - apply-groups-exclude reference
-   - high-watermark number
-   - low-watermark number
-   - gtp-filter reference criteria keyword direction keyword
-     - apply-groups reference
-     - apply-groups-exclude reference
-     - high-watermark number
-     - low-watermark number
-   - gtp-filter-entry reference entry-id number direction keyword
-     - apply-groups reference
-     - apply-groups-exclude reference
-     - high-watermark number
-     - low-watermark number
-   - policer string direction keyword
-     - apply-groups reference
-     - apply-groups-exclude reference
-     - high-watermark number
-     - low-watermark number
-   - sctp-filter reference criteria keyword direction keyword
-     - apply-groups reference
-     - apply-groups-exclude reference
-     - high-watermark number
-     - low-watermark number
-   - sctp-filter-entry reference entry-id reference direction keyword
-     - apply-groups reference
-     - apply-groups-exclude reference
-     - high-watermark number
-     - low-watermark number
-   - session-filter reference criteria keyword direction keyword
-     - apply-groups reference
-     - apply-groups-exclude reference
-     - high-watermark number
-     - low-watermark number
-   - session-filter-entry reference entry-id reference direction keyword
-     - apply-groups reference
-     - apply-groups-exclude reference
-     - high-watermark number
-     - low-watermark number
-   - tcp-validate reference direction keyword
-     - apply-groups reference
-     - apply-groups-exclude reference
-     - high-watermark number

```

configure application-assurance group partition threshold-crossing-alert tcp-validate low-watermark

- **low-watermark** *number*
- **transit-ip-policy** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-app-profile** *reference*
- **description** *string*
- **detect-seen-ip** *boolean*
- **dhcp**
  - **admin-state** *keyword*
- **diameter**
  - **admin-state** *keyword*
  - **application-policy** *reference*
- **ipv6-address-prefix-length** *number*
- **radius**
  - **admin-state** *keyword*
  - **authentication-policy** *reference*
  - **seen-ip-radius-acct-policy** *reference*
- **static-aa-sub** *string*
  - **app-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip** (*ipv4-unicast-address | ipv6-prefix*)
- **sub-ident-policy** *reference*
- **transit-auto-create**
  - **admin-state** *keyword*
  - **inactivity-monitor** *boolean*
- **transit-prefix-policy** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **aa-sub** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **match**
      - **aa-sub-ip** (*ipv4-prefix | ipv6-prefix*)
      - **network-ip** (*ipv4-prefix | ipv6-prefix*)
  - **static-aa-sub** *string*
    - **app-profile** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **is-remote** *boolean*
- **wap1x**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **policer**
  - **anl-bandwidth-policer** *string*
    - **action** *keyword*
    - **adaptation-rule**
      - **pir** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **mbs** *number*
    - **rate-percentage** *number*
    - **rate-percentage-stage-2** *number*
  - **dual-bucket-bandwidth-policer** *string*
    - **adaptation-rule**
      - **cir** *keyword*
      - **pir** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cbs** *number*



configure application-assurance group policer dual-bucket-bandwidth-policer cir

```

- cir (number | keyword)
- congestion-override
  - cbs number
  - cir (number | keyword)
  - mbs number
  - pir (number | keyword)
- congestion-override-stage-2
  - cbs number
  - cir (number | keyword)
  - mbs number
  - pir (number | keyword)
- description string
- mbs number
- pir (number | keyword)
- time-of-day-override number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs number
  - cir (number | keyword)
  - description string
  - mbs number
  - pir (number | keyword)
  - time-range
    - daily
      - all-days
      - end string
      - on keyword
      - start string
    - weekly
      - end
        - day keyword
        - time string
      - start
        - day keyword
        - time string
- flow-count-limit-policer string
  - action keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - granularity keyword
  - limit-gtp-flows boolean
  - peak-flow-count (number | keyword)
  - time-of-day-override number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - peak-flow-count (number | keyword)
    - time-range
      - daily
        - all-days
        - end string
        - on keyword
        - start string
      - weekly
        - end
          - day keyword
          - time string
        - start
          - day keyword
          - time string
- flow-setup-rate-policer string

```

configure application-assurance group policer flow-setup-rate-policer action

- **action** *keyword*
- **adaptation-rule**
  - **peak-flow-setup-rate** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **flow-setup-rate-burst-size** *number*
- **granularity** *keyword*
- **peak-flow-setup-rate** (*number* | *keyword*)
- **time-of-day-override** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **flow-setup-rate-burst-size** *number*
  - **peak-flow-setup-rate** (*number* | *keyword*)
  - **time-range**
    - **daily**
      - **all-days**
      - **end** *string*
      - **on** *keyword*
      - **start** *string*
    - **weekly**
      - **end**
        - **day** *keyword*
        - **time** *string*
      - **start**
        - **day** *keyword*
        - **time** *string*
- **single-bucket-bandwidth-policer** *string*
  - **action** *keyword*
  - **adaptation-rule**
    - **pir** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **congestion-override**
    - **mbs** *number*
    - **pir** (*number* | *keyword*)
  - **congestion-override-stage-2**
    - **mbs** *number*
    - **pir** (*number* | *keyword*)
  - **description** *string*
  - **granularity** *keyword*
  - **mbs** *number*
  - **pir** (*number* | *keyword*)
  - **time-of-day-override** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **mbs** *number*
    - **pir** (*number* | *keyword*)
    - **time-range**
      - **daily**
        - **all-days**
        - **end** *string*
        - **on** *keyword*
        - **start** *string*
      - **weekly**
        - **end**
          - **day** *keyword*
          - **time** *string*
        - **start**
          - **day** *keyword*

configure application-assurance group policer single-bucket-bandwidth-policer time-of-day-override time-range weekly start time

```

    - time string
- tcp-optimizer string
- apply-groups reference
- apply-groups-exclude reference
- dack-timeout number
- description string
- initial-cwnd number
- initial-ss-threshold (number | keyword)
- network-rtt-threshold number
- tcp-stack keyword
- url-filter string
- admin-state keyword
- apply-function-specific-behaviour boolean
- apply-groups reference
- apply-groups-exclude reference
- default-action
  - allow
  - block-all
  - block-http-redirect reference
- description string
- http-redirect reference
- http-request-filtering keyword
- icap
  - custom-x-header string
  - default-action
    - allow
    - block-all
    - block-http-redirect reference
  - http-redirect reference
  - server (ipv4-address-no-zone | ipv6-address-no-zone) port number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - vlan-id number
- local-filtering
  - allow-list reference
  - deny-list reference
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action
    - allow
    - block-all
    - block-http-redirect reference
    - http-redirect reference
- web-service
  - category-set number
  - classification-overrides
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - category-name string
      - expression string
  - classifier keyword
  - default-action
    - allow
    - block-all
    - block-http-redirect reference
  - default-profile reference
  - dns-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - fqdn string
  - http-redirect reference
  - profile string
  - apply-groups reference

```

configure application-assurance group url-filter web-service profile apply-groups-exclude

```

    - apply-groups-exclude reference
    - block
      - category string
      - description string
    - server (ipv4-address-no-zone | ipv6-address-no-zone) port number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - vlan-id number
  - url-list string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - file string
    - host-expressions boolean
    - key string
    - size keyword
- http-enrich
  - field string
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
- http-error-redirect
  - error-code number
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
  - template number
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
- http-notification
  - template number
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
- http-redirect
  - template number
    - apply-groups reference
    - apply-groups-exclude reference
    - comment string
- protocol string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- radius-accounting-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - interim-update-interval number
  - radius-accounting-server
    - access-algorithm keyword
    - retry number
    - router-instance string
    - server number
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - port number
      - secret string
      - source-address string
    - timeout number

```

---

configure application-assurance radius-accounting-policy significant-change

- **significant-change** *number*
- **usage-alert-thresholds**
- **bit-rate-high-wmark** (*number* | *keyword*)
- **bit-rate-low-wmark** *number*
- **datapath-cpu-high-wmark** (*number* | *keyword*)
- **datapath-cpu-low-wmark** *number*
- **flow-setup-rate-high-wmark** (*number* | *keyword*)
- **flow-setup-rate-low-wmark** *number*
- **flow-table-high-wmark** *number*
- **flow-table-low-wmark** *number*
- **packet-rate-high-wmark** (*number* | *keyword*)
- **packet-rate-low-wmark** *number*

### 3.3.1 application-assurance command descriptions

#### application-assurance

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

#### **aarp** [[aarp-id](#)] *number*

Synopsis	Enter the <b>aarp</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>
Tree	<a href="#">aarp</a>
Description	Commands in this context define an Application Assurance Redundancy Protocol (AARP) instance. This instance is paired with the same AARP ID in a peer node, as part of the configuration to provide flow and packet asymmetry removal for traffic of a multi-homed SAP or spoke SDP.
Max. Instances	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### [\[aarp-id\]](#) *number*

Synopsis	AARP ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>
Tree	<a href="#">aarp</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the AARP instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**master-selection-mode** *keyword***WARNING:**

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

Synopsis	AARP master selection mode
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>master-selection-mode</b> <i>keyword</i>
Tree	<a href="#">master-selection-mode</a>
Description	This command configures the AARP mode of operation with the peer instance. The modes affect the AARP state machine behavior according to the specified behavior.
Options	minimize-switchovers, inter-chassis-efficiency, priority-based-balance
Default	minimize-switchovers
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

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

Synopsis	AARP peer IP address
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Description	This command defines the IP address of the AARP peer router, which must be a routable system IP address. If no peer is configured when the AARP is administratively enabled, it is configured as a single node AARP instance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-endpoint**

Synopsis	Enter the <b>peer-endpoint</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>peer-endpoint</b>
Tree	<a href="#">peer-endpoint</a>
Description	Commands in this context specify the attributes of the peer endpoint parent AA subscriber of the AARP peer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sap**

Synopsis	Enable the <b>sap</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <b>peer-endpoint</b> <b>sap</b>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>sap</b> or <b>spoke-sdp</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**encap-type** *keyword*

Synopsis	Encapsulation type for peer endpoint SAP
----------	--



Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <a href="#">peer-endpoint</a> <a href="#">sap</a> <a href="#">encap-type</a> <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	null, dot1q, qinq
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sap-id** *string*

Synopsis	AARP peer endpoint SAP ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <a href="#">peer-endpoint</a> <a href="#">sap</a> <a href="#">sap-id</a> <i>string</i>
Tree	<a href="#">sap-id</a>
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** *string*

Synopsis	AARP peer endpoint spoke SDP
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <a href="#">peer-endpoint</a> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>sap</b> or <b>spoke-sdp</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** *number*



#### **WARNING:**

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

Synopsis	AARP priority
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i> <a href="#">priority</a> <i>number</i>

Tree	<a href="#">priority</a>
Description	This command defines the priority for the AARP instance. The priority value is used to determine the master and backup upon initialization or rebalance.
Range	0 to 255
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **cflowd**

Synopsis	Enter the <b>cflowd</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">cflowd</a>
Tree	<a href="#">cflowd</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>field</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">cflowd</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **[field-name]** *string*

Synopsis	Cflowd record field name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">cflowd</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">cflowd field</a> <i>string</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-attribute**

Synopsis	Enter the <b>flow-attribute</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">flow-attribute</a>
Tree	<a href="#">flow-attribute</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>attribute</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">flow-attribute</a> <a href="#">attribute</a> <i>string</i>
Tree	<a href="#">attribute</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[attribute-name]** *string*

Synopsis	Attribute name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">flow-attribute</a> <a href="#">attribute</a> <i>string</i>
Tree	<a href="#">attribute</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">flow-attribute</a> <a href="#">attribute</a> <i>string</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i>
Tree	<a href="#">group</a>
Description	Commands in this context configure an Application Assurance group and partition parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[aa-group-id]** *number*

Synopsis	AA group ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i>
Tree	<a href="#">group</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**certificate-profile** [[cert-prof-name](#)] *string*

Synopsis	Enter the <b>certificate-profile</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">certificate-profile</a> <i>string</i>
Tree	<a href="#">certificate-profile</a>
Description	Commands in this context create a certificate profile to be used for certificate-based encryption in HTTP header enrichment.

Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[cert-prof-name]** *string*

Synopsis AA group certificate profile name  
Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string*  
Tree [certificate-profile](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of the AA certificate profile  
Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string* **admin-state** *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [application-assurance](#) [group](#) *number* [certificate-profile](#) *string* **description** *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**file string****WARNING:**

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

Synopsis	Certificate file name
Context	<b>configure</b> <a href="#">application-assurance group number certificate-profile string file string</a>
Tree	<a href="#">file</a>
String Length	1 to 95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cflowd**

Synopsis	Enter the <b>cflowd</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd</a>
Tree	<a href="#">cflowd</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of cflowd export
Context	<b>configure</b> <a href="#">application-assurance group number cflowd admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>collector</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number cflowd collector (ipv4-address-no-zone   ipv6-address-no-zone) port number</a>
Tree	<a href="#">collector</a>

Description	<p>Commands in this context configure flow data collectors for cflowd data.</p> <p>In the current release, the system supports IPv4 addresses only for the cflowd collector host.</p> <p>In the current release, the system supports IPv4 addresses only for the cflowd collector host.</p>
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote cflowd collector host
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a>
Tree	<a href="#">collector</a>
Description	<p>This command configures the IP address of the remote cflowd collector host.</p> <p>In the current release, the system supports IPv4 addresses only for the cflowd collector host.</p>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port number**

Synopsis	Cflowd collector host port number
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a>
Tree	<a href="#">collector</a>
Description	This command configures the UDP port number used by the remote cflowd collector host.
Range	1 to 65535
MD-CLI Default	4739
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the cflowd export
Context	<b>configure</b> <a href="#">application-assurance group number cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comprehensive**

Synopsis	Enter the <b>comprehensive</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd comprehensive</a>
Tree	<a href="#">comprehensive</a>
Description	Commands in this context configure cflowd comprehensive records output parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-rate** *number*

Synopsis	Cflowd flow sampling rate
Context	<b>configure</b> <a href="#">application-assurance group number cflowd comprehensive flow-rate number</a>
Tree	<a href="#">flow-rate</a>
Range	1 to 1000



Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-rate-2** *number*

Synopsis	Cflowd per-flow second sampling rate
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd comprehensive flow-rate-2</a> <i>number</i>
Tree	<a href="#">flow-rate-2</a>
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template**

Synopsis	Enter the <b>template</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd comprehensive template</a>
Tree	<a href="#">template</a>
Description	Commands in this context configure the template for comprehensive fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dynamic-fields**

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd comprehensive template</a> <a href="#">dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure the fields that are included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the dynamic fields
Context	<b>configure</b> <a href="#">application-assurance group number cflowd comprehensive template dynamic-fields admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for <b>field</b>
Context	<b>configure</b> <a href="#">application-assurance group number cflowd comprehensive template dynamic-fields field string</a>
Tree	<a href="#">field</a>
Description	This command adds a dynamic field to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance group number cflowd comprehensive template dynamic-fields field string</a>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   deviceOsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   chargeId   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei_roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>When AA is deployed in FWA SR, the following value applies: ApnExtended</li> </ul>

- For the rtp-voice template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postItpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs | MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postItpPrecedence | aaProt | aaApp | aaAppGrp | rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterIframeGap | imageWidth | imageHeight | frameRate | slicesPerIframe | SSRC | videoInterlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired | BFrameReceived | BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrivalJitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postItpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### field-selection *keyword*

Synopsis Field selection method

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [comprehensive](#) [template](#) [field-selection](#) *keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Options legacy, dynamic

Default legacy

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### direct-export

Synopsis Enter the **direct-export** context

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [direct-export](#)

Tree	<a href="#">direct-export</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collector** [[collector-id](#)] *number*

Synopsis	Enter the <b>collector</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd direct-export collector number</a>
Tree	<a href="#">collector</a>
Max. Instances	16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[collector-id]** *number*

Synopsis	Cflowd direct export collector ID
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd direct-export collector number</a>
Tree	<a href="#">collector</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd direct-export collector number</a> <a href="#">address (ipv4-address-no-zone   ipv6-address-no-zone) port number</a>
Tree	<a href="#">address</a>
Description	Commands in this context configure the cflowd direct export collector IP address. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.
Max. Instances	2
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the remote cflowd collector host

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [direct-export](#) [collector](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Tree [address](#)

Description This command configures the IP address of the remote cflowd collector host.  
In the current release, the system supports IPv4 addresses only for the cflowd collector host.

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port number**

Synopsis Cflowd collector host port number

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [direct-export](#) [collector](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Tree [address](#)

Description This command configures the UDP port number used by the remote cflowd collector host.

Range 1 to 65535

MD-CLI 4739

Default

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of the direct export collector

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [direct-export](#) [collector](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Description	This command sets the administrative state of the cflowd direct export collector. In the current release, the system supports IPv4 addresses only for the cflowd direct export collector.
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd direct-export collector number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vlan-id number**

Synopsis	Cflowd direct export VLAN ID
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd direct-export vlan-id number</a>
Tree	<a href="#">vlan-id</a>
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-override**

Synopsis	Enter the <b>export-override</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd export-override</a>
Tree	<a href="#">export-override</a>
Description	Commands in this context configure the AA subtype used in the cflowd record export. The cflowd statistics exported to the cflowd collector look identical to AA for the type of system defined by the mode. The following cflowd export fields are affected: <ul style="list-style-type: none"> <li>The cflowd export observation point (field 138) mode is derived from the export-override category that is selected.</li> </ul>

- The cflowd export AA\_Subscriber\_Type (field 12) mode is modified as configured, using existing field types.
- The cflowd interface name is used as the sub-ID field, optionally modified to use the configured **mode** and **prefix** commands for global identifiers.

All AA cflowd record types are affected by export override. To change the export override or prefix, cflowd must first be disabled. When this command is set back to the default, the prefix is also set back to its default.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### mode keyword



#### WARNING:

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

Synopsis	AA cflowd export override mode
Context	<b>configure</b> application-assurance group number cflowd export-override mode keyword
Tree	mode
Description	This command specifies the type of system emulated for the cflowd export.
Options	mobile, ifname-obfuscate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### prefix string



#### WARNING:

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

Synopsis	AA group cflowd export override prefix
Context	<b>configure</b> application-assurance group number cflowd export-override prefix string
Tree	prefix
Description	This command specifies the prefix-string associated with the export override. The prefix string specifies up to an 8 character string. If the 8 character prefix is "ABCDEFG_" for a particular node, the cflowd export override would generate IPv4 interface names such as ABCDEF_255.255.255.255 or IPv6 as ABCDEF_2001:DB8:EF01:2345::/64. By default, the prefix is left blank.
String Length	1 to 8

Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## obfuscation

Synopsis Enter the **obfuscation** context  
Context **configure** [application-assurance group number cflowd obfuscation](#)  
Tree [obfuscation](#)  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aes-128-encryption-key *string*

Synopsis AES-128 encryption key  
Context **configure** [application-assurance group number cflowd obfuscation aes-128-encryption-key string](#)  
Tree [aes-128-encryption-key](#)  
Description This command specifies the AES-128 key used to encrypt export cflowd fields.  
String Length 51  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aes-256-encryption-key *string*

Synopsis AES-256 encryption key  
Context **configure** [application-assurance group number cflowd obfuscation aes-256-encryption-key string](#)  
Tree [aes-256-encryption-key](#)  
Description This command specifies the AES-256 key used to encrypt exported cflowd fields.  
String Length 71  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rtp-performance

Synopsis Enter the **rtp-performance** context



Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance</a>
Tree	<a href="#">rtp-performance</a>
Description	Commands in this context configure cflowd real-time transport protocol (RTP) performance export for the AA group.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## audio-template

Synopsis	Enter the <b>audio-template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance audio-template</a>
Tree	<a href="#">audio-template</a>
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-fields

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance audio-template dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance audio-template dynamic-fields admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for <b>field</b>
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance audio-template dynamic-fields field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	This command adds a list entry for fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance audio-template dynamic-fields field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIppPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flowDuration Milliseconds   postIppPrecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> <li>• For the rtp-video template only, the following values apply: flowStartSeconds   flowDuration Milliseconds   postIppPrecedence   aaProt   aaApp   aaAppGrp   rtpRefClockRate   MOSAV   VSTQ   estimatedPSNR   GoPType   avgGoPLength   avgInterIframeGap   imageWidth   imageHeight   frameRate   slicesPerIframe   SSRC   video Interlaced   IFrameReceived   IFrameImpaired   PFrameReceived   PFrameImpaired   BFrameReceived   BFrameImpaired   SIFrameReceived   SIFrameImpaired  </li> </ul>

SPFrameReceived | SPFrameImpaired |frameInterArrivalJitter| IFrameInterArrival Jitter | avgFrameArrivalDelay

- For the rtp-audio template only, the following values apply: flowStartSeconds | flow DurationMilliseconds |postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurst Count| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtp NumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEst Delay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **field-selection** *keyword*

Synopsis Field selection method

Context **configure** [application-assurance group number cflowd rtp-performance audio-template field-selection keyword](#)

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Options legacy, dynamic

Default legacy

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-rate** *number*

Synopsis Cflowd flow sampling rate

Context **configure** [application-assurance group number cflowd rtp-performance flow-rate number](#)

Tree [flow-rate](#)

Range 1 to 1000

Units flows per second

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-rate-2** *number*

Synopsis	Cflowd per-flow second sampling rate
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">flow-rate-2 number</a>
Tree	<a href="#">flow-rate-2</a>
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**video-template**

Synopsis	Enter the <b>video-template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">video-template</a>
Tree	<a href="#">video-template</a>
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dynamic-fields**

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">video-template</a> <a href="#">dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure dynamic fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the dynamic fields
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">video-template</a> <a href="#">dynamic-fields</a> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for <b>field</b>
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance video-template dynamic-fields field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	This command adds a list entry for the fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance group number cflowd rtp-performance video-template dynamic-fields field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	This command specifies the name of the field to be included in the exported cflowd template. <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   anlType   anlTopology   anlCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> <li>• For the rtp-video template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpRefClock</li> </ul>

Rate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterIframe  
Gap | imageWidth | imageHeight | frameRate | slicesPerIframe | SSRC | video  
Interlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired  
| BFrameReceived | BFrameImpaired | SIFrameReceived | SIFrameImpaired |  
SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrival  
Jitter | avgFrameArrivalDelay

- For the rtp-audio template only, the following values apply: flowStartSeconds | flow  
DurationMilliseconds | postIframePrecedence | aaProt | aaApp | aaAppGrp | rtpBurst  
Count | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtp  
NumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEst  
Delay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### field-selection *keyword*

Synopsis Field selection method

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [rtp-performance](#) [video-template](#)  
[field-selection](#) *keyword*

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the  
exported cflowd template.

Options legacy, dynamic

Default legacy

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### voice-template

Synopsis Enter the **voice-template** context

Context **configure** [application-assurance](#) [group](#) *number* [cflowd](#) [rtp-performance](#) [voice-template](#)

Tree [voice-template](#)

Description Commands in this context configure the fields to be included in the exported cflowd  
template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-fields

Synopsis Enter the **dynamic-fields** context

Context **configure** [application-assurance group number cflowd rtp-performance voice-template dynamic-fields](#)

Tree [dynamic-fields](#)

Description Commands in this context configure dynamic fields to be included in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of the dynamic fields

Context **configure** [application-assurance group number cflowd rtp-performance voice-template dynamic-fields admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Add a list entry for **field**

Context **configure** [application-assurance group number cflowd rtp-performance voice-template dynamic-fields field string](#)

Tree [field](#)

Description This command adds a cflowd record field to the list included in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">voice-template</a> <a href="#">dynamic-fields</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> <li>• For the rtp-video template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpRefClock Rate   MOSAV   VSTQ   estimatedPSNR   GoPType   avgGoPLength   avgInterFrame Gap   imageWidth   imageHeight   frameRate   slicesPerFrame   SSRC   video Interlaced   IFrameReceived   IFrameImpaired   PFrameReceived   PFrameImpaired   BFrameReceived   BFrameImpaired   SIFrameReceived   SIFrameImpaired   SPFrameReceived   SPFrameImpaired   frameInterArrivalJitter   IFrameInterArrival Jitter   avgFrameArrivalDelay</li> <li>• For the rtp-audio template only, the following values apply: flowStartSeconds   flow DurationMilliseconds   postIpPrecedence   aaProt   aaApp   aaAppGrp   rtpBurst Count   rtpAvgBurstLengthPkts   rtpGapCount   rtpAvgGapLengthPkts   PPDVM   rtp NumAudioChannels   rtpRefClockRate   rtpPeakAudioBw   SSRC   hostName</li> <li>• For volume and comprehensive templates, the following values apply: tcpSessionEst Delay   tcpRetransmittedBytes   tcpRetransmittedPackets</li> </ul>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**field-selection** *keyword*

Synopsis	Field selection method
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">rtp-performance</a> <a href="#">voice-template</a> <b>field-selection</b> <i>keyword</i>
Tree	<a href="#">field-selection</a>
Description	This command configures the method for selecting the fields to be included in the exported cflowd template.
Options	legacy, dynamic
Default	legacy
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-performance**

Synopsis	Enter the <b>tcp-performance</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd</a> <b>tcp-performance</b>
Tree	<a href="#">tcp-performance</a>
Description	Commands in this context configure TCP performance parameters for the group cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-rate** *number*

Synopsis	Cflowd flow sampling rate
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">cflowd</a> <a href="#">tcp-performance</a> <b>flow-rate</b> <i>number</i>
Tree	<a href="#">flow-rate</a>
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-rate-2** *number*

Synopsis	Cflowd per-flow second sampling rate
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Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance flow-rate-2</a> <i>number</i>
Tree	<a href="#">flow-rate-2</a>
Range	1 to 1000
Units	flows per second
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## template

Synopsis	Enter the <b>template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance template</a>
Tree	<a href="#">template</a>
Description	Commands in this context configure the template for cflowd TCP performance fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-fields

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance template dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the dynamic fields
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance template dynamic-fields admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for <b>field</b>
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance template dynamic-fields field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	This command adds a list entry for fields to include in the exported cflowd template.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[field-name]** *string*

Synopsis	Cflowd template dynamic field name
Context	<b>configure</b> <a href="#">application-assurance group number cflowd tcp-performance template dynamic-fields field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	<p>This command specifies the name of the field to be included in the exported cflowd template.</p> <ul style="list-style-type: none"> <li>• Common to all templates are the following values: flowStartSeconds   flowDuration Milliseconds   postIppPrecedence   aaProt   aaApp   aaAppGrp   hostName   hostName Extended   deviceId   deviceMfgId   deviceOsId   ipFamily   deviceOsVer1   device OsVer2   deviceOsVer3   aniType   aniTopology   aniCongestionState   apn   charge Id   mnc   imsi   msisdn   sgw-sgsnAddr   pgw-ggsnAddr   bsid   ratType   regionId   cellId   timeZone   aaChargingGrp   flowAttr_video   flowAttr_abr_service   flowAttr_audio   flowAttr_encrypted   flowAttr_download   flowAttr_upload   flowAttr_realtime_communication   aaSubTetheringState   imei   ipTTL   imei roamingStatus   mcc   uli   chargingChar   plmnid   customerId</li> <li>• When AA is deployed in FWA SR, the following value applies: ApnExtended</li> <li>• For the rtp-voice template only, the following values apply: flowStartSeconds   flowDuration Milliseconds   postIppPrecedence   aaProt   aaApp   aaAppGrp   rtpBurstCount   rtpAvgBurstLengthMs   rtpGapCount   rtpAvgGapLengthMs   MAPDV   RBurst   RGap   SSRC</li> <li>• For the rtp-video template only, the following values apply: flowStartSeconds   flowDuration Milliseconds   postIppPrecedence   aaProt   aaApp   aaAppGrp   rtpRefClockRate   MOSAV   VSTQ   estimatedPSNR   GoPType   avgGoPLength   avgInterIframeGap   imageWidth   imageHeight   frameRate   slicesPerIframe   SSRC   video Interlaced   IFrameReceived   IFrameImpaired   PFrameReceived   PFrameImpaired   BFrameReceived   BFrameImpaired   SIFrameReceived   SIFrameImpaired  </li> </ul>

SPFrameReceived | SPFrameImpaired | frameInterArrivalJitter | IFrameInterArrivalJitter | avgFrameArrivalDelay

- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount | rtpAvgBurstLengthPkts | rtpGapCount | rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels | rtpRefClockRate | rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes | tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **field-selection** *keyword*

Synopsis Field selection method

Context **configure** [application-assurance group number cflowd tcp-performance template field-selection keyword](#)

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Options legacy, dynamic

Default legacy

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template-retransmit** *number*

Synopsis Template retransmit time

Context **configure** [application-assurance group number cflowd template-retransmit number](#)

Tree [template-retransmit](#)

Range 10 to 600

Units seconds

Default 600

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## volume

Synopsis	Enter the <b>volume</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd volume</a>
Tree	<a href="#">volume</a>
Description	Commands in this context configure the cflowd volume export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rate number

Synopsis	Cflowd packet sampling rate
Context	<b>configure</b> <a href="#">application-assurance group number cflowd volume rate number</a>
Tree	<a href="#">rate</a>
Range	1 to 10000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## template

Synopsis	Enter the <b>template</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd volume template</a>
Tree	<a href="#">template</a>
Description	Commands in this context configure the template for cflowd volume fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-fields

Synopsis	Enter the <b>dynamic-fields</b> context
Context	<b>configure</b> <a href="#">application-assurance group number cflowd volume template dynamic-fields</a>
Tree	<a href="#">dynamic-fields</a>
Description	Commands in this context configure the fields to be included in the exported cflowd template.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of the dynamic fields

Context **configure** [application-assurance](#) [group](#) [number](#) [cflowd](#) [volume](#) [template](#) [dynamic-fields](#)  
**admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Add a list entry for **field**

Context **configure** [application-assurance](#) [group](#) [number](#) [cflowd](#) [volume](#) [template](#) [dynamic-fields](#)  
**field** *string*

Tree [field](#)

Description This command adds a list entry for the fields to be included in the exported cflowd template.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[field-name]** *string*

Synopsis Cflowd template dynamic field name

Context **configure** [application-assurance](#) [group](#) [number](#) [cflowd](#) [volume](#) [template](#) [dynamic-fields](#)  
**field** *string*

Tree [field](#)

Description This command specifies the name of the field to be included in the exported cflowd template.

- Common to all templates are the following values: flowStartSeconds | flowDuration Milliseconds | postItpPrecedence | aaProt | aaApp | aaAppGrp | hostName | hostName Extended | deviceId | deviceMfgId | deviceOsId | ipFamily | deviceOsVer1 | device OsVer2 | deviceOsVer3 | aniType | aniTopology | aniCongestionState | apn | charge Id | mnc | imsi | msisdn | sgw-sgsnAddr | pgw-ggsnAddr | bsid | ratType | regionId | cellId | timeZone | aaChargingGrp | flowAttr\_video | flowAttr\_abr\_service | flowAttr\_audio | flowAttr\_encrypted | flowAttr\_download | flowAttr\_upload | flowAttr\_realtime\_

communication | aaSubTetheringState | imei| ipTTL | imei roamingStatus | mcc | uli | chargingChar | plmnid| customerId

- When AA is deployed in FWA SR, the following value applies: ApnExtended
- For the rtp-voice template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount| rtpAvgBurstLengthMs | rtpGapCount | rtpAvgGapLengthMs |MAPDV | RBurst | RGap | SSRC
- For the rtp-video template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpRefClockRate | MOSAV | VSTQ | estimatedPSNR | GoPType | avgGoPLength | avgInterFrameGap | imageWidth| imageHeight | frameRate |slicesPerIFrame | SSRC |video Interlaced | IFrameReceived | IFrameImpaired | PFrameReceived | PFrameImpaired | BFrameReceived |BFrameImpaired | SIFrameReceived | SIFrameImpaired | SPFrameReceived | SPFrameImpaired |frameInterArrivalJitter| IFrameInterArrival Jitter | avgFrameArrivalDelay
- For the rtp-audio template only, the following values apply: flowStartSeconds | flowDurationMilliseconds | postIpPrecedence | aaProt | aaApp | aaAppGrp | rtpBurstCount| rtpAvgBurstLengthPkts | rtpGapCount |rtpAvgGapLengthPkts | PPDVM | rtpNumAudioChannels |rtpRefClockRate |rtpPeakAudioBw | SSRC | hostName
- For volume and comprehensive templates, the following values apply: tcpSessionEstDelay | tcpRetransmittedBytes |tcpRetransmittedPackets

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### field-selection *keyword*

Synopsis Field selection method

Context **configure** [application-assurance group](#) *number* [cflowd](#) [volume](#) [template](#) [field-selection keyword](#)

Tree [field-selection](#)

Description This command configures the method for selecting the fields to be included in the exported cflowd template.

Options legacy, dynamic

Default legacy

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dns-ip-cache** [**dns-ip-cache-name**] *string*

Synopsis	Enter the <b>dns-ip-cache</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>
Tree	<a href="#">dns-ip-cache</a>
Description	Commands in this context configure a DNS IP cache that is used to snoop DNS requests generated by subscribers, to populate a cache of IP addresses that match a specified list of domain names. In the context of strengthening URL-content charging, Operators may also specify a list of trusted DNS servers to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[dns-ip-cache-name]** *string*

Synopsis	DNS IP cache name within the AA group
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>
Tree	<a href="#">dns-ip-cache</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the AA DNS IP cache object
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string description string</a>



Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dns-match

Synopsis	Enter the <b>dns-match</b> context
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match</a>
Tree	<a href="#">dns-match</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match domain string</a>
Tree	<a href="#">domain</a>
Description	Commands in this context configure a domain expression to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	DNS IP cache domain name
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match domain string</a>
Tree	<a href="#">domain</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**expression string**

Synopsis	AA DNS domain expression to match
Context	<b>configure application-assurance group number dns-ip-cache string dns-match domain string expression string</b>
Tree	<b>expression</b>
Description	This command specifies a domain name expression string used to define a pattern match. The domain expression uses the same syntax as the expressions used in <b>configure application-assurance group partition policy app-filter entry app-filters</b> configuration.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**trusted-server-address [dns-server-address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	Enter the <b>trusted-server-address</b> list instance
Context	<b>configure application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone   ipv6-address-no-zone)</b>
Tree	<b>trusted-server-address</b>
Description	Commands in this context configure a trusted DNS server address. DNS responses from this DNS server are used to populate the DNS IP cache.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[dns-server-address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	Trusted DNS server address
Context	<b>configure application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone   ipv6-address-no-zone)</b>
Tree	<b>trusted-server-address</b>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server-name** *string*

Synopsis	DNS server name
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string dns-match trusted-server-address (ipv4-address-no-zone   ipv6-address-no-zone) server-name string</a>
Tree	<a href="#">server-name</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-cache**

Synopsis	Enter the <b>ip-cache</b> context
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string ip-cache</a>
Tree	<a href="#">ip-cache</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark** *number*

Synopsis	High watermark value for the DNS IP cache
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string ip-cache high-watermark number</a>
Tree	<a href="#">high-watermark</a>
Description	This command configures the high watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the threshold, the system generates a trap.
Range	0 to 100
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**low-watermark** *number*

Synopsis	Low watermark value for the DNS IP cache
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string ip-cache low-watermark number</a>
Tree	<a href="#">low-watermark</a>

Description	This command configures the low watermark value for the DNS IP cache. When the number of cached IP addresses exceeds the high watermark threshold, the system generates a trap based on the high watermark. The trap clears after the number of cached IP addresses drops below the configured low watermark value.
Range	0 to 100
Default	80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**size number**

Synopsis	Maximum number of IP addresses stored in the cache
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string ip-cache size number</a>
Tree	<a href="#">size</a>
Range	10 to 64000
Default	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**static-address** [[static-ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>static-address</b>
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string ip-cache static-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">static-address</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[static-ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Trusted IP address for the DNS IP cache
Context	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string ip-cache static-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">static-address</a>

Description	This command configures an IP address to be used as a trusted IP address. For packets whose destination IP address matches that of the trusted IP address, a cache hit is assumed.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-enrich** [[http-enrich-name](#)] *string*

Synopsis	Enter the <b>http-enrich</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i>
Tree	<a href="#">http-enrich</a>
Description	Commands in this context configure the attributes of the HTTP enrichment policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[http-enrich-name]** *string*

Synopsis	HTTP header enrichment policy name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i>
Tree	<a href="#">http-enrich</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of the HTTP enrichment policy
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>field</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string</a>
Tree	<a href="#">field</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[field-name]** *string*

Synopsis	Field name to insert into the HTTP header
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string</a>
Tree	<a href="#">field</a>
Description	<p>This command specifies the field type to insert into the HTTP header. The command must be repeated for each field to be inserted. The same field cannot be inserted twice into the header under different header names.</p> <p><b>Note:</b> AA can insert two copies of the following fields in the same HTTP header (with a different header name):</p> <p>imei-hyphenated, imei-hyphenated-2, imsi, imsi-2, static-string, static-string-2, user-location-raw, and user-location-raw2.</p> <p>The following field types are supported in any deployment:</p> <p>static-string - header name for the inserted string</p> <p>static-string-2 - header name for the inserted string</p> <p>subscriber-id - header name for the subscriber ID</p> <p>subscriber-ip - header name for the subscriber IP address</p> <p>The following field types are supported in Fixed Wireless Access (FWA) deployments only:</p> <p>apn - complete APN string</p>

apn-ni - APN Network Identifier (APN-NI) used by the UE  
 billing-type - UE charging type (charging characteristics)  
 dynamic-acr - dynamic Anonymous Customer Record (ACR)  
 static-acr - static ACR  
 imei-hyphenated - subscriber IMEI with format AABBBBBB-CCCCCC-EE  
 imei-hyphenated-2 - subscriber IMEI with format AABBBBBB-CCCCCC-EE  
 imei-sv - subscriber IMEI with format AABBBBBBCCCCCEE  
 imsi - subscriber IMSI  
 imsi-2 - subscriber IMSI  
 msisdn - subscriber MSISDN  
 msisdn-ts - subscriber MSISDN appended with the UNIX timestamp  
 msisdn-without-cc - subscriber MSISDN without a country code  
 pgw-ggsn-address - PGW/GGSN address serving the UE  
 plmn-id - Public Land Mobile Network (PLMN) ID of the SGSN/MME  
 rat-type - Radio Access Technology (RAT) type  
 timestamp - timestamp inserted in UNIX time format; for example, 1531204313  
 user-location - UE LOCATION (ULI)  
 user-location-3gpp - ULI encoded as defined in 3GPP 29.061  
 user-location-raw - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX>  
 Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16  
 user-location-raw-2 - ULI in raw format:<ULI-TYPE1>[+<ULI-TYPE2>]=<ULI HEX>  
 Example: x-locinfo: TAI+ECGI=1300622c46130062014adf16

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aes-initialization-vector** *string*

Synopsis	Initialization vector for the AES CBC encryption
Context	<b>configure</b> <i>application-assurance</i> <i>group</i> <i>number</i> <i>http-enrich</i> <i>string</i> <i>field</i> <i>string</i> <b>aes-initialization-vector</b> <i>string</i>
Tree	<a href="#">aes-initialization-vector</a>
Description	This command configures the initialization vector used for the AES CBC encryption. The vector consists of 34 characters, that is, 0x followed by exactly 32 hexadecimal characters.

String Length	34
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **anti-spoof** *boolean*

Synopsis	Enable anti-spoofing
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string anti-spoof boolean</a>
Tree	<a href="#">anti-spoof</a>
Description	When configured to <b>true</b> , this command enables the HTTP header enrichment anti-spoofing functionality.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **calling-line-id** *boolean*

Synopsis	Enable calling line identification
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string calling-line-id boolean</a>
Tree	<a href="#">calling-line-id</a>
Description	When configured to <b>true</b> , this command configures the HTTP header for “x-up-calling-line-id” anti-spoofing.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encode**

Synopsis	Enter the <b>encode</b> context
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string encode</a>
Tree	<a href="#">encode</a>
Description	Commands in this context configure the encoding applied to the HTTP header enrichment field.
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cert-base64** *reference*

Synopsis Certificate profile name

Context **configure** [application-assurance group number](#) [http-enrich string field string encode](#) [cert-base64 reference](#)

Tree [cert-base64](#)

Reference **configure** [application-assurance group number](#) [certificate-profile string](#)

Notes The following elements are part of a choice: **cert-base64**, **cert-profile**, or **key**.

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cert-profile** *reference*

Synopsis Certificate profile name used for encryption

Context **configure** [application-assurance group number](#) [http-enrich string field string encode](#) [cert-profile reference](#)

Tree [cert-profile](#)

Reference **configure** [application-assurance group number](#) [certificate-profile string](#)

Notes The following elements are part of a choice: **cert-base64**, **cert-profile**, or **key**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **key**

Synopsis Enter the **key** context

Context **configure** [application-assurance group number](#) [http-enrich string field string encode](#) [key](#)

Tree [key](#)

Description Commands in this context configure the encryption fields.

Notes The following elements are part of a choice: **cert-base64**, **cert-profile**, or **key**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Encoding type
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string encode key type keyword</a>
Tree	<a href="#">type</a>
Description	This command configures the encoding/ encryption method.
Options	md5, rc4, rc4-md5-base64, aes128, aes256, aes128cbc, aes256cbc
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value string**

Synopsis	Secret key for encrypting the field
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string encode key value string</a>
Tree	<a href="#">value</a>
String Length	1 to 114
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**md5-salt string**

Synopsis	MD5 salt string
Context	<b>configure</b> <a href="#">application-assurance group number http-enrich string field string md5-salt string</a>
Tree	<a href="#">md5-salt</a>
Description	This command configures an MD5 salt string. The configured string is appended to the parameter before performing MD5 hashing of the field.
String Length	1 to 16
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name** *string***WARNING:**

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

Synopsis	HTTP header field name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">field</a> <a href="#">string</a> <a href="#">name</a> <a href="#">string</a>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**static-string** *string*

Synopsis	HTTP header enrichment template field static string
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">field</a> <a href="#">string</a> <a href="#">static-string</a> <a href="#">string</a>
Tree	<a href="#">static-string</a>
String Length	1 to 16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rat-type-enrichment**

Synopsis	Enter the <b>rat-type-enrichment</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">rat-type-enrichment</a>
Tree	<a href="#">rat-type-enrichment</a>
Description	Commands in this context configure Radio Access Type (RAT) enrichment.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rat-type** [[rat-type-name](#)] *keyword*

Synopsis	Enter the <b>rat-type</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">http-enrich</a> <a href="#">string</a> <a href="#">rat-type-enrichment</a> <a href="#">rat-type</a> <a href="#">keyword</a>

Tree	<a href="#">rat-type</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[rat-type-name]** *keyword*

Synopsis	RAT type name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">rat-type-enrichment</a> <a href="#">rat-type</a> <i>keyword</i>
Tree	<a href="#">rat-type</a>
Description	This command configures a customised RAT value for the specified RAT-Type.
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rat-string** *string*

Synopsis	Customised RAT type value
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-enrich</a> <i>string</i> <a href="#">rat-type-enrichment</a> <a href="#">rat-type</a> <i>keyword</i> <a href="#">rat-string</a> <i>string</i>
Tree	<a href="#">rat-string</a>
String Length	1 to 31
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-error-redirect** [[http-error-redirect-name](#)] *string*

Synopsis	Enter the <b>http-error-redirect</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-error-redirect</a> <i>string</i>
Tree	<a href="#">http-error-redirect</a>
Description	Commands in this context configure an HTTP error redirect policy that contains important information relevant to the redirect server.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[http-error-redirect-name]** *string*

Synopsis HTTP error redirect policy name

Context **configure** [application-assurance group number](#) [http-error-redirect string](#)

Tree [http-error-redirect](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of the HTTP error redirect object

Context **configure** [application-assurance group number](#) [http-error-redirect string](#) [admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [application-assurance group number](#) [http-error-redirect string](#) [description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **error-code** [[error-code-value](#)] *number*

Synopsis Enter the **error-code** list instance

Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-error-redirect</a> <i>string</i> <a href="#">error-code</a> <i>number</i>
Tree	<a href="#">error-code</a>
Description	Commands in this context configure the HTTP error status codes to which a redirect action is applied. Only messages with sizes less than that configured for the <b>custom-message-size</b> command are eligible for redirect action.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[error-code-value]** *number*

Synopsis	HTTP error code value for an HTTP error redirect
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-error-redirect</a> <i>string</i> <a href="#">error-code</a> <i>number</i>
Tree	<a href="#">error-code</a>
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **custom-message-size** *number*

Synopsis	HTTP error redirect error code custom message size
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">http-error-redirect</a> <i>string</i> <a href="#">error-code</a> <i>number</i> <a href="#">custom-message-size</a> <i>number</i>
Tree	<a href="#">custom-message-size</a>
Description	This command specifies the maximum message size above which an HTTP error redirect is not performed.
Max. Range	0 to 4294967295
Units	octets
Default	1024
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-host** *string*

Synopsis	HTTP host for the HTTP error redirect object
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Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string</a> <a href="#">http-host string</a>
Tree	<a href="#">http-host</a>
Description	This command specifies the HTTP hostname of the landing server (Barefruit or Xerocole). It is used in the HTTP GET operation from the client (which is being redirected) to the redirect search landing server. The hostname must contain a valid IP address or HTTP hostname or URI for the HTTP GET from the client to the landing server.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **participant-id** *string*

Synopsis	Participant ID for the HTTP error redirect object
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string</a> <a href="#">participant-id string</a>
Tree	<a href="#">participant-id</a>
Description	This command specifies a string assigned to the operator by Barefruit. It is used by Barefruit landing servers (applies to template # 1 only).
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template** *number*

Synopsis	Template ID for the HTTP error redirect object
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string</a> <a href="#">template number</a>
Tree	<a href="#">template</a>
Description	This command configures the template of parameters passed from the AA-ISA to the redirect server using JavaScript in the redirect packet. The template is specific to the redirect server used in the network. Currently, two partners are supported with AA-ISA redirect solution, Barefruit, and Xerocole.
Max. Range	0 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-notification** [[http-notification-name](#)] *string*

Synopsis	Enter the <b>http-notification</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-notification string</a>
Tree	<a href="#">http-notification</a>
Description	Commands in this context configure an HTTP notification object for the subscriber in-browser notification.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[http-notification-name]** *string*

Synopsis	HTTP notification policy name
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-notification string</a>
Tree	<a href="#">http-notification</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the AA HTTP notification object
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-notification string</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-notification string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>



String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** (*number* | *keyword*)

Synopsis	Minimum HTTP response notification interval
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">http-notification string</a> <b>interval</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">interval</a>
Range	1 to 1440
Units	minutes
Options	one-time
Default	one-time
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **script-url** *string*

Synopsis	Script URL inserted into the HTTP response
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">http-notification string</a> <b>script-url</b> <i>string</i>
Tree	<a href="#">script-url</a>
Description	This command configures the URL of the script used by the HTTP notification policy.
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template** *number*

Synopsis	Template ID for the AA HTTP notification object
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">http-notification string</a> <b>template</b> <i>number</i>
Tree	<a href="#">template</a>
Description	This command configures the template that defines the format and attributes included in the HTTP notification message.
Max. Range	0 to 4294967295

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect** [[http-redirect-name](#)] *string*

Synopsis Enter the **http-redirect** list instance  
 Context **configure** [application-assurance group number http-redirect string](#)  
 Tree [http-redirect](#)  
 Description Commands in this context configure the parameters of the HTTP redirect policy.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[http-redirect-name]** *string*

Synopsis HTTP redirect policy name  
 Context **configure** [application-assurance group number http-redirect string](#)  
 Tree [http-redirect](#)  
 Description This command specifies the applied HTTP redirect name. If no redirect name is specified, HTTP redirect is not enabled.  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of the AA HTTP redirect object  
 Context **configure** [application-assurance group number http-redirect string admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **captive-redirect**

Synopsis	Enter the <b>captive-redirect</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>captive-redirect</b>
Tree	<a href="#">captive-redirect</a>
Description	<p>Commands in this context configure the captive redirect capability for an HTTP redirect policy. HTTP redirect policies using captive redirect can be used in conjunction with a session-filter policy to terminate TCP flows in the ISA-AA card before reaching the Internet to redirect subscribers to the predefined redirect URL.</p> <p>Non-HTTP TCP flows are TCP reset. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.</p> <p>The operator can select the URL arguments to include in the redirect URL using either a specific template ID or by configuring the redirect URL using a supported macro substitution keyword.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **vlan-id number**

Synopsis	Captive redirect VLAN ID
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>captive-redirect</b> <a href="#">vlan-id number</a>
Tree	<a href="#">vlan-id</a>
Description	This command configures the VLAN ID for a captive redirect. Captive redirect uses the provisioned VLAN ID to send the HTTP response to subscribers; therefore, this VLAN ID must be properly assigned in the same VPN as the subscriber.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>description</b> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**redirect-https** *boolean*

Synopsis	Enable HTTPS redirect
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>redirect-https</b> <i>boolean</i>
Tree	<a href="#">redirect-https</a>
Description	When set to <b>true</b> , the HTTP redirect policy redirects HTTPS sessions to the configured redirect URL.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**redirect-url** *string*

Synopsis	HTTP redirect URL
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a> <b>redirect-url</b> <i>string</i>
Tree	<a href="#">redirect-url</a>
Description	<p>This command configures the HTTP redirect URL which is the URL (page) that the user is redirected to when an HTTP redirect takes effect.</p> <p>The operator can select the URL arguments to include in the redirect URL, using either a specific template ID or by configuring any of the following macro substitution keywords:</p> <ul style="list-style-type: none"> <li>• \$URL - The Request-URI in the HTTP GET Request received</li> <li>• \$SUB - The subscriber ID</li> <li>• \$IP - The IP address of the subscriber host</li> <li>• \$RTRID - The router ID</li> <li>• \$URLPRM - The HTTP URL parameter associated with the subscriber</li> <li>• \$MAC - The UE MAC address</li> <li>• \$SAP - The UE SAP</li> <li>• \$CID - The circuit ID or interface ID of the subscriber</li> <li>• \$RID - The remote ID of the subscriber</li> <li>• \$CATID - The URL filter web-service rating category identifier</li> <li>• \$CATNAME - The URL filter web-service rating category name</li> </ul> <p>Only ESM and ESM-MAC sub types support \$MAC, \$SAP, \$CID, and \$RID macro substitution.</p>
String Length	1 to 255
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp-client-reset** *boolean*

Synopsis Enable TCP client reset

Context **configure** [application-assurance group number](#) [http-redirect string](#) [tcp-client-reset boolean](#)

Tree [tcp-client-reset](#)

Description When configured to **true**, this command enables an HTTP-redirect policy to initiate a TCP reset towards the client if the AA policy results in a redirect with packet drop but the HTTP redirect cannot be delivered. Scenarios for this include HTTP (TLS) sessions, blocking of non-HTTP TCP traffic, and blocking of existing flows after a policy re-evaluation of an existing subscriber.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template** *number*

Synopsis Template ID for the HTTP redirect object

Context **configure** [application-assurance group number](#) [http-redirect string](#) [template number](#)

Tree [template](#)

Description This command configures the template that defines which parameters are appended to the HTTP host redirect field in the redirect message. The HTTP redirect template provides HTTP 302 redirect containing only the URL specified in the redirect policy, with no other parameters.

Max. Range 0 to 4294967295

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-identification-assist**

Synopsis Enter the **ip-identification-assist** context

Context **configure** [application-assurance group number](#) [ip-identification-assist](#)

Tree [ip-identification-assist](#)

Description Commands in this context configure the IP identification assist feature, which uses IP addresses to assist in traffic identification.

This optional mechanism is enabled by default and consults an internally generated and stored database when app-filters fail to classify the traffic as one of the configured applications from the AppDB.

Use the **configure application-assurance group ip-identification-assist admin-state** command to disable the administrative state of the IP identification assist feature.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of IP identification assist
Context	<b>configure application-assurance group number ip-identification-assist admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **passive-dns**

Synopsis	Enter the <b>passive-dns</b> context
Context	<b>configure application-assurance group number ip-identification-assist passive-dns</b>
Tree	<a href="#">passive-dns</a>
Description	Commands in this context configure passive DNS monitoring for the IP identification assist feature.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **monitor** *boolean*



#### **WARNING:**

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

Synopsis	Use passive DNS monitoring to collect IP addresses
Context	<b>configure application-assurance group number ip-identification-assist passive-dns monitor boolean</b>

Tree	<a href="#">monitor</a>
Description	When configured to <b>true</b> , the router collects IP addresses by passively monitoring DNS traffic. The router uses the collected IP addresses to build its internal database.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **trusted-server** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>trusted-server</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist passive-dns trusted-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">trusted-server</a>
Description	Commands in this context configure a DNS server that the IP identification assist feature is allowed to passively monitor.
Max. Instances	64
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the DNS server
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist passive-dns trusted-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">trusted-server</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **comment string**

Synopsis	Name or description to associate with the DNS server
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist passive-dns trusted-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">comment string</a>
Tree	<a href="#">comment</a>
String Length	0 to 32

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## positive-app-id

Synopsis	Enter the <b>positive-app-id</b> context
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist positive-app-id</a>
Tree	<a href="#">positive-app-id</a>
Description	Commands in this context implement the positive application identification mechanism, which monitors the correlations between IP addresses and applications identified with a high degree of confidence independently of any IP identification assist mechanism.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## enabled *boolean*



### WARNING:

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

Synopsis	Use the positive application identification mechanism
Context	<b>configure</b> <a href="#">application-assurance group number ip-identification-assist positive-app-id enabled boolean</a>
Tree	<a href="#">enabled</a>
Description	When configured to <b>true</b> , the router uses the positive application identification mechanism. This mechanism causes the router to add the IP addresses of the global applications learned through AA analysis into the IP identification assist cache. The router uses the harvested IP addresses to build its internal application-IP database.  When configured to <b>false</b> , only DNS is used to harvest IP addresses.
Default	true
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## partition [[aa-partition-id](#)] *number*

Synopsis	Enter the <b>partition</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number</a>
Tree	<a href="#">partition</a>



Description	Commands in this context configure the AA partition-related policies.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[aa-partition-id]** *number*

Synopsis	Partition ID within the AA group
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i>
Tree	<a href="#">partition</a>
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-congestion-detection**

Synopsis	Enter the <b>aa-sub-congestion-detection</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">aa-sub-congestion-detection</a>
Tree	<a href="#">aa-sub-congestion-detection</a>
Description	Commands in this context configure congestion detection parameters related to Non-location Based Dynamic Experience Management (NLB-DEM). <b>Note:</b> NLB-DEM cannot be enabled if Access-Network Location (ANL) DEM mode is enabled; the two are mutually exclusive.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of congestion detection
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">aa-sub-congestion-detection</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rat-type** [[rat-type-name](#)] *keyword*

Synopsis Enter the **rat-type** list instance

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [aa-sub-congestion-detection](#) [rat-type](#) *keyword*

Tree [rat-type](#)

Description Commands in this context configure the RAT types for which unique RTT thresholds are configured.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[rat-type-name]** *keyword*

Synopsis Mobile radio access technology (RAT) type

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [aa-sub-congestion-detection](#) [rat-type](#) *keyword*

Tree [rat-type](#)

Options utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtt-threshold** (*number* | *keyword*)

Synopsis Round trip time congestion threshold for a RAT type

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [aa-sub-congestion-detection](#) [rat-type](#) *keyword* **rtt-threshold** (*number* | *keyword*)

Tree [rtt-threshold](#)

Description This command configures the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.

Range 1 to 500

Units milliseconds

Options not-applicable

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtt-threshold** (*number* | *keyword*)

Synopsis	Round trip time congestion threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">aa-sub-congestion-detection</a> <b>rtt-threshold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtt-threshold</a>
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine subscriber congestion for NLB-DEM. This default value is used when the current RAT-Type is not known, or has no associated configured RTT threshold.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Default	173
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtt-threshold-tolerance** *number*

Synopsis	RTT threshold tolerance for congestion detection
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">aa-sub-congestion-detection</a> <b>rtt-threshold-tolerance</b> <i>number</i>
Tree	<a href="#">rtt-threshold-tolerance</a>
Description	This command configures the round trip delay threshold tolerance used by the DEM gateway algorithm to determine subscriber-level congestion.
Range	0 to 100
Units	percent
Default	50
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-sub-remote** *boolean*

Synopsis	Reverse subscriber traffic direction
Context	<b>configure</b> <a href="#">application-assurance group number partition number</a> <b>aa-sub-remote</b> <i>boolean</i>
Tree	<a href="#">aa-sub-remote</a>
Description	When configured to <b>true</b> , the direction of the from-subscriber and to-subscriber traffic is reversed for this group partition.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**access-network-location**

Synopsis	Enter the <b>access-network-location</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number</a> <b>access-network-location</b>
Tree	<a href="#">access-network-location</a>
Description	Commands in this context configure parameters related to dynamic experience management, also known as Access Network Location (ANL).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**source** [[source-type](#)] *keyword*

Synopsis	Enter the <b>source</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number</a> <b>access-network-location</b> <a href="#">source</a> <i>keyword</i>
Tree	<a href="#">source</a>
Description	Commands in this context configure location sources for dynamic experience management.
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[source-type] keyword**

Synopsis	Access network location source
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location source keyword</a>
Tree	<a href="#">source</a>
Description	This command specifies the location or access technology. AA supports access points for WLGW access points or ULI-2gpp for mobile (for example, FWA).
Options	mobile-3g, access-point, uli-3gpp
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rat-type [rat-type-name] keyword**

Synopsis	Enter the <b>rat-type</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location source keyword rat-type keyword</a>
Tree	<a href="#">rat-type</a>
Description	Commands in this context configure the RAT types for which unique RTT thresholds are configured.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[rat-type-name] keyword**

Synopsis	Access network location RAT type
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location source keyword rat-type keyword</a>
Tree	<a href="#">rat-type</a>
Options	utran, geran, wlan, gan, hspa-evol, eutran, virtual, eutran-nb, ehrpd, hrpd, cdma-1x, umb, wifi, nr, lte-m
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rtt-threshold** (*number* | *keyword*)

Synopsis	RTT congestion threshold for a RAT type
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">access-network-location source</a> <i>keyword</i> <a href="#">rat-type</a> <i>keyword</i> <b>rtt-threshold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtt-threshold</a>
Description	This command specifies the maximum acceptable round trip time (RTT) under no congestion. Any measured RTT above the threshold is considered an indication of possible congestion.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rtt-threshold** (*number* | *keyword*)

Synopsis	Source round trip time congestion threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">access-network-location source</a> <i>keyword</i> <b>rtt-threshold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtt-threshold</a>
Description	This command configures the default round trip delay threshold used by the DEM gateway algorithm to determine ANL congestion. This default value is used when either the ANL RAT-Type is not known or has no associated configured RTT threshold.
Range	1 to 500
Units	milliseconds
Options	not-applicable
Default	173
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rtt-threshold-tolerance** *number*

Synopsis	Source round trip time congestion threshold tolerance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">access-network-location source</a> <i>keyword</i> <b>rtt-threshold-tolerance</b> <i>number</i>

Tree	<a href="#">rtt-threshold-tolerance</a>
Description	This command configures the ANL round trip delay threshold tolerance used by the DEM gateway algorithm to determine ANL-level congestion.
Range	0 to 100
Units	percent
Default	50
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### source-level *keyword*



#### WARNING:

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

Synopsis	Access network location source level
Context	<b>configure</b> <a href="#">application-assurance group number partition number access-network-location source keyword source-level keyword</a>
Tree	<a href="#">source-level</a>
Options	cell, transport-network-link, mac-vlan
Default	cell
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### aqp-initial-lookup *boolean*

Synopsis	Enable AQP initial lookup
Context	<b>configure</b> <a href="#">application-assurance group number partition number aqp-initial-lookup boolean</a>
Tree	<a href="#">aqp-initial-lookup</a>
Description	<p>When configured to <b>true</b>, this command allows AA to perform application QoS policy (AQP) lookups on flows prior to complete application identification. As usual, AQP will be looked up again when identification is complete. Without this, AA executes AQPs that are part of the sub-default policy. The sub-default policy is formed by regular AQPs that contain ASOs, subID, or flow direction as matching conditions.</p> <p>This behavior is required, for example, to apply GTP and SCTP filtering on the first packet of a new GTP/SCTP flow (AQP matching conditions).</p>

When configured to **false**, AA only performs AQP lookups when identification is complete.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **cflowd**

Synopsis	Enter the <b>cflowd</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd</a>
Tree	<a href="#">cflowd</a>
Description	Commands in this context configure the AA partition-based cflowd fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **export-type** [[flow-export-type](#)] *keyword*

Synopsis	Enter the <b>export-type</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword</a>
Tree	<a href="#">export-type</a>
Description	Commands in this context configure the scope of traffic subjected to AA cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **[flow-export-type]** *keyword*

Synopsis	Cflowd flow export type for the partition
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword</a>
Tree	<a href="#">export-type</a>
Description	This command allows the operator to configure the scope of traffic that can be sampled for cflowd export for the configured cflowd template.
Options	volume, tcp-performance, rtp-performance, comprehensive
Notes	This element is part of a list key.
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of cflowd export

Context **configure** [application-assurance group number partition number cflowd export-type keyword admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-group** [[app-group-name](#)] *reference*

Synopsis Enter the **app-group** list instance

Context **configure** [application-assurance group number partition number cflowd export-type keyword app-group reference](#)

Tree [app-group](#)

Description Commands in this context configure application groups for flow sampling and cflowd export.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[app-group-name]** *reference*

Synopsis Application group name

Context **configure** [application-assurance group number partition number cflowd export-type keyword app-group reference](#)

Tree [app-group](#)

Reference **configure** [application-assurance group number partition number policy app-group string](#)

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate-choice** *keyword*

Synopsis	Cflowd rate to use for sampling
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword app-group reference rate-choice keyword</a>
Tree	<a href="#">rate-choice</a>
Options	flow-rate, flow-rate-2
Default	flow-rate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**application** [[application-name](#)] *reference*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword application reference</a>
Tree	<a href="#">application</a>
Description	Commands in this context configure applications for flow sampling and cflowd export.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[application-name]** *reference*

Synopsis	Application name
Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword application reference</a>
Tree	<a href="#">application</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate-choice** *keyword*

Synopsis	Cflowd rate to use for sampling
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Context	<b>configure</b> <a href="#">application-assurance group number partition number cflowd export-type keyword application reference rate-choice keyword</a>
Tree	<a href="#">rate-choice</a>
Options	flow-rate, flow-rate-2
Default	flow-rate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event-log** [[event-log-name](#)] *string*

Synopsis	Enter the <b>event-log</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Tree	<a href="#">event-log</a>
Description	Commands in this context configure an event log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[event-log-name]** *string*

Synopsis	Partition event log name
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Tree	<a href="#">event-log</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the event log
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**buffer-type** *keyword***WARNING:**

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

Synopsis	Event log buffer type
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string buffer-type keyword</a>
Tree	<a href="#">buffer-type</a>
Options	linear, circular, syslog
Default	linear
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-entries** *number***WARNING:**

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

Synopsis	Maximum number of entries for the event log
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	1 to 100000

Default	500
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## syslog



### WARNING:

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

Synopsis	Enter the <b>syslog</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">event-log</a> <a href="#">string</a> <b>syslog</b>
Tree	<a href="#">syslog</a>
Description	Commands in this context configure the syslog options for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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



### WARNING:

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

Synopsis	Syslog host IP address
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">event-log</a> <a href="#">string</a> <b>syslog</b> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">event-log</a> <a href="#">string</a> <b>syslog</b> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### facility *keyword*



#### WARNING:

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

Synopsis	AA syslog facility
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string syslog facility keyword</a>
Tree	<a href="#">facility</a>
Description	This command configures the syslog facility. The syslog facility is an information field associated with a syslog message. It is defined by the syslog protocol and provides an indication of which part of the system originated the message.
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### port *number*



#### WARNING:

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

Synopsis	UDP port for syslog events
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string syslog port number</a>
Tree	<a href="#">port</a>
Max. Range	0 to 65535
Default	514
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword***WARNING:**

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

Synopsis	Syslog message severity level threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string syslog severity keyword</a>
Tree	<a href="#">severity</a>
Options	emergency, alert, critical, error, warning, notice, info, debug
Default	info
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vlan-id** *number***WARNING:**

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

Synopsis	ISA service port VLAN ID for sending syslog traffic
Context	<b>configure</b> <a href="#">application-assurance group number partition number event-log string syslog vlan-id number</a>
Tree	<a href="#">vlan-id</a>
Description	This command configures the service port VLAN ID to be used by application assurance to provide syslog events. This VLAN ID also needs to be configured for the application assurance interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp**

Synopsis	Enter the <b>gtp</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp</a>
Tree	<a href="#">gtp</a>
Description	Commands in this context configure GTP parameters.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of GTP
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-filter** [[gtp-filter-name](#)] *string*

Synopsis	Enter the <b>gtp-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i>
Tree	<a href="#">gtp-filter</a>
Description	Commands in this context allow AA to treat traffic on UDP port number 2152 as GTP-U. Without further specifying any other parameters within this GTP context, AA performs basic GTP-U header sanity checks and discards packets that are malformed. This GTP context also allows the operator to configure various GTP filters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[gtp-filter-name]** *string*

Synopsis	GTP filter name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtp-filter</a> <i>string</i>
Tree	<a href="#">gtp-filter</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp-in-gtp** *keyword*

Synopsis	GTP in GTP packet filtering
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string gtp-in-gtp keyword</a>
Tree	<a href="#">gtp-in-gtp</a>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp-tunnel-database**

Synopsis	Enter the <b>gtp-tunnel-database</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database</a>
Tree	<a href="#">gtp-tunnel-database</a>
Description	Commands in this context configure GTP advanced firewall functions, such as validating GTP tunnels, sequence numbers, and source IP addresses).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-tunnel-endpoint-limit** *number*

Synopsis	Default GTP tunnel endpoint limit
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database default-tunnel-endpoint-limit number</a>

Tree	<a href="#">default-tunnel-endpoint-limit</a>
Description	This command configures the maximum number of GTP endpoints requested in GTP-C messages by using, for example, the PDP Context Create message type. The <b>validate-gtp-tunnels</b> command must be enabled before using this command.
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **validate-gtp-tunnels** *boolean*

Synopsis	Enable GTP tunnel validation
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database validate-gtp-tunnels</a> <i>boolean</i>
Tree	<a href="#">validate-gtp-tunnels</a>
Description	When configured to <b>true</b> , this command configures GTP tunnel validation. This allows for the validation of TEIDs and is a prerequisite for sequence checking and UE IP address validation. This command is only applicable when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. The <b>gtp-inspection</b> command in the <b>configure application-assurance group partition gtp</b> context must be configured to true before using this command.  When configured to <b>false</b> , the GTP tunnels cannot be validated.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **validate-sequence-number** *boolean*

Synopsis	Enable GTP sequence number checking
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database validate-sequence-number</a> <i>boolean</i>
Tree	<a href="#">validate-sequence-number</a>
Description	When configured to <b>true</b> , this command enables GTP sequence number checking. GTP packets that fail the sequence number check are discarded.  The <b>validate-gtp-tunnels</b> command in the <b>configure application-assurance group partition gtp gtp-filter gtp-tunnel-database</b> context must be configured to <b>true</b> before using this command.  When configured to <b>false</b> , the GTP packet sequence number cannot be checked.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **validate-source-ip-addr** *boolean*

Synopsis	Validate source IP address in GTP frames
Context	<b>configure application-assurance group number partition number gtp gtp-filter string gtp-tunnel-database validate-source-ip-addr boolean</b>
Tree	<a href="#">validate-source-ip-addr</a>
Description	<p>When configured to <b>true</b>, this command enables checking for spoofed or invalid UE IP addresses. Upstream GTP packets that contain invalid UE IP addresses are discarded. When a packet is dropped due to source-ip-address “invalid source IP add”, the statistics counter is updated.</p> <p>The <b>validate-gtp-tunnels</b> command in the <b>configure application-assurance group partition gtp gtp-filter gtp-tunnel-database</b> context must be configured to <b>true</b> before using this command.</p> <p>When configured to <b>false</b>, the spoofed or invalid UE IP addresses cannot be checked.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **imsi-apn-filter**

Synopsis	Enter the <b>imsi-apn-filter</b> context
Context	<b>configure application-assurance group number partition number gtp gtp-filter string imsi-apn-filter</b>
Tree	<a href="#">imsi-apn-filter</a>
Description	<p>Commands in this context configure IMSI and APN filtering.</p> <p>The <b>gtpc-inspection</b> command in the <b>configure application-assurance group partition gtp</b> context must be configured to true before using this command.</p> <p>This command is only applicable to the GTP packets that contain IMSI or APN information elements (IEs).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-action** *keyword*

Synopsis	IMSI APN filter default action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string imsi-apn-filter default-action keyword</a>
Tree	<a href="#">default-action</a>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number</a>
Tree	<a href="#">entry</a>
Description	Commands in this context configure an entry within the IMSI-APN filter to allow for IMSI-APN match and action configuration.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id]** *number*

Synopsis	AA IMSI-APN filter entry ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number</a>
Tree	<a href="#">entry</a>
Description	This command specifies the index in the IMSI-APN list that defines a custom filtering action.
Range	1031 to 2030
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action keyword**

Synopsis	IMSI APN filter entry action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number action keyword</a>
Tree	<a href="#">action</a>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**apn string**

Synopsis	APN as GTP filter match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number apn string</a>
Tree	<a href="#">apn</a>
Description	This command configures a matching condition for an APN configured as a GTP filter. If no APN is specified, the entry is not checked for the APN IE in GTP-C packets. The values for this command are: <ul style="list-style-type: none"> <li>• string: The extracted APN must match string exactly.</li> <li>• ^string: The extracted APN must start with string.</li> <li>• string\$: The extracted APN must end with string.</li> <li>• WILDCARD_APN: Special string that indicates that the extracted APN must be "*" (that is, a length octet with value one, followed by the ASCII code for the asterisk)</li> <li>• EMPTY_APN: Special string that indicates that the extracted APN must be empty (that is, "")</li> <li>• ANY_APN: Special string that indicates that the extracted APN IE must be present and can have any value in order for the filter entry to match</li> </ul>
String Length	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**imsi-mcc-mnc-prefix string**

Synopsis	IMSI (MCC-MNC) prefix as GTP filter match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number imsi-mcc-mnc-prefix string</a>

Tree	<a href="#">imsi-mcc-mnc-prefix</a>
Description	This command configures a matching condition for the IMSI (MCC-MNC) prefix. This string represents the IMSI prefix to be matched against the IMSI IE of the packet, or the special value ANY_IMSI to indicate that an IMSI IE must be present as a matching condition regardless of the IMSI IE value. If no MCC-MNC prefix is specified, the entry will match GTP packets that have an IMSI IE containing any value.
String Length	1 to 8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### src-gsn

Synopsis	Enter the <b>src-gsn</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp gtp-filter</a> <i>string</i> <a href="#">imsi-apn-filter</a> <i>entry</i> <i>number</i> <b>src-gsn</b>
Tree	<a href="#">src-gsn</a>
Description	Commands in this context configure a matching condition for the GSN IP address. The IP address value is checked only against the source IP address of the GTP packets that contain an APN IE or an IMSI IE.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source GSN IP address prefix as filter match criterion
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp gtp-filter</a> <i>string</i> <a href="#">imsi-apn-filter</a> <i>entry</i> <i>number</i> <b>src-gsn</b> <b>ip-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Description	This command specifies a valid unicast address associated with the IMSI-APN filter entry.
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ip-prefix-list *reference*

Synopsis	Source GSN IP address prefix list as match criterion
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Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string imsi-apn-filter entry number src-gsn ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## log

Synopsis	Enter the <b>log</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string log</a>
Tree	<a href="#">log</a>
Description	Commands in this context configure the AA group partition GTP filter log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## action keyword

Synopsis	GTP filter action to be logged
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string log action keyword</a>
Tree	<a href="#">action</a>
Options	deny, permit, all
Default	deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log reference

Synopsis	Event-log name to capture GTP filter events
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string log event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-payload-length** *number*

Synopsis	Maximum allowed GTP payload length
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string max-payload-length number</a>
Tree	<a href="#">max-payload-length</a>
Range	0 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **message-type**

Synopsis	Enter the <b>message-type</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type</a>
Tree	<a href="#">message-type</a>
Description	Commands in this context configure the GTP message-type filtering. If no message type is specified within a filter, all GTP message types are allowed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action** *keyword*

Synopsis	GTP message type default action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type default-action keyword</a>
Tree	<a href="#">default-action</a>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**entry** [**entry-id**] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type entry number</a>
Tree	<a href="#">entry</a>
Description	Commands in this context configure an entry for a specific GTPv1 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id]** *number*

Synopsis	GTP filter entry ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type entry number</a>
Tree	<a href="#">entry</a>
Description	This command specifies the index in the GTPv1 message value list that defines a custom message-type action.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action** *keyword*

Synopsis	GTPv1 filter message entry action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type entry number action keyword</a>
Tree	<a href="#">action</a>
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value** (*number* | *keyword*)**WARNING:**

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

Synopsis	GTPv1 filter message type value
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp gtp-filter</a> <i>string</i> <a href="#">message-type entry</a> <i>number</i> <b>value</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">value</a>
Range	1 to 255
Options	echo-request, echo-response, version-not-supported, node-alive-request, node-alive-response, redirection-request, redirection-response, create-pdp-context-request, create-pdp-context-response, update-pdp-context-request, update-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, initiate-pdp-context-activation-request, initiate-pdp-context-activation-response, error-indication, pdu-notification-request, pdu-notification-response, pdu-notification-reject-request, pdu-notification-reject-response, supported-extension-headers-notification, send-routing-information-for-gprs-request, send-routing-information-for-gprs-response, failure-report-request, failure-report-response, note-ms-gprs-present-request, note-ms-gprs-present-response, identification-request, identification-response, sgsn-context-request, sgsn-context-response, sgsn-context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete, relocation-cancel-request, relocation-cancel-response, forward-srns-context, forward-relocation-complete-acknowledge, forward-srns-context-acknowledge, ran-information-relay, mbms-notification-request, mbms-notification-response, mbms-notification-reject-request, mbms-notification-reject-response, create-mbms-context-request, create-mbms-context-response, update-mbms-context-request, update-mbms-context-response, delete-mbms-context-request, delete-mbms-context-response, mbms-registration-request, mbms-registration-response, mbms-de-registration-request, mbms-de-registration-response, mbms-session-start-request, mbms-session-start-response, mbms-session-stop-request, mbms-session-stop-response, mbms-session-update-request, mbms-session-update-response, ms-info-change-notification-request, ms-info-change-notification-response, data-record-transfer-request, data-record-transfer-response, end-marker, g-pdu
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**message-type-gtp-v2**

Synopsis	Enter the <b>message-type-gtp-v2</b> context
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Context	<b>configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2</b>
Tree	<b>message-type-gtp-v2</b>
Description	<p>Commands in this context configure the GTPv2 message-type filtering.</p> <p>If message-type GTPv2 is not specified within a filter, all GTP message types are allowed, except for the messages that are dropped by GTP-C inspection because they violate the expected GTP protocol for the deployment interface (for example, roaming deployment).</p> <p>The <b>gtpc-inspection</b> command in the <b>configure application-assurance group partition gtp</b> context must be configured to true before configuring GTPv2 message-type filtering.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action** *keyword*

Synopsis	GTPv2 message type default action
Context	<b>configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 default-action keyword</b>
Tree	<b>default-action</b>
Options	deny, permit
Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number</b>
Tree	<b>entry</b>
Description	Commands in this context configure an entry for a specific GTPv2 message type value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id] number**

Synopsis	GTPv2 filter entry ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number</a>
Tree	<a href="#">entry</a>
Description	This command configures the index in the GTP message value list that defines a custom message-type action.
Range	516 to 770
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action keyword**

Synopsis	GTPv2 filter message entry action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number action keyword</a>
Tree	<a href="#">action</a>
Description	This command specifies the action to take for packets that match this GTPv2 filter message entry.
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value (number | keyword)****WARNING:**

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

Synopsis	GTPv2 filter message type value
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp gtp-filter string message-type-gtp-v2 entry number value (number   keyword)</a>
Tree	<a href="#">value</a>
Range	1 to 255

Options	echo-request, echo-response, version-not-supported-indication, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, change-notification-request, change-notification-response, remote-ue-report-notification, remote-ue-report-acknowledge, modify-bearer-command, modify-bearer-failure-indication, delete-bearer-command, delete-bearer-failure-indication, bearer-resource-command, bearer-resource-failure-indication, downlink-data-notification-failure-indication, trace-session-activation, trace-session-deactivation, stop-paging-indication, create-bearer-request, create-bearer-response, update-bearer-request, update-bearer-response, delete-bearer-request, delete-bearer-response, delete-pdn-connection-set-request, delete-pdn-connection-set-response, pgw-downlink-triggering-notification, pgw-downlink-triggering-acknowledge, identification-request, identification-response, context-request, context-response, context-acknowledge, forward-relocation-request, forward-relocation-response, forward-relocation-complete-notification, forward-relocation-complete-acknowledge, forward-access-context-notification, forward-access-context-acknowledge, relocation-cancel-request, relocation-cancel-response, configuration-transfer-tunnel, detach-notification, detach-acknowledge, cs-paging-indication, ran-information-relay, alert-mme-notification, alert-mme-acknowledge, ue-activity-notification, ue-activity-acknowledge, isr-status-indication, create-forwarding-tunnel-request, create-forwarding-tunnel-response, suspend-notification, suspend-acknowledge, resume-notification, resume-acknowledge, create-indirect-data-forwarding-tunnel-request, create-indirect-data-forwarding-tunnel-response, delete-indirect-data-forwarding-tunnel-request, delete-indirect-data-forwarding-tunnel-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-acknowledge, pgw-restart-notification, pgw-restart-notification-acknowledge, update-pdn-connection-set-request, update-pdn-connection-set-response, modify-access-bearers-request, modify-access-bearers-response, mbms-session-start-request, mbms-session-start-response, mbms-session-update-request, mbms-session-update-response, mbms-session-stop-request, mbms-session-stop-response
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtpc-inspection** *boolean*

Synopsis	Enable inspection of GTP-C packets
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp</a> <a href="#">gtpc-inspection</a> <i>boolean</i>
Tree	<a href="#">gtpc-inspection</a>

Description	When configured to <b>true</b> , this command enables the inspection of GTP-C packets. This is relevant only when AA GTP FW is deployed on S8/S5/Gp/Gn interfaces. This command must be enabled before configuring related features, such as APN filtering, GTP tunnel validation, message-type-v2 filtering, sequence number validation, and SRC IP validation.  When configured to <b>false</b> , GTP-C packet inspection cannot be performed.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## log

Synopsis	Enter the <b>log</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp log</a>
Tree	<a href="#">log</a>
Description	Commands in this context configure the AA group partition GTP log.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## action keyword

Synopsis	GTP log action
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp log action keyword</a>
Tree	<a href="#">action</a>
Description	This command specifies the action on which the GTP log is raised.
Options	deny, permit, all
Default	deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log reference

Synopsis	Event log reference for logging GTP events
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp log event-log reference</a>
Tree	<a href="#">event-log</a>

Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mode** *keyword*



#### **WARNING:**

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

Synopsis	GTP mode
Context	<b>configure</b> <a href="#">application-assurance group number partition number gtp mode keyword</a>
Tree	<a href="#">mode</a>
Options	filtering, untunneling
Default	filtering
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-match-all-requests** *boolean*

Synopsis	Enable HTTP matching for all requests for an expression
Context	<b>configure</b> <a href="#">application-assurance group number partition number http-match-all-requests boolean</a>
Tree	<a href="#">http-match-all-requests</a>
Description	When configured to <b>true</b> , this command enables HTTP matching for all requests for an HTTP expression.  When configured to <b>false</b> , this command restores the default and removes the matching request for this particular expression.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-x-online-host** *boolean*

Synopsis	Enable X-Online-Host header field
Context	<b>configure</b> <a href="#">application-assurance group number partition number http-x-online-host boolean</a>

Tree	<a href="#">http-x-online-host</a>
Description	When configured to <b>true</b> , this command enables the X-Online-Host header field as a replacement for the HTTP Host header field.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-identification-contribute** *boolean*

Synopsis	Contribute traffic info from this partition to group
Context	<b>configure</b> <a href="#">application-assurance group number partition number ip-identification-contribute</a> <i>boolean</i>
Tree	<a href="#">ip-identification-contribute</a>
Description	When configured to <b>true</b> , the router collects information from traffic in this partition and contributes it to the database that is built by the IP identification assist feature at the group level.
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** [[ip-prefix-list-name](#)] *string*

Synopsis	Enter the <b>ip-prefix-list</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list</a> <i>string</i>
Tree	<a href="#">ip-prefix-list</a>
Description	Commands in this context configure an IP prefix list.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-prefix-list-name]** *string*

Synopsis	AA IP prefix list name
Context	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list</a> <i>string</i>
Tree	<a href="#">ip-prefix-list</a>
String Length	1 to 32
Notes	This element is part of a list key.



Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [ip-prefix-list](#) *string*  
[description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **prefix** list instance  
 Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [ip-prefix-list](#) *string*  
[prefix](#) (*ipv4-prefix* | *ipv6-prefix*)  
 Tree [prefix](#)  
 Description Commands in this context configure an IP prefix within the list.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis AA IP prefix  
 Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [ip-prefix-list](#) *string*  
[prefix](#) (*ipv4-prefix* | *ipv6-prefix*)  
 Tree [prefix](#)  
 Notes This element is part of a list key.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis AA IP prefix name

Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policy

Synopsis	Enter the <b>policy</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a>
Tree	<a href="#">policy</a>
Description	Commands in this context configure the fields for the Application Assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## app-filter

Synopsis	Enter the <b>app-filter</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a>
Tree	<a href="#">app-filter</a>
Description	Commands in this context configure an application filter for Application Assurance.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## entry [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	<p>Commands in this context create an application filter entry.</p> <p>Application filter entries are an ordered list. The lowest numerical entry that matches the flow defines the application for that flow.</p> <p>An application filter entry or entries configure match attributes of an application.</p>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[entry-id]** *number*

Synopsis Application filter entry ID

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number*

Tree [entry](#)

Range 1 to 65535

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of the AA application filter entry

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application** *reference*

Synopsis Application name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-filter](#) [entry](#) *number* [application](#) *reference*

Tree [application](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [application](#) *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <i>description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**expression** [[expr-index](#)] *number*

Synopsis	Enter the <b>expression</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">expression number</a>
Tree	<a href="#">expression</a>
Description	Commands in this context configure string values to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[[expr-index](#)]** *number*

Synopsis	Application filter matching expression identifier
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">expression number</a>
Tree	<a href="#">expression</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq** *string*

Synopsis	Exact match for application filter matching expression
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">expression number</a> <a href="#">eq string</a>
Tree	<a href="#">eq</a>

String Length	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq string**

Synopsis	Non-match for application filter matching expression
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number expression number neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Application filter matching expression type
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number expression number type keyword</a>
Tree	<a href="#">type</a>
Options	http-host, http-uri, http-referer, sip-ua, sip-uri, sip-mt, citrix-app, http-user-agent, h323-product-id, tls-cert-subj-org-name, tls-cert-subj-common-name, rtsp-host, rtsp-uri, rtsp-ua, rtmp-page-host, rtmp-page-uri, rtmp-swf-host, rtmp-swf-uri, rtmp-tc-host, rtmp-tc-uri, dns-domain-name
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-direction keyword**

Synopsis	Traffic flow direction for the application filter entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number flow-setup-direction keyword</a>
Tree	<a href="#">flow-setup-direction</a>
Options	subscriber-to-network, network-to-subscriber, both

Default	both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-match-all-requests** *boolean*

Synopsis	Enable HTTP matching for all requests
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-match-all-requests boolean</a>
Tree	<a href="#">http-match-all-requests</a>
Description	When configured to <b>true</b> , this command enables HTTP matching for all requests for an HTTP expression. When configured to <b>false</b> , this command restores the default for this app-filter entry which matches the first request.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-port**

Synopsis	Enter the <b>http-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-port</a>
Tree	<a href="#">http-port</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-port eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context configure the exact value as the match criterion.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list** *reference*

Synopsis Port list name

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-filter entry number](#) [http-port eq port-list reference](#)

Tree [port-list](#)

Reference **configure** [application-assurance group number](#) [partition number](#) [port-list string](#)

Notes The following elements are part of a choice: **port-list** or **port-number**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis Server port number

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-filter entry number](#) [http-port eq port-number number](#)

Tree [port-number](#)

Range 0 | 1 to 65535

Default 0

Notes The following elements are part of a choice: **port-list** or **port-number**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis Enter the **neq** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy app-filter entry number](#) [http-port neq](#)

Tree [neq](#)

Description Commands in this context configure the non-match criterion used.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list** *reference*

Synopsis	Port list name
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-port neq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> or <b>port-number</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-number** *number*

Synopsis	Server port number
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">http-port neq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> or <b>port-number</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-identification-assist** *boolean*

Synopsis	Enable IP identification assist for this entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">ip-identification-assist boolean</a>
Tree	<a href="#">ip-identification-assist</a>
Description	<p>When configured to <b>true</b>, the router performs a network IP address lookup that overrides the assigned application if it finds the network IP address in its internal application-IP database.</p> <p>If an IP match is found, the application assigned from the app-filter is overridden with the application from the IP lookup. This also affects the app-group and charging group.</p> <p>If an IP match is not found, the application assigned from the app-filter is not overridden and remains (including the app-group and charging group).</p>



When configured to **false**, this command disables the router from performing a network IP address lookup and overriding the assigned application.

Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-protocol

Synopsis	Enter the <b>ip-protocol</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <b>ip-protocol</b>
Tree	<a href="#">ip-protocol</a>
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq (*number* | *keyword*)

Synopsis	Exact match criterion used for the IP protocol number
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <b>ip-protocol</b> <b>eq</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">eq</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neq (*number* | *keyword*)

Synopsis	Non-match criterion used for the IP protocol number
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <b>ip-protocol</b> <b>neq</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">neq</a>
Range	0 to 255

Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## network-address

Synopsis	Enter the <b>network-address</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">network-address</a>
Tree	<a href="#">network-address</a>
Description	Commands in this context configure the network address to use for the application filter entry. The network address is the address on the network side of AA, independent of whether the subscriber is acting as a client or server and is not normally used in AA app-filters. The network address will match the destination IP address in a from-sub flow or the source IP address in a to-sub flow.
Notes	The following elements are part of a choice: <b>network-address</b> or <b>server-address</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">network-address</a> <a href="#">eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context specify an exact value as the match criterion for the network address.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">network-address</a> <a href="#">eq</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	IP prefix list
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">network-address</a> <a href="#">eq</a> <a href="#">ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">network-address</a> <a href="#">neq</a>
Tree	<a href="#">neq</a>
Description	Commands in this context specify the non-match criterion used for the network address.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">network-address</a> <a href="#">neq</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	IP prefix list
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number network-address neq ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **protocol**

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number protocol</a>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure the protocol signature in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** (*string* | *named-item*)

Synopsis	Exact match criterion used for the AA protocol name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number protocol eq (string   named-item)</a>
Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq** (*string* | *named-item*)

Synopsis	Non-match criterion used for the AA protocol name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">protocol</a> <b>neq</b> ( <i>string</i>   <i>named-item</i> )
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server-address**

Synopsis	Enter the <b>server-address</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <b>server-address</b>
Tree	<a href="#">server-address</a>
Description	Commands in this context configure the server address to use for the application filter entry. The server address is the address on the server end of a client-server session.
Notes	The following elements are part of a choice: <b>network-address</b> or <b>server-address</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">server-address</a> <b>eq</b>
Tree	<a href="#">eq</a>
Description	Commands in this context configure the attributes of the IP address used for the exact match criterion for the application flow.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dns-ip-cache** *reference*

Synopsis	DNS IP cache name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq dns-ip-cache reference</a>
Tree	<a href="#">dns-ip-cache</a>
Reference	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq ip-prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix-list** *reference*

Synopsis	IP prefix list
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address eq ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## masked-ip

Synopsis	Enter the <b>masked-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-address eq masked-ip</a>
Tree	<a href="#">masked-ip</a>
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-address eq masked-ip address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-address eq masked-ip netmask</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">netmask</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neq

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-address neq</a>
Tree	<a href="#">neq</a>

Description	Commands in this context configure the attributes of the IP address used for non-matching criteria in the application flow.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns-ip-cache** *reference*

Synopsis	DNS IP cache name
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-filter entry</a> <i>number</i> <a href="#">server-address</a> <a href="#">neq dns-ip-cache</a> <i>reference</i>
Tree	<a href="#">dns-ip-cache</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">dns-ip-cache</a> <i>string</i>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-filter entry</a> <i>number</i> <a href="#">server-address</a> <a href="#">neq ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	IP prefix list
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-filter entry</a> <i>number</i> <a href="#">server-address</a> <a href="#">neq ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i>



Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## masked-ip

Synopsis	Enter the <b>masked-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq masked-ip</a>
Tree	<a href="#">masked-ip</a>
Description	Commands in this context configure the attributes of a masked IP address.
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , <b>ip-prefix-list</b> , or <b>masked-ip</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq masked-ip address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">address</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	IPv4 or IPv6 address mask
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-address neq masked-ip netmask (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">netmask</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server-port**

Synopsis	Enter the <b>server-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port</a>
Tree	<a href="#">server-port</a>
Description	Commands in this context specify the server TCP or UDP port number to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context configure the exact value as the match criterion for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**first-packet-policy** *keyword*

Synopsis	TCP/UDP port application to apply
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port eq first-packet-policy keyword</a>
Tree	<a href="#">first-packet-policy</a>
Options	first-packet-trusted, first-packet-validate
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list** *reference*

Synopsis	Port-list name used in application filter criteria
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">server-port</a> <a href="#">eq</a> <a href="#">port-list</a> <a href="#">reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">port-list</a> <a href="#">string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">server-port</a> <a href="#">eq</a> <a href="#">port-number</a> <i>number</i>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">server-port</a> <a href="#">eq</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis	TCP/UDP ending port number
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">server-port</a> <a href="#">eq</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">server-port</a> <a href="#">eq</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gt**

Synopsis	Enter the <b>gt</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">server-port</a> <a href="#">gt</a>
Tree	<a href="#">gt</a>
Description	Commands in this context specify the greater than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-number number**

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-filter</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">server-port</a> <a href="#">gt</a> <a href="#">port-number</a> <i>number</i>

Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lt

Synopsis	Enter the <b>lt</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-port lt</a>
Tree	<a href="#">lt</a>
Description	Commands in this context specify the less than value as the match criterion for the server port number for the app-filter.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-number number

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-port lt port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neq

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-filter entry number</a> <a href="#">server-port neq</a>
Tree	<a href="#">neq</a>

Description	Commands in this context configure non-match criterion used for the server TCP or UDP number in the app-filter.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list** *reference*

Synopsis	Port-list name used in application filter criteria
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port neq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port neq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port neq range</a>
Tree	<a href="#">range</a>

Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port neq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-filter entry number server-port neq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-group** [[application-group-name](#)] *string*

Synopsis	Enter the <b>app-group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Tree	<a href="#">app-group</a>
Description	Commands in this context create an application group for an application assurance policy.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-group-name] string**

Synopsis Application group name

Context **configure** [application-assurance group number partition number policy app-group string](#)

Tree [app-group](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **charging-group reference**

Synopsis Charging group used in the AA application group policy

Context **configure** [application-assurance group number partition number policy app-group string charging-group reference](#)

Tree [charging-group](#)

Reference **configure** [application-assurance group number partition number policy charging-group string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis Text description

Context **configure** [application-assurance group number partition number policy app-group string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-id number**

Synopsis App group export ID used in RADIUS accounting export



Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-group</a> <i>string</i> <a href="#">export-id</a> <i>number</i>
Tree	<a href="#">export-id</a>
Description	This command assigns an export ID value to a charging group, an application group, or an application that RADIUS accounting uses for accounting export identification. This export ID is encoded in the top two bytes of the RADIUS accounting VSA to identify which charging group the counter value represents.  If no export ID is assigned, the counter cannot be added to the AA subscriber stats RADIUS export-type. After a charging group index is referenced, it cannot be deleted without removing the reference.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** [[app-profile-name](#)] *string*

Synopsis	Enter the <b>app-profile</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Tree	<a href="#">app-profile</a>
Description	Commands in this context create an application profile and configure the profile parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[app-profile-name]** *string*

Synopsis	App-profile name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Tree	<a href="#">app-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-suppressible** *boolean*

Synopsis	Enable AA suppression for subs with this app profile
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> <a href="#">aa-sub-suppressible</a> <i>boolean</i>
Tree	<a href="#">aa-sub-suppressible</a>
Description	When configured to <b>true</b> , this command configures the ability to suppress Application Assurance for subscribers with this application profile.  This function is used in the context of an SRRP group interface. If an SRRP group interface is configured as <b>configure service ies subscriber-interface group-interface suppress-aa-sub</b> or <b>configure service vprn subscriber-interface group-interface suppress-aa-sub</b> , subscribers with an application profile configured as suppressible are not diverted to Application Assurance.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **capacity-cost** *number*

Synopsis	Application profile capacity cost
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> <a href="#">capacity-cost</a> <i>number</i>
Tree	<a href="#">capacity-cost</a>
Description	This command configures an application profile capacity cost.  Capacity cost based load balancing allows a cost to be assigned to diverted SAPs (with the application profile). This allows for load balancing SAPs between ISAs and acts as a threshold to notify the operator if capacity planning is exceeded.
Range	1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **characteristic** [[characteristic-name](#)] *reference*

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i> <a href="#">characteristic</a> <i>reference</i>
Tree	<a href="#">characteristic</a>
Description	Commands in this context assign one of the existing values of an existing application service option characteristic to the application profile.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [characteristic-name] *reference*

Synopsis Application service option characteristic name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string* [characteristic](#) *reference*

Tree [characteristic](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-service-options](#) [characteristic](#) *string*

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### value *reference*

Synopsis ASO characteristic value name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string* [characteristic](#) *reference* [value](#) *reference*

Tree [value](#)

Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-service-options](#) [characteristic](#) *string* [value](#) *string*

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### description *string*

Synopsis Text description

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**divert *boolean***

Synopsis	Enable traffic redirection to AA ISAs or ESA VMs
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-profile string</a> <b>divert <i>boolean</i></b>
Tree	<a href="#">divert</a>
Description	When configured to <b>true</b> , this command enables the redirection of traffic to AA ISAs or ESA VMs for the system-wide forwarding classes diverted to Application Assurance ( <b>configure isa application-assurance-group divert-fc</b> ) for AA subscribers using this application profile.  When configured to <b>false</b> , this command stops the redirection of traffic to AA ISAs or ESA VMs for the AA subscribers using this application profile.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**app-qos-policy**

Synopsis	Enter the <b>app-qos-policy</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy</a>
Tree	<a href="#">app-qos-policy</a>
Description	Commands in this context configure an application QoS policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry [[entry-id](#)] *number***

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy</a> <b>entry <i>number</i></b>
Tree	<a href="#">entry</a>
Description	Commands in this context create an application QoS policy (AQP) entry.  A flow that matches multiple AQP entries will have multiple AQP entries actions applied. If a conflict occurs for two or more actions, the action from the AQP entry with the lowest numerical value takes precedence.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id] number**

Synopsis	AQP entry ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action</a>
Tree	<a href="#">action</a>
Description	Commands in this context configure AQP actions to be performed on flows that match the match criteria of the AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**abandon-tcp-optimization boolean**

Synopsis	Abandon TCPO for this entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action abandon-tcp-optimization boolean</a>
Tree	<a href="#">abandon-tcp-optimization</a>
Description	When configured to <b>true</b> , this command disables TCPO for flows matching this AQP entry.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## bandwidth-policer

Synopsis	Enter the <b>bandwidth-policer</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action bandwidth-policer</a>
Tree	<a href="#">bandwidth-policer</a>
Description	<p>Commands in this context assign an existing bandwidth policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers apply to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## anl reference

Synopsis	Access network locator bandwidth policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action bandwidth-policer anl reference</a>
Tree	<a href="#">anl</a>
Description	This command creates an Application Assurance policy profile for a policer instance for each ANL that limits traffic bandwidth in the scope of that ANL. For ANL, only single-bucket bandwidth policers can be configured.
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer anl-bandwidth-policer string</a>
Notes	The following elements are part of a choice: <b>anl</b> , <b>dual-bucket</b> , or <b>single-bucket</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dual-bucket reference

Synopsis	Dual bucket bandwidth limiting policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action bandwidth-policer dual-bucket reference</a>
Tree	<a href="#">dual-bucket</a>

Description	This command creates an Application Assurance policy profile for a dual bucket (PIR) bandwidth limiting policer.
Reference	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string</a>
Notes	The following elements are part of a choice: <b>anl</b> , <b>dual-bucket</b> , or <b>single-bucket</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **single-bucket** *reference*

Synopsis	Single bucket bandwidth limiting policer
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action bandwidth-policer single-bucket reference</a>
Tree	<a href="#">single-bucket</a>
Description	This command creates an Application Assurance policy profile for a single bucket (PIR) bandwidth limiting policer.
Reference	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string</a>
Notes	The following elements are part of a choice: <b>anl</b> , <b>dual-bucket</b> , or <b>single-bucket</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns-ip-cache** *reference*

Synopsis	DNS IP cache name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action dns-ip-cache reference</a>
Tree	<a href="#">dns-ip-cache</a>
Reference	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **drop** *boolean*

Synopsis	Enable drop action for the AQP entry
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action drop boolean</a>
Tree	<a href="#">drop</a>
Description	When configured to <b>true</b> , all flow traffic matching this AQP entry is dropped. The drop action is performed first and no other action is invoked on that flow even if multiple other actions exist for the flow because of one or more AQP entry matches. When configured to <b>false</b> , this command disables the drop action on flows matching this AQP entry.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## error-drop

Synopsis	Enable the <b>error-drop</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action error-drop</a>
Tree	<a href="#">error-drop</a>
Description	Commands in this context configure a drop action for error flows (for instance, bad IP checksums or TCP/UDP port 0).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log *reference*

Synopsis	Event log action for the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action error-drop event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## flow-count-limit-policer

Synopsis	Enter the <b>flow-count-limit-policer</b> context
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer</a>
Tree	<a href="#">flow-count-limit-policer</a>
Description	<p>Commands in this context assign an existing flow count limit policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used by another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks packet out of profile, the final marking will reflect that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event-log** *reference*

Synopsis	Event log name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer-name** *reference*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-count-limit-policer policer-name reference</a>
Tree	<a href="#">policer-name</a>
Description	This command specifies the name of the flow count limit policer for flows matching the AQP entry. The policer name is configured in the <b>configure application-assurance group policer</b> context.
Reference	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-rate-policer**

Synopsis	Enter the <b>flow-setup-rate-policer</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer</a>
Tree	<a href="#">flow-setup-rate-policer</a>
Description	<p>Commands in this context assign an existing flow setup rate policer as an action on flows matching this AQP entry.</p> <p>The match criteria for the AQP entry must specify a unidirectional traffic direction before a policer action can be configured. If a policer is used in one direction in an AQP match entry, the same policer name cannot be used for another AQP entry that uses different traffic direction match criteria.</p> <p>When multiple policers are applied to a single flow, the final action on a packet is the worst case of all policer outcomes (for example, if one of the policers marks a packet out of profile, the final marking reflects that).</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event-log** *reference*

Synopsis	Events log name for flow-setup rate policer
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policer-name** *reference*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action flow-setup-rate-policer policer-name reference</a>
Tree	<a href="#">policer-name</a>
Description	This command specifies the name of the flow setup rate policer for flows matching this AQP entry.
Reference	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## fragment-drop

Synopsis Enter the **fragment-drop** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop](#)

Tree [fragment-drop](#)

Description Commands in this context specify the drop action options to apply to fragments.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## drop-scope *keyword*

Synopsis Fragment-drop scope

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop drop-scope keyword](#)

Tree [drop-scope](#)

Description This command specifies which fragments to drop as an action on flows matching this AQP entry.

Options all, out-of-order

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log *reference*

Synopsis Event log name

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number action fragment-drop event-log reference](#)

Tree [event-log](#)

Reference **configure** [application-assurance group number partition number event-log string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-filter** *reference*

Synopsis	GTP filter executed for flows matching this AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action gtp-filter reference</a>
Tree	<a href="#">gtp-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">gtp gtp-filter string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-enrich** *reference*

Synopsis	HTTP header enrichment action for the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action http-enrich reference</a>
Tree	<a href="#">http-enrich</a>
Description	This command configures the HTTP header enrichment template name that is applied as defined in the tmnxBsxHttpEnrichTable. An empty value specifies no HTTP header enrichment template.
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-enrich string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-error-redirect** *reference*

Synopsis	HTTP error redirect for the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number</a> <a href="#">action http-error-redirect reference</a>
Tree	<a href="#">http-error-redirect</a>
Description	This command specifies the HTTP error redirect that is applied as defined in the redirect table. An empty value specifies no HTTP error redirect.
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-error-redirect string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## http-notification *reference*

Synopsis	HTTP notification to use for flows matching AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action http-notification reference</a>
Tree	<a href="#">http-notification</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-notification string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## http-redirect

Synopsis	Enter the <b>http-redirect</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action http-redirect</a>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context assign an existing HTTP redirect policy as an action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## flow-type *keyword*

Synopsis	Flow type for HTTP redirect of flows matching the entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action http-redirect flow-type keyword</a>
Tree	<a href="#">flow-type</a>
Description	<p>This command assigns an existing HTTP redirect policy as an action on flows matching this AQP entry. The redirect only takes effect if the matching flows are HTTP and the condition specified is met.</p> <p>The condition specified by dropped flows means the flow is dropped due to an AQP action, such as flow rate, count policers, or drop actions. The admitted flows condition allows the operator to redirect HTTP traffic to a web portal while allowing non-HTTP traffic matching the same AQP rule to be forwarded.</p> <p>No HTTP redirect takes place if the HTTP redirect action and a drop/flow-police action are part of the default AQP policy. In this case, any flow drop actions take place before identification of the application/application-group.</p>
Options	dropped-flows, admitted-flows
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name** *reference*

Synopsis HTTP redirect policy name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [http-redirect](#) *name* *reference*

Tree [name](#)

Description This command specifies the name of an existing HTTP policy redirect.

Reference **configure** [application-assurance](#) [group](#) *number* [http-redirect](#) *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mirror-source**

Synopsis Enter the **mirror-source** context

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [mirror-source](#)

Tree [mirror-source](#)

Description Commands in this context configure an application-based policy mirroring service that uses the AQP entry of this AA ISA as a mirror source.

When configured, the AQP entry becomes a mirror source for IP packets seen by AA. The mirrored packet is an IP packet analyzed by AA and does not include encapsulations present on the incoming interfaces.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **all-inclusive** *boolean*

Synopsis Mirror flows matching the AQP subscriber default policy

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [mirror-source](#) [all-inclusive](#) *boolean*

Tree [all-inclusive](#)

Description This command specifies that all packets during the identification phase that could match a given AQP rule are mirrored in addition to packets after an application identification completes that match the AQP rule. This ensures that all packets of a flow are mirrored at a cost of sending some unidentified packets, which after the application is identified no longer match this AQP entry.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mirror-service** *reference*

Synopsis	Mirror source service ID for flows matching the entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action mirror-source mirror-service reference</a>
Tree	<a href="#">mirror-service</a>
Description	This command specifies the mirror source service ID to use for flows that match this policy.
Reference	<b>configure</b> <a href="#">mirror mirror-dest string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **overload-drop**

Synopsis	Enable the <b>overload-drop</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action overload-drop</a>
Tree	<a href="#">overload-drop</a>
Description	Commands in this context configure a drop action for cases where flow records are not created (overload). This command is only applicable to ISA2 hardware.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event-log** *reference*

Synopsis	Event log name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action overload-drop event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remark**

Synopsis	Enter the <b>remark</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action remark</a>
Tree	<a href="#">remark</a>
Description	Commands in this context configure the remark action on flows matching this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dscp**

Synopsis	Enter the <b>dscp</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action remark dscp</a>
Tree	<a href="#">dscp</a>
Description	<p>Commands in this context configure the DSCP remark action or actions on flows matching this AQP entry.</p> <p>All packets for all flows matching this AQP entry are remarked to the configured DSCP name.</p> <p>DSCP remark can only be applied when the entry remarks forwarding class or forwarding class and priority. In-profile and out-of-profile of a packet for DSCP remark is assessed after all AQP policing and priority remarking actions have taken place.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**in-profile keyword**

Synopsis	DSCP name to remark matching in-profile flows
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action remark dscp in-profile keyword</a>
Tree	<a href="#">in-profile</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **out-profile** *keyword*

Synopsis DSCP name to remark matching out-of-profile flows

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [remark](#) [dscp](#) **out-profile** *keyword*

Tree [out-profile](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fc** *keyword*

Synopsis FC remark action for flows matching this entry

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [remark](#) **fc** *keyword*

Tree [fc](#)

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** *keyword*

Synopsis Priority to use to remark flows matching this entry

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-qos-policy](#) [entry](#) *number* [action](#) [remark](#) **priority** *keyword*

Tree [priority](#)

Options low, high, auto

Default auto

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sctp-filter** *reference*

Synopsis	SCTP filter to use for flows matching the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action sctp-filter reference</a>
Tree	<a href="#">sctp-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-filter** *reference*

Synopsis	Session filter to use for flows matching the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action session-filter reference</a>
Tree	<a href="#">session-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-mss-adjust** *number*

Synopsis	TCP MSS adjustment traffic action and size
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action tcp-mss-adjust number</a>
Tree	<a href="#">tcp-mss-adjust</a>
Range	160 to 10240
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-validate** *reference*

Synopsis	TCP validation policy action for entry matching flows
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action tcp-validate reference</a>
Tree	<a href="#">tcp-validate</a>

Description	This command assigns an existing TCP validation policy as an action on flows matching this AQP entry. TCP validation can only be called from AQP entries that: <ul style="list-style-type: none"> <li>• have no matching conditions that relate to information extracted from the incoming IP packets; for example, no application or IP address.</li> <li>• allow the following match conditions: none, aa-sub, characteristic, traffic-direction (both only), traffic-direction cannot be unidirectional (from or to sub). It can either be set to both or left unspecified.</li> </ul>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tls-enrich** *reference*

Synopsis	HTTP TLS enrichment action for the AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action tls-enrich reference</a>
Tree	<a href="#">tls-enrich</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-enrich string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-filter**

Synopsis	Enter the <b>url-filter</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action url-filter</a>
Tree	<a href="#">url-filter</a>
Description	Commands in this context configure a URL filter action for flows matching this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **characteristic** *reference*

Synopsis	URL filter characteristic used for matching AQP entries
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action url-filter characteristic reference</a>

Tree	<a href="#">characteristic</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name reference**

Synopsis	URL filter name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number action url-filter name reference</a>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">application-assurance group number url-filter string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state keyword**

Synopsis	Administrative state of the AA AQP entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match</a>
Tree	<a href="#">match</a>
Description	Commands in this context configure flow match rules for this AQP entry. A flow matches this AQP entry only if it matches all match rules defined (logical AND of all rules). If no match rule is specified, the entry will match all flows.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-sub

Synopsis	Enter the <b>aa-sub</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub</a>
Tree	<a href="#">aa-sub</a>
Description	Commands in this context specify a Service Access Point (SAP) or an Enhanced Subscriber Management (ESM) subscriber as matching criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esm

Synopsis	Enter the <b>esm</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm</a>
Tree	<a href="#">esm</a>
Description	Commands in this context configure the ESM fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq string**

Synopsis	Exact match criterion used for the ESM subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm eq string</a>
Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq string**

Synopsis	Non-match criterion used for ESM subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esm-mac**

Synopsis	Enter the <b>esm-mac</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac</a>
Tree	<a href="#">esm-mac</a>
Description	Commands in this context configure the ESM MAC fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq string**

Synopsis	Exact match criterion used for ESM MAC subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac eq string</a>
Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq string**

Synopsis	Non-match criterion used for AA subscriber ESM MAC
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub esm-mac neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sap**

Synopsis	Enter the <b>sap</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub sap</a>
Tree	<a href="#">sap</a>
Description	Commands in this context configure the SAP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq string**

Synopsis	Exact match criterion used for the SAP subscriber
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">sap</a> <a href="#">eq</a> <a href="#">string</a>
Tree	<a href="#">eq</a>
String Length	1 to 45
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** *string*

Synopsis	Non-match criterion used for the SAP subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">sap</a> <a href="#">neq</a> <a href="#">string</a>
Tree	<a href="#">neq</a>
String Length	1 to 45
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp**

Synopsis	Enter the <b>spoke-sdp</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a>
Tree	<a href="#">spoke-sdp</a>
Description	Commands in this context configure the spoke SDP fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** *string*

Synopsis	Exact match criterion used for a spoke SDP subscriber
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">eq</a> <a href="#">string</a>
Tree	<a href="#">eq</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** *string*

Synopsis	Non-match criterion used for a spoke SDP subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">neq</a> <a href="#">string</a>
Tree	<a href="#">neq</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transit**

Synopsis	Enter the <b>transit</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">transit</a>
Tree	<a href="#">transit</a>
Description	Commands in this context configure the transit fields for the AA subscriber match entry.
Notes	The following elements are part of a choice: <b>esm</b> , <b>esm-mac</b> , <b>sap</b> , <b>spoke-sdp</b> , or <b>transit</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** *string*

Synopsis	Exact match criterion used for a transit AA subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">aa-sub</a> <a href="#">transit</a> <a href="#">eq</a> <a href="#">string</a>

Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq string**

Synopsis	Non-match criterion used for a transit AA subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub transit neq string</a>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-tethering keyword**

Synopsis	Tethering detection status for flow match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match aa-sub-tethering keyword</a>
Tree	<a href="#">aa-sub-tethering</a>
Description	This command configures the match criteria for subscribers in a tethering state.
Options	not-applicable, detected, not-detected
Default	not-applicable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-group**

Synopsis	Enter the <b>app-group</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match app-group</a>
Tree	<a href="#">app-group</a>

Description	Commands in this context add an application group to the match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq reference**

Synopsis	Exact match criterion used for the application group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match app-group eq reference</a>
Tree	<a href="#">eq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq reference**

Synopsis	Non-match criterion used for the application group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match app-group neq reference</a>
Tree	<a href="#">neq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application**

Synopsis	Enter the <b>application</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match application</a>
Tree	<a href="#">application</a>
Description	Commands in this context add an application to match criteria used by this AQP entry.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** *reference*

Synopsis Exact match criterion used for the application

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match application eq reference](#)

Tree [eq](#)

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** *reference*

Synopsis Non-match criterion used for the application

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match application neq reference](#)

Tree [neq](#)

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **characteristic** [[characteristic-name](#)] *reference*

Synopsis Enter the **characteristic** list instance

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match characteristic reference](#)

Tree [characteristic](#)

Description Commands in this context configure an existing characteristic and its value to the match criteria used by this AQP entry.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[characteristic-name] reference**

Synopsis	ASO characteristic name for AQP entry matching
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match characteristic reference</a>
Tree	<a href="#">characteristic</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq reference**

Synopsis	Match criterion used for AQP match characteristic
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match characteristic reference eq reference</a>
Tree	<a href="#">eq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	The following elements are part of a mandatory choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq reference**

Synopsis	Non-match criterion used for AQP match characteristic
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match characteristic reference neq reference</a>
Tree	<a href="#">neq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	The following elements are part of a mandatory choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## charging-group

Synopsis	Enter the <b>charging-group</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match</a> <a href="#">charging-group</a>
Tree	<a href="#">charging-group</a>
Description	Commands in this context add a charging group to match criteria used by this AQP entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq reference

Synopsis	Match criterion used for the charging group
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match</a> <a href="#">charging-group eq reference</a>
Tree	<a href="#">eq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neq reference

Synopsis	Non-match criterion used for the charging group
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match</a> <a href="#">charging-group neq reference</a>
Tree	<a href="#">neq</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dscp**

Synopsis	Enter the <b>dscp</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match dscp</a>
Tree	<a href="#">dscp</a>
Description	Commands in this context add a DSCP name to the match criteria used by this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq keyword**

Synopsis	Exact match criterion used for the DSCP
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match dscp eq keyword</a>
Tree	<a href="#">eq</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**neq keyword**

Synopsis	Non-match criterion used for the DSCP
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy app-qos-policy entry number match dscp neq keyword</a>
Tree	<a href="#">neq</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-ip</a>
Tree	<a href="#">dst-ip</a>
Description	Commands in this context configure a destination IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-ip eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-ip eq ip-prefix (ipv4-prefix   ipv6-prefix)</a>
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix-list** *reference*

Synopsis	IP address prefix list used for match criterion
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">eq</a> <a href="#">ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neq

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">neq</a>
Tree	<a href="#">neq</a>
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-prefix (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">neq</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-prefix-list *reference*

Synopsis	IP address prefix list used for match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-qos-policy</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">neq</a> <a href="#">ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>

Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dst-port

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port</a>
Tree	<a href="#">dst-port</a>
Description	Commands in this context configure a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq</a>
Tree	<a href="#">eq</a>
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-list *reference*

Synopsis	IP port list used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis TCP/UDP starting port number

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port eq range start number

Tree [start](#)

Range 0 | 1 to 65535

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis Enter the **neq** context

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port neq

Tree [neq](#)

Description Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list reference**

Synopsis IP port list used as match criterion

Context **configure** application-assurance group number partition number policy app-qos-policy entry number match dst-port neq port-list reference

Tree [port-list](#)

Reference **configure** application-assurance group number partition number port-list string

Notes The following elements are part of a choice: **port-list**, **port-number**, or **range**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-qos-policy entry</a> <i>number</i> <a href="#">match dst-port neq</a> <b>port-number</b> <i>number</i>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-qos-policy entry</a> <i>number</i> <a href="#">match dst-port neq</a> <b>range</b>
Tree	<a href="#">range</a>
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end** *number*

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-qos-policy entry</a> <i>number</i> <a href="#">match dst-port neq</a> <b>range</b> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match dst-port neq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-attribute** [[flow-attribute-name](#)] *string*

Synopsis	Enter the <b>flow-attribute</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string</a>
Tree	<a href="#">flow-attribute</a>
Description	Commands in this context configure a flow attribute to use as match criteria. The supported options are: <ul style="list-style-type: none"> <li>• abr_service</li> <li>• audio</li> <li>• download</li> <li>• encrypted</li> <li>• esni</li> <li>• real_time_communication</li> <li>• upload</li> <li>• video</li> </ul>
Max. Instances	10
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[flow-attribute-name]** *string*

Synopsis	Flow attribute name used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string</a>

Tree	<a href="#">flow-attribute</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## confidence

Synopsis	Enter the <b>confidence</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence</a>
Tree	<a href="#">confidence</a>
Description	Commands in this context configure the confidence level of the flow attribute for use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq number

Synopsis	Exact match criterion for the flow-attribute confidence
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gte number

Synopsis	Greater than or equal to for confidence match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence gte number</a>
Tree	<a href="#">gte</a>
Range	0 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lt** *number*

Synopsis	Less than value for confidence match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match flow-attribute string confidence lt number</a>
Tree	<a href="#">lt</a>
Range	1 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-protocol**

Synopsis	Enter the <b>ip-protocol</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match ip-protocol</a>
Tree	<a href="#">ip-protocol</a>
Description	Commands in this context configure the IP protocol to use in the application definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq** (*number* | *keyword*)

Synopsis	Exact match criterion used for the IP protocol
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match ip-protocol eq (number   keyword)</a>
Tree	<a href="#">eq</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** (*number* | *keyword*)

Synopsis Non-match criterion used for the IP protocol

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match ip-protocol neq](#) (*number* | *keyword*)

Tree [neq](#)

Range 0 to 255

Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **src-ip**

Synopsis Enter the **src-ip** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match src-ip](#)

Tree [src-ip](#)

Description Commands in this context configure a source IP address to use as match criteria.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq**

Synopsis Enter the **eq** context

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [policy app-qos-policy entry](#) *number* [match src-ip eq](#)

Tree [eq](#)

Description Commands in this context specify the exact match value as the match criterion. A successful match occurs when the flow matches the specified address or prefix.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP address prefix used for match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip eq ip-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [ip-prefix](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis IP address prefix list used for match criterion

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip eq ip-prefix-list reference](#)

Tree [ip-prefix-list](#)

Reference **configure** [application-assurance group number partition number ip-prefix-list string](#)

Notes The following elements are part of a choice: **ip-prefix** or **ip-prefix-list**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis Enter the **neq** context

Context **configure** [application-assurance group number partition number policy app-qos-policy entry number match src-ip neq](#)

Tree [neq](#)

Description Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified address or prefix.

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address prefix used for match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-ip neq ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix-list** *reference*

Synopsis	IP address prefix list used for match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-ip neq ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port</a>
Tree	<a href="#">src-port</a>
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq**

Synopsis	Enter the <b>eq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq</a>

Tree	<a href="#">eq</a>
Description	Commands in this context specify the exact match criterion. A successful match occurs when the flow matches the specified port.
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list** *reference*

Synopsis	IP port list used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq range</a>
Tree	<a href="#">range</a>

Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port eq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq**

Synopsis	Enter the <b>neq</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq</a>
Tree	<a href="#">neq</a>
Description	Commands in this context specify the non-match value as the match criterion. A successful match occurs when the flow does not match the specified port.

Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-list** *reference*

Synopsis	IP port list used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-number** *number*

Synopsis	Server port number used as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq port-number number</a>
Tree	<a href="#">port-number</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify the match value as the match criterion based on the starting or ending port number.
Notes	The following elements are part of a choice: <b>port-list</b> , <b>port-number</b> , or <b>range</b> .

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	TCP/UDP ending port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	TCP/UDP starting port number
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match src-port neq range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**traffic-direction keyword**

Synopsis	Traffic direction to which AQP match entry is applied
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-qos-policy entry number match traffic-direction keyword</a>
Tree	<a href="#">traffic-direction</a>
Options	subscriber-to-network, network-to-subscriber, both
Default	both
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## app-service-options

Synopsis	Enter the <b>app-service-options</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options</a>
Tree	<a href="#">app-service-options</a>
Description	Commands in this context configure application service option characteristics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Tree	<a href="#">characteristic</a>
Description	Commands in this context create the characteristic of the application service options.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	ASO characteristic name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Tree	<a href="#">characteristic</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-value *string*

Synopsis	ASO characteristic default value
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string default-value string</a>



Tree	<a href="#">default-value</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for <b>value</b>
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Tree	<a href="#">value</a>
Description	Commands in this context configure a characteristic value.
Max. Instances	64
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[value-name]** *string*

Synopsis	ASO characteristic value name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Tree	<a href="#">value</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Tree	<a href="#">application</a>
Description	Commands in this context configure the policy application of the Application Assurance group partition.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-name]** *string*

Synopsis	Application name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">application</a> <i>string</i>
Tree	<a href="#">application</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-group** *reference*

Synopsis	Application group associated with the application
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">application</a> <i>string</i> <a href="#">app-group</a> <i>reference</i>
Tree	<a href="#">app-group</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-group</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **charging-group** *reference*

Synopsis	Charging group associated with the application
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">application</a> <i>string</i> <a href="#">charging-group</a> <i>reference</i>
Tree	<a href="#">charging-group</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">charging-group</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description *string***

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy application string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export-id *number***

Synopsis	Application export ID used for RADIUS accounting
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy application string</a> <a href="#">export-id number</a>
Tree	<a href="#">export-id</a>
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**charging-filter**

Synopsis	Enter the <b>charging-filter</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter</a>
Tree	<a href="#">charging-filter</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry [*entry-id*] *number***

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter</a> <a href="#">entry number</a>
Tree	<a href="#">entry</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id] number**

Synopsis	Charging filter entry ID in the AA partition policy
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter entry number</a>
Tree	<a href="#">entry</a>
Description	This command defines a charging filter entry ID. Charging filter entries are an ordered list; the lowest numerical entry that matches the flow, defines the charging filter for this flow.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the AA charging filter entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter entry number</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**charging-group reference**

Synopsis	Charging group to associate to flows matching the entry
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-filter entry number</a> <a href="#">charging-group reference</a>
Tree	<a href="#">charging-group</a>
Description	This command associates a charging group to the flows that match the charging filter entry.
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy charging-group string</a>
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### description *string*

Synopsis Text description

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *description string*

Tree [description](#)

String Length 1 to 80

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### match

Synopsis Enter the **match** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match*

Tree [match](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### app-group

Synopsis Enter the **app-group** context

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match app-group*

Tree [app-group](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### eq *reference*

Synopsis Exact value as the match criterion

Context **configure** [application-assurance group number](#) [partition number](#) [policy charging-filter entry number](#) *match app-group eq reference*

Tree [eq](#)

Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq reference**

Synopsis	Non-matching application to resolve to a charging group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match app-group neq reference</a>
Tree	<a href="#">neq</a>
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application**

Synopsis	Enter the <b>application</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match application</a>
Tree	<a href="#">application</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq reference**

Synopsis	Exact value as the match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match application eq reference</a>
Tree	<a href="#">eq</a>

Description	This command specifies that the value configured and the value in the flow must be equal for a match to occur.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **neq** *reference*

Synopsis	Non-matching application to resolve to a charging group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match application neq reference</a>
Tree	<a href="#">neq</a>
Description	This command specifies that the value configured and the value in the flow must differ for a match to occur.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy application string</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-attribute** [[flow-attribute-name](#)] *string*

Synopsis	Enter the <b>flow-attribute</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string</a>
Tree	<a href="#">flow-attribute</a>
Max. Instances	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[flow-attribute-name]** *string*

Synopsis	Flow attribute name match criteria
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string</a>
Tree	<a href="#">flow-attribute</a>
Description	This command adds a flow attribute to the match criteria used by this charging filter entry.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## confidence

Synopsis	Enter the <b>confidence</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence</a>
Tree	<a href="#">confidence</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## eq number

Synopsis	Exact value as the match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence eq number</a>
Tree	<a href="#">eq</a>
Description	This command specifies that a successful match occurs when the flow attribute confidence level is equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gte number

Synopsis	Confidence value to resolve to a charging group
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Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence gte number</a>
Tree	<a href="#">gte</a>
Description	This command specifies that a successful match occurs when the flow attribute confidence level is greater than or equal to the specified value.
Range	0 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lt number**

Synopsis	Less than value as the match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match flow-attribute string confidence lt number</a>
Tree	<a href="#">lt</a>
Description	This command specifies that a successful match occurs when the flow attribute confidence level is less than the specified value.
Range	1 to 100
Notes	The following elements are part of a choice: <b>eq</b> , <b>gte</b> , or <b>lt</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tethered-flow**

Synopsis	Enable the <b>tethered-flow</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-filter entry number match tethered-flow</a>
Tree	<a href="#">tethered-flow</a>
Description	Commands in this context add the tethering status to the match criteria used by this charging filter entry.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**charging-group** [[charging-group-name](#)] *string*

Synopsis	Enter the <b>charging-group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Tree	<a href="#">charging-group</a>
Description	Commands in this context create a charging group for an Application Assurance policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[charging-group-name]** *string*

Synopsis	Charging group name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Tree	<a href="#">charging-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export-id** *number*

Synopsis	Charging group export ID used for RADIUS accounting
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string export-id number</a>
Tree	<a href="#">export-id</a>

Description	This command assigns an export ID value to a charging group, an app application group, or an application to be used for accounting export identification in RADIUS accounting. This ID is encoded in the top 2 bytes of the RADIUS accounting VSA to identify which charging group the counter value represents.
Range	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **notify-start-stop** *keyword*

Synopsis	Start and stop notification for the charging group
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">charging-group</a> <i>string</i> <b>notify-start-stop</b> <i>keyword</i>
Tree	<a href="#">notify-start-stop</a>
Options	none, flow, charging-group
Default	none
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **custom-protocol** [[custom-protocol-id](#)] *string*

Synopsis	Enter the <b>custom-protocol</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">custom-protocol</a> <i>string</i>
Tree	<a href="#">custom-protocol</a>
Description	<p>Commands in this context configure custom protocols.</p> <p>Custom protocols allow the creation of TCP and UDP-based custom protocols that employ pattern-match at offset in the protocol signature definition.</p> <p>Operator-configurable custom protocols are evaluated ahead of any Nokia-provided protocol signature in order of custom protocol ID within the context the protocol is defined. The lower ID is matched first in case of flow matching multiple custom protocols.</p> <p>Custom protocols must be created before they can be used in an application definition but do not have to be enabled. To reference a custom protocol in an application definition, or any other CLI configuration one must use the protocol name that is a concatenation of “custom_” and, (for example, custom_01, custom_02 ... custom_10, and so on). This concatenation is also used when reporting custom protocol statistics.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[custom-protocol-id] string**

Synopsis	Custom protocol ID for the AA policy custom protocol
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy custom-protocol string</a>
Tree	<a href="#">custom-protocol</a>
Description	This command configures the index into the protocol list that defines a custom protocol for Application Assurance.
String Length	9
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the custom protocol
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy custom-protocol string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy custom-protocol string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**expression** [[expr-index](#)] *number*

Synopsis	Enter the <b>expression</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">custom-protocol</a> <a href="#">string</a> <a href="#">expression</a> <i>number</i>
Tree	<a href="#">expression</a>
Description	Commands in this context configure an expression string value for pattern-based custom protocols match.  A flow matches a custom protocol if the specified string is found at an offset of a TCP/UDP of the first payload packet.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[[expr-index](#)]** *number*

Synopsis	Expression substring index for custom protocol matching
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">custom-protocol</a> <a href="#">string</a> <a href="#">expression</a> <i>number</i>
Tree	<a href="#">expression</a>
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Flow direction for custom-protocol expression matching
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">custom-protocol</a> <a href="#">string</a> <a href="#">expression</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Description	This command configures the protocol direction to match against for a custom protocol.
Options	client-to-server, server-to-client, any
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**eq string**

Synopsis	Exact match criterion for custom protocol expression
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy custom-protocol string expression number</a> <b>eq string</b>
Tree	<a href="#">eq</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**offset number**

Synopsis	Offset in protocol flow to start custom-protocol match
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy custom-protocol string expression number</a> <b>offset number</b>
Tree	<a href="#">offset</a>
Description	This command configures the offset into the protocol payload where the expr-string match criteria starts.
Range	0 to 127
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-protocol keyword****WARNING:**

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

Synopsis	IP protocol number for custom-protocol match criterion
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy custom-protocol string ip-protocol</a> <b>keyword</b>
Tree	<a href="#">ip-protocol</a>
Description	This command configures the IP protocol number of the TCP and UDP-based custom protocols.
Options	tcp, udp
Notes	This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-charging-group** *reference*

Synopsis	Default charging group
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy default-charging-group reference</a>
Tree	<a href="#">default-charging-group</a>
Description	This command associates a charging group with any applications or application groups that do not have an explicitly assigned charging group for the Application Assurance policy.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-tethered-charging-group** *reference*

Synopsis	Default charging group for tethered traffic
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy default-tethered-charging-group reference</a>
Tree	<a href="#">default-tethered-charging-group</a>
Description	This command configures the default charging group to be assigned to all flows which are classified as tethered.  For flows that have been identified as tethered, the AA will replace the charging group configured at the application level with the charging group configured for tethered traffic (that is, configured with <b>default-tethered-charging-group</b> ).
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-override**

Synopsis	Enter the <b>policy-override</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override</a>
Tree	<a href="#">policy-override</a>

Description	Commands in this context configure policy override parameters.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-sub

Synopsis	Enter the <b>aa-sub</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy-override aa-sub</a>
Tree	<a href="#">aa-sub</a>
Description	Commands in this context configure the AA policy override subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap [[sap-id](#)] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy-override aa-sub</a> <a href="#">sap string</a>
Tree	<a href="#">sap</a>
Description	Commands in this context configure the Service Access Point (SAP) within the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[sap-id](#)] *string*

Synopsis	AA subscriber SAP ID
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">policy-override aa-sub</a> <a href="#">sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**characteristic** [[characteristic-name](#)] *reference*

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub sap string characteristic reference</a>
Tree	<a href="#">characteristic</a>
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[characteristic-name]** *reference*

Synopsis	ASO characteristic name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub sap string characteristic reference</a>
Tree	<a href="#">characteristic</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value** *reference*

Synopsis	Characteristic value used in subscriber policy override
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub sap string characteristic reference value reference</a>
Tree	<a href="#">value</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy-override</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">string</a>
Tree	<a href="#">spoke-sdp</a>
Description	Commands in this context configure the Service Distribution Point (SDP) for the policy override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sdp-bind-id]** *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy-override</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">string</a>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**characteristic** [[characteristic-name](#)] *reference*

Synopsis	Enter the <b>characteristic</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy-override</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">characteristic</a> <a href="#">reference</a>
Tree	<a href="#">characteristic</a>
Description	Commands in this context configure an override characteristic and value.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[characteristic-name]** *reference*

Synopsis	ASO characteristic name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy-override</a> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">characteristic</a> <a href="#">reference</a>
Tree	<a href="#">characteristic</a>

Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### value reference

Synopsis	Characteristic value used in subscriber policy override
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub spoke-sdp string characteristic reference value reference</a>
Tree	<a href="#">value</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-service-options characteristic string value string</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### transit [[transit-sub-name](#)] string

Synopsis	Enter the <b>transit</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub transit string</a>
Tree	<a href="#">transit</a>
Description	Commands in this context configure the AA transit subscriber fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [[transit-sub-name](#)] string

Synopsis	Transit subscriber name
Context	<b>configure</b> <a href="#">application-assurance group number partition number policy-override aa-sub transit string</a>
Tree	<a href="#">transit</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **characteristic** [[characteristic-name](#)] *reference*

Synopsis Enter the **characteristic** list instance  
 Context **configure** [application-assurance group number partition number policy-override aa-sub transit string characteristic reference](#)  
 Tree [characteristic](#)  
 Description Commands in this context configure an override characteristic and value.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[characteristic-name]** *reference*

Synopsis ASO characteristic name  
 Context **configure** [application-assurance group number partition number policy-override aa-sub transit string characteristic reference](#)  
 Tree [characteristic](#)  
 Reference **configure** [application-assurance group number partition number policy app-service-options characteristic string](#)  
 Notes This element is part of a list key.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **value** *reference*

Synopsis Characteristic value used in subscriber policy override  
 Context **configure** [application-assurance group number partition number policy-override aa-sub transit string characteristic reference value reference](#)  
 Tree [value](#)  
 Reference **configure** [application-assurance group number partition number policy app-service-options characteristic string value string](#)  
 Notes This element is mandatory.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list** [[port-list-name](#)] *string*

Synopsis	Enter the <b>port-list</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Tree	<a href="#">port-list</a>
Description	<p>Commands in this context define an AA group or partition named port list, which contains a list of port numbers or port ranges.</p> <p>The port list is then referenced in AA policy application filters, allowing increased flexibility in the use of server ports or HTTP proxy ports for application definition.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[port-list-name]** *string*

Synopsis	Port list name
Context	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Tree	<a href="#">port-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number port-list string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port** [[port-number](#)] *number*

Synopsis	Add a list entry for <b>port</b>
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <a href="#">string</a> <a href="#">port</a> <a href="#">number</a>
Tree	<a href="#">port</a>
Description	Commands in this context specify the server TCP or UDP port number to use in the port list definition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[port-number]** *number*

Synopsis	Port number
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <a href="#">string</a> <a href="#">port</a> <a href="#">number</a>
Tree	<a href="#">port</a>
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **range** [start](#) *number* [end](#) *number*

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <a href="#">string</a> <a href="#">range</a> <a href="#">start</a> <i>number</i> <a href="#">end</a> <i>number</i>
Tree	<a href="#">range</a>
Description	Commands in this context configure the AA group or partition named port-list range.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start** *number*

Synopsis	Start value for the port range in the AA port list
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">port-list</a> <a href="#">string</a> <a href="#">range</a> <a href="#">start</a> <i>number</i> <a href="#">end</a> <i>number</i>
Tree	<a href="#">range</a>
Range	0 to 65534

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

**end number**

Synopsis	End value for the port range in the AA port list
Context	<b>configure</b> <a href="#">application-assurance group number partition number port-list string range</a> <a href="#">start number end number</a>
Tree	<a href="#">range</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sctp-filter** [[sctp-filter-name](#)] *string*

Synopsis	Enter the <b>sctp-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Tree	<a href="#">sctp-filter</a>
Description	Commands in this context configure the Stream Control Transmission Protocol (SCTP) fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sctp-filter-name]** *string*

Synopsis	SCTP filter name
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Tree	<a href="#">sctp-filter</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event-log** *reference*

Synopsis	Event log for packets dropped by the SCTP filter
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ppid**

Synopsis	Enter the <b>ppid</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid</a>
Tree	<a href="#">ppid</a>
Description	Commands in this context configure actions for specific or default Payload Protocol Identifiers (PPIDs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-action** *keyword*

Synopsis	Default action for all SCTP PPIDs
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid default-action keyword</a>
Tree	<a href="#">default-action</a>
Options	deny, permit



Default	permit
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	Commands in this context specify SCTP PPID values and the corresponding action to apply.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[entry-id]** *number*

Synopsis	SCTP filter PPID entry ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis	SCTP filter PPID entry action
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	deny, permit
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value** (*number* | *keyword*)**WARNING:**

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

Synopsis	PPID entry value
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid</a> <a href="#">entry</a> <i>number</i> <b>value</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">value</a>
Range	0 to 4294967295
Options	iaa, m2ua, m3ua, sua, m2pa, v5ua, h.248, bicc/q.2150.3, tali, dua, asap, enr, h.323, q.ipc/q.2150.3, simco, ddp-segment-chunk, ddp-stream-session-control, s1-application-protocol, rua, hnbap, forces-hp, forces-mp, forces-lp, sbc-ap, nbap, x2ap, ircp, lcs-ap, mpich2, service-area-broadcast-protocol, fractal-generator-protocol, ping-pong-protocol, calcapp-protocol, scripting-service-protocol, netperformer-protocol-control-channel, netperformer-protocol-data-channel, echo, discard, daytime, character-generator, 3gpp-rna, 3gpp-m2ap, 3gpp-m3ap, ssh-over-sctp, diameter-in-a-sctp-data-chunk, diameter-in-a-dtls/sctp-data-chunk, r14p.-ber-encoded-asn.1-over-sctp, webrtc-control, domstring-last, binary-data-partial, binary-data-last, domstring-partial, 3gpp-pua, webrtc-string-empty, webrtc-binary-empty, 3gpp-xwap, 3gpp-xw-control-plane, 3gpp-ng-application-protocol, 3gpp-xn-application-protocol, 3gpp-f1-application-protocol, http-sctp, 3gpp-e1-application-protocol, ele2-lawful-interception, 3gpp-ngap-over-dtls-over-sctp, 3gpp-xnap-over-dtls-over-sctp, 3gpp-f1ap-over-dtls-over-sctp, 3gpp-e1ap-over-dtls-over-sctp, e2-cp, e2-up, e2-du, 3gpp-w1ap
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ppid-range**

Synopsis	Enter the <b>ppid-range</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">sctp-filter</a> <i>string</i> <a href="#">ppid-range</a>
Tree	<a href="#">ppid-range</a>
Description	Commands in this context specify the range of PPID values that are allowed by the AA SCTP filter firewall.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max number**

Synopsis	Maximum PPID value
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid-range max number</a>
Tree	<a href="#">max</a>
Description	This command configures the maximum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be greater or equal to the minimum PPID value.
Range	0 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**min number**

Synopsis	Minimum PPID value
Context	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid-range min number</a>
Tree	<a href="#">min</a>
Description	This command configures the minimum SCTP Payload Protocol Identifier (PPID) to be permitted by the SCTP filter. The value must be less than or equal to the maximum PPID value.
Range	0 to 4294967295
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-filter** [[session-filter-name](#)] *string*

Synopsis	Enter the <b>session-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string</a>
Tree	<a href="#">session-filter</a>
Description	Commands in this context create a session filter.
Max. Instances	1000
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[session-filter-name]** *string*

Synopsis Session filter name

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string*

Tree [session-filter](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-action**

Synopsis Enter the **default-action** context

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string* [default-action](#)

Tree [default-action](#)

Description Commands in this context specify the default action to take for packets that do not match any filter entries.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis Default action for packets not matching filter entries

Context **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [session-filter](#) *string* [default-action](#) [action](#) *keyword*

Tree [action](#)

Options deny, permit

Default deny

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event-log** *reference*

Synopsis	Event logging of default action
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string default-action event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number</a>
Tree	<a href="#">entry</a>
Description	Commands in this context configure an AA session filter match entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id]** *number*

Synopsis	Entry ID for the session filter entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 65535

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

## action

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action</a>
Tree	<a href="#">action</a>
Description	Commands in this context configure the action for this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## deny

Synopsis	Deny sessions matching the criteria
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action deny</a>
Tree	<a href="#">deny</a>
Notes	The following elements are part of a choice: <b>deny</b> , <b>http-redirect</b> , <b>permit</b> , or <b>tcp-optimizer</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## event-log reference

Synopsis	Event log name used to log the action
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-redirect** *reference*

Synopsis	HTTP redirect for matching sessions
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action http-redirect reference</a>
Tree	<a href="#">http-redirect</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">http-redirect string</a>
Notes	The following elements are part of a choice: <b>deny</b> , <b>http-redirect</b> , <b>permit</b> , or <b>tcp-optimizer</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**permit**

Synopsis	Permit sessions that match the criteria
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action permit</a>
Tree	<a href="#">permit</a>
Notes	The following elements are part of a choice: <b>deny</b> , <b>http-redirect</b> , <b>permit</b> , or <b>tcp-optimizer</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-optimizer** *reference*

Synopsis	TCP optimizer to handle sessions matching the criteria
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number action tcp-optimizer reference</a>
Tree	<a href="#">tcp-optimizer</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">tcp-optimizer string</a>
Notes	The following elements are part of a choice: <b>deny</b> , <b>http-redirect</b> , <b>permit</b> , or <b>tcp-optimizer</b> .
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match</a>
Tree	<a href="#">match</a>
Description	Commands in this context configure session conditions for this entry.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-ip</a>
Tree	<a href="#">dst-ip</a>
Description	Commands in this context configure the destination IP address to match.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dns-ip-cache** *reference*

Synopsis	Destination IPs in specified DNS IP Cache
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-ip dns-ip-cache reference</a>
Tree	<a href="#">dns-ip-cache</a>
Reference	<b>configure</b> <a href="#">application-assurance group number dns-ip-cache string</a>



Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-ip ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	IP address prefix list as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-ip ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number ip-prefix-list string</a>
Notes	The following elements are part of a choice: <b>dns-ip-cache</b> , <b>ip-prefix</b> , or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-port</a>
Tree	<a href="#">dst-port</a>
Description	Commands in this context specify a destination TCP/UDP port, a destination port list, or a destination range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** *number*

Synopsis	Match criterion used for destination or source port
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <b>eq</b> <i>number</i>
Tree	<a href="#">eq</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gt** *number*

Synopsis	Greater than match criterion for the port number
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <b>gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lt** *number*

Synopsis	Less than match criterion for the port
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <b>lt</b> <i>number</i>
Tree	<a href="#">lt</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list reference**

Synopsis	Destination or source port list
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match dst-port port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">port-list string</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match dst-port range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match dst-port range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the port range as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match dst-port range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-protocol** (*number* | *keyword*)

Synopsis	IP protocol as a match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match ip-protocol (number   keyword)</a>
Tree	<a href="#">ip-protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match src-ip</a>
Tree	<a href="#">src-ip</a>
Description	Commands in this context specify a source IP address to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source IP address prefix as match criterion
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix-list** *reference*

Synopsis	Source IP address prefix list as match criterion
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">ip-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>ip-prefix</b> or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a>
Tree	<a href="#">src-port</a>
Description	Commands in this context specify a source IP port, a source port list, or a source range to use as match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **eq** *number*

Synopsis	Match criterion used for destination or source port
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0   1 to 65535

Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gt number**

Synopsis	Greater than match criterion for the port number
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match src-port</a> <b>gt number</b>
Tree	<a href="#">gt</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lt number**

Synopsis	Less than match criterion for the port
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match src-port</a> <b>lt number</b>
Tree	<a href="#">lt</a>
Range	0   1 to 65535
Default	0
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-list reference**

Synopsis	Destination or source port list
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition number</a> <a href="#">session-filter string</a> <a href="#">entry number match src-port</a> <b>port-list reference</b>
Tree	<a href="#">port-list</a>

Reference	<b>configure</b> <a href="#">application-assurance group number partition number port-list string</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match src-port range</a>
Tree	<a href="#">range</a>
Description	Commands in this context specify a destination IP port, a destination port list, or a destination range to use as match criteria.
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of the port range as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match src-port range end number</a>
Tree	<a href="#">end</a>
Range	0   1 to 65535
Default	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of the port range as match criterion
Context	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number match src-port range start number</a>
Tree	<a href="#">start</a>
Range	0   1 to 65535
Default	0

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **shallow-inspection** *boolean*

Synopsis Enable shallow inspection  
 Context **configure** [application-assurance group number partition number shallow-inspection boolean](#)  
 Tree [shallow-inspection](#)  
 Default false  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **statistics**

Synopsis Enter the **statistics** context  
 Context **configure** [application-assurance group number partition number statistics](#)  
 Tree [statistics](#)  
 Description Commands in this context configure accounting and billing statistics for this AA group.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-admit-deny**

Synopsis Enter the **aa-admit-deny** context  
 Context **configure** [application-assurance group number partition number statistics aa-admit-deny](#)  
 Tree [aa-admit-deny](#)  
 Description Commands in this context configure admit-deny statistics generation.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis Accounting policy



Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp-filter-stats** *boolean*

Synopsis	Include GTP filter admit-deny statistics in records
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny gtp-filter-stats boolean</a>
Tree	<a href="#">gtp-filter-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policer-stats** *boolean*

Synopsis	Include admit-deny policer statistics in records
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny policer-stats boolean</a>
Tree	<a href="#">policer-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policer-stats-resources** *boolean*

Synopsis	Allocate resources for policer admit-deny statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny policer-stats-resources</a> <i>boolean</i>
Tree	<a href="#">policer-stats-resources</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sctp-filter-stats** *boolean*

Synopsis	Include SCTP filter admit-deny statistics in accounting
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny sctp-filter-stats</a> <i>boolean</i>
Tree	<a href="#">sctp-filter-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-filter-stats** *boolean*

Synopsis	Include session filter admit-deny statistics in records
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny session-filter-stats</a> <i>boolean</i>
Tree	<a href="#">session-filter-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-validate-stats** *boolean*

Synopsis	Include TCP validate admit-deny statistics in records
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-admit-deny tcp-validate-stats</a> <i>boolean</i>
Tree	<a href="#">tcp-validate-stats</a>

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-app-group

Synopsis	Enter the <b>aa-app-group</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-app-group</a>
Tree	<a href="#">aa-app-group</a>
Description	Commands in this context configure the AA application group statistics fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-policy *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-app-group accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## collect-stats *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-app-group collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-application

Synopsis	Enter the <b>aa-application</b> context
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Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-application</a>
Tree	<a href="#">aa-application</a>
Description	Commands in this context configure the application statistics fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-application accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-application collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-partition**

Synopsis	Enter the <b>aa-partition</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition</a>
Tree	<a href="#">aa-partition</a>
Description	Commands in this context configure the AA partition statistics fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tethering-stats** *boolean*

Synopsis	Collect tethering statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition tethering-stats boolean</a>
Tree	<a href="#">tethering-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **traffic-type-stats** *boolean*

Synopsis	Collect traffic type statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-partition traffic-type-stats boolean</a>
Tree	<a href="#">traffic-type-stats</a>

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-protocol

Synopsis	Enter the <b>aa-protocol</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-protocol</a>
Tree	<a href="#">aa-protocol</a>
Description	Commands in this context configure the AA protocol statistics fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-policy *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-protocol accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of protocol statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-protocol admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-protocol collect-stats boolean</a>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-sub**

Synopsis	Enter the <b>aa-sub</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub</a>
Tree	<a href="#">aa-sub</a>
Description	Commands in this context configure accounting and statistics collection parameters for Application Assurance subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aggregate-stats-export-using** *keyword*

Synopsis	Method of statistics export to be used
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub aggregate-stats-export-using keyword</a>
Tree	<a href="#">aggregate-stats-export-using</a>
Options	accounting-policy, radius-accounting-policy

Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-group** [[app-group-name](#)] *reference*

Synopsis	Enter the <b>app-group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub app-group reference</a>
Tree	<a href="#">app-group</a>
Description	Commands in this context configure accounting and statistics collection parameters for AA application groups for a specific AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[app-group-name]** *reference*

Synopsis	Application group name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub app-group reference</a>
Tree	<a href="#">app-group</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-group string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-using** *keyword*

Synopsis	Method used to export statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub app-group reference export-using keyword</a>
Tree	<a href="#">export-using</a>
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application** [[application-name](#)] *reference*

Synopsis Enter the **application** list instance

Context **configure** [application-assurance group number partition number statistics aa-sub application reference](#)

Tree [application](#)

Description Commands in this context configure the AA subscriber accounting statistics for the export of AA applications for an AA group/partition.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-name]** *reference*

Synopsis Application name

Context **configure** [application-assurance group number partition number statistics aa-sub application reference](#)

Tree [application](#)

Reference **configure** [application-assurance group number partition number policy application string](#)

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-using** *keyword*

Synopsis Method used to export statistics

Context **configure** [application-assurance group number partition number statistics aa-sub application reference export-using keyword](#)

Tree [export-using](#)

Options accounting-policy, radius-accounting-policy

Max. Instances 2

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**charging-group** [[charging-group-name](#)] *reference*

Synopsis	Enter the <b>charging-group</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub charging-group reference</a>
Tree	<a href="#">charging-group</a>
Description	Commands in this context configure AA subscriber accounting statistics for the export of AA charging groups of an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[charging-group-name]** *reference*

Synopsis	Charging group name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub charging-group reference</a>
Tree	<a href="#">charging-group</a>
Description	This command specifies the AA charging group to be included in the exported accounting records.
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy charging-group string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export-using** *keyword*

Synopsis	Method used to export statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub charging-group reference export-using keyword</a>
Tree	<a href="#">export-using</a>
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**exclude-tcp-retrans** *boolean*

Synopsis	Exclude TCP retransmission and error statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub exclude-tcp-retrans</a> <i>boolean</i>
Tree	<a href="#">exclude-tcp-retrans</a>
Description	When configured to <b>true</b> , TCP errors and retransmission packets are not counted for the purpose of content-based billing. <b>Note:</b> This command is only applicable to EPC. This setting has no impact on app/app-group aggregate AA stats.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-throughput-stats** *boolean*

Synopsis	Collect maximum throughput statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub max-throughput-stats</a> <i>boolean</i>
Tree	<a href="#">max-throughput-stats</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>protocol</b> list instance
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Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub protocol string</a>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure AA subscriber accounting statistics for the export of aa-sub protocols of an AA group/partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[protocol-name]** *string*

Synopsis	AA protocol name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub protocol string</a>
Tree	<a href="#">protocol</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-using** *keyword*

Synopsis	Method used to export statistics
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub protocol string export-using keyword</a>
Tree	<a href="#">export-using</a>
Options	accounting-policy, radius-accounting-policy
Max. Instances	2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy name
Context	<b>configure</b> <a href="#">application-assurance group number partition number statistics aa-sub radius-accounting-policy reference</a>
Tree	<a href="#">radius-accounting-policy</a>

Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **usage-monitoring** *boolean*

Synopsis	Collect usage monitoring statistics
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub</a> <a href="#">usage-monitoring</a> <i>boolean</i>
Tree	<a href="#">usage-monitoring</a>
Description	When configured to <b>true</b> , this command allows the system to activate Gx usage monitoring at AA group/partition level, if enough usage monitoring resources exist for all existing subs.  When configured to <b>false</b> , this command silently removes all monitoring instances (no PCRF notifications) for AA subscribers and all subsequent AA Gx usage monitoring messages are ignored.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-study** [[study-type](#)] *keyword*

Synopsis	Enter the <b>aa-sub-study</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i>
Tree	<a href="#">aa-sub-study</a>
Description	Commands in this context configure accounting and statistics collection parameters per AA special study subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[study-type]** *keyword*

Synopsis	Statistic type that the study is using
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i>
Tree	<a href="#">aa-sub-study</a>

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

## aa-sub

Synopsis	Enter the <b>aa-sub</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a>
Tree	<a href="#">aa-sub</a>
Description	Commands in this context add an existing subscriber identification to a group of special study subscribers.  Identifying a group of special study subscribers allows statistics and accounting records for those subscribers to be collected for protocols and applications through Application Assurance. When adding a subscriber to the special study group, accounting records and statistics generation commence immediately. When removing a subscriber from the group, special study statistics and accounting records for that subscriber in the current interval are lost.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esm [[esm-sub-name](#)] *string*

Synopsis	Add a list entry for <b>esm</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">esm</a> <i>string</i>
Tree	<a href="#">esm</a>
Description	Commands in this context configure the ESM fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[esm-sub-name](#)] *string*

Synopsis	ESM subscriber name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">esm</a> <i>string</i>
Tree	<a href="#">esm</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esm-mac** [[esm-mac-sub-name](#)] *string*

Synopsis	Add a list entry for <b>esm-mac</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <b>esm-mac</b> <i>string</i>
Tree	<a href="#">esm-mac</a>
Description	Commands in this context configure the ESM MAC fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[esm-mac-sub-name]** *string*

Synopsis	ESM MAC subscriber name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <b>esm-mac</b> <i>string</i>
Tree	<a href="#">esm-mac</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sap** [[sap-id](#)] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
Description	Commands in this context configure the Service Access Point (SAP) for the purpose of enabling special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sap-id]** *string*

Synopsis	AA subscriber SAP ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for <b>spoke-sdp</b>
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
Description	Commands in this context specify the spoke SDP ID and VC ID for the purpose of including the subscriber into AA special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sdp-bind-id]** *string*

Synopsis	Spoke SDP ID for an AA subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**transit** [[transit-sub-name](#)] *string*

Synopsis	Add a list entry for <b>transit</b>
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">transit</a> <i>string</i>
Tree	<a href="#">transit</a>
Description	Commands in the context specify an existing transit subscriber to be included in AA sub special study statistics.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[transit-sub-name]** *string*

Synopsis	Transit subscriber name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">aa-sub</a> <a href="#">transit</a> <i>string</i>
Tree	<a href="#">transit</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collect-stats** *boolean*

Synopsis	Collect statistics
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">statistics</a> <a href="#">aa-sub-study</a> <i>keyword</i> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp-validate** [[tcp-validate-name](#)] *string*

Synopsis Enter the **tcp-validate** list instance  
 Context **configure** [application-assurance group number partition number tcp-validate string](#)  
 Tree [tcp-validate](#)  
 Description Commands in this context configure a TCP validation policy.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tcp-validate-name]** *string*

Synopsis TCP validation policy name  
 Context **configure** [application-assurance group number partition number tcp-validate string](#)  
 Tree [tcp-validate](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [application-assurance group number partition number tcp-validate string description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **log**

Synopsis Enter the **log** context

Context	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string log</a>
Tree	<a href="#">log</a>
Description	Commands in this context enable event logging of traffic dropped by TCP validation.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **all** *boolean*

Synopsis	Enable logging of all dropped TCP packets
Context	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string log</a> <a href="#">all boolean</a>
Tree	<a href="#">all</a>
Description	When configured to <b>true</b> , all dropped TCP packets are logged, including the following: <ul style="list-style-type: none"> <li>• packets received after an RST and discarded</li> <li>• packets received before TCP session establishment (before SYN) and discarded</li> </ul> An event log must also be configured to enable logging of all dropped packets. When configured to <b>false</b> , discards related to the described cases are not captured in any event log.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event-log** *reference*

Synopsis	Event log name
Context	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string log</a> <a href="#">event-log reference</a>
Tree	<a href="#">event-log</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number event-log string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **strict** *boolean*

Synopsis	Enable strict checking of TCP traffic
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Context	<b>configure</b> <a href="#">application-assurance group number partition number tcp-validate string strict</a> <i>boolean</i>
Tree	<a href="#">strict</a>
Description	<p>When configured to <b>true</b>, the command specifies whether enforcement of TCP sequence and acknowledgment numbers are applied. If a packet does not meet the expected sequence or acknowledgment number, it is dropped. This command should only be enabled if the expected bit error rate or packet loss is low.</p> <p>For example, if acknowledgments are lost before being detected by AA, the server timeouts are triggered and retransmissions occur. If strict is enabled, these retransmissions resemble a reply attack and are dropped by AA.</p> <p>When configured to <b>false</b>, the command removes the TCP sequence and acknowledgment number enforcement.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tethering-detection

Synopsis	Enter the <b>tethering-detection</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection</a>
Tree	<a href="#">tethering-detection</a>
Description	Commands in this context configure tethering detection for the group.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of tethering detection
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## single-device

Synopsis	Enter the <b>single-device</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">tethering-detection single-device</a>
Tree	<a href="#">single-device</a>
Description	Commands in this context configure the single-device fields and expected TTL values for flow-level tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## expected-ttl [[ttl](#)] *number*

Synopsis	Add a list entry for <b>expected-ttl</b>
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">tethering-detection single-device expected-ttl number</a>
Tree	<a href="#">expected-ttl</a>
Description	Commands in this context configure the TTL values for single-device tethering detection.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [ttl](#) *number*

Synopsis	Expected TTL traffic value from host devices
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">tethering-detection single-device expected-ttl number</a>
Tree	<a href="#">expected-ttl</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## invert-match *boolean*



### WARNING:

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

Synopsis	Mark flows with expected TTL values as tethered
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection single-device invert-match boolean</a>
Tree	<a href="#">invert-match</a>
Description	When configured to <b>true</b> , AA classifies flows with expected TTL values as coming from a connected device (tethered). When configured to <b>false</b> , AA classifies flows with expected TTL values as coming from the host device (untethered).
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ttl-monitor

Synopsis	Enter the <b>ttl-monitor</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection ttl-monitor</a>
Tree	<a href="#">ttl-monitor</a>
Description	Commands in this context configure the scope of analysis for TCP and UDP traffic for tethering detection.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tcp-protocols *keyword*



### WARNING:

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

Synopsis	Scope of analysis for TCP traffic
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection ttl-monitor tcp-protocols keyword</a>
Tree	<a href="#">tcp-protocols</a>
Description	This command configures whether AA analyzes all TCP traffic or only traffic from standard applications that generate consistent TTL values. Configuring AA to analyze all TCP traffic is typically recommended.
Options	standard – Protocols with reliable TTL-tethering state association all – All protocols

Default	standard
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### udp-protocols *keyword*



#### **WARNING:**

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

Synopsis	Scope of analysis for UDP traffic
Context	<b>configure</b> <a href="#">application-assurance group number partition number tethering-detection ttl-monitor</a> <a href="#">udp-protocols keyword</a>
Tree	<a href="#">udp-protocols</a>
Description	This command configures whether AA analyzes all UDP traffic or only traffic from standard applications that generate consistent TTL values. Configuring AA to analyze only standard UDP traffic is recommended.
Options	standard – Protocols with reliable TTL-tethering state association all – All protocols
Default	standard
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### threshold-crossing-alert

Synopsis	Enter the <b>threshold-crossing-alert</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert</a>
Tree	<a href="#">threshold-crossing-alert</a>
Description	Commands in this context configure the generation of threshold crossing alerts (TCAs).
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### criteria [*criteria-id*] *keyword direction keyword*

Synopsis	Enter the <b>criteria</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert criteria keyword direction keyword</a>

Tree	<a href="#">criteria</a>
Description	Commands in this context configure the TCA criteria for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[criteria-id] keyword**

Synopsis	Statistics TCA criteria ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">criteria</a>
Options	error-drop, fragment-drop-out-of-order, fragment-drop-all, overload-drop, gtp-sanity-drop
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction keyword**

Synopsis	Direction of traffic for the criteria statistics TCA
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">criteria</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark number**

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">high-watermark</a> <i>number</i>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis Low watermark threshold

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert criteria](#) *keyword* [direction](#) *keyword* **low-watermark** *number*

Tree [low-watermark](#)

Range 0 to 4294967294

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-filter** [[gtp-filter-name](#)] *reference* [criteria](#) *keyword* [direction](#) *keyword*

Synopsis Enter the **gtp-filter** list instance

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [gtp-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword*

Tree [gtp-filter](#)

Description Commands in this context configure TCA generation for a GTP filter.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[gtp-filter-name]** *reference*

Synopsis GTP filter name for TCA generation

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [gtp-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword*

Tree [gtp-filter](#)

Reference **configure** [application-assurance group](#) *number* [partition](#) *number* [gtp](#) [gtp-filter](#) *string*

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**criteria** *keyword*

Synopsis	Criteria ID for GTP filter TCA
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtp-filter</a>
Options	max-payload-length, message-type-default-action, header-sanity, message-type-gtpv2-default-action, imsi-apn-filter-default-action, validate-gtp-tunnels, validate-sequence-number, validate-src-ip-addr, missing-mandatory-ie, gtp-in-gtp, gtp-tunnel-database-full, gtp-tunnel-endpoint-limit
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of traffic for the GTP filter TCA
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtp-filter</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">high-watermark</a> <i>number</i>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert gtp-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <b>low-watermark</b> <i>number</i>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp-filter-entry** [[gtp-filter-name](#)] *reference* [entry-id](#) *number* [direction](#) *keyword*

Synopsis	Enter the <b>gtp-filter-entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtp-filter-entry</a>
Description	Commands in this context configure the AA GTP filter entry TCA fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[gtp-filter-name]** *reference*

Synopsis	AA GTP filter name for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtp-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">gtp gtp-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry-id** *number*

Synopsis	Entry ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <a href="#">direction</a> <i>keyword</i>

Tree	<a href="#">gtp-filter-entry</a>
Description	This command configures the identifier for the statistics TCA GTP filter V1 message type entry, V2 message type entry, or imsi-apn filter entry.
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Traffic direction for GTP filter entry TCA
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <b>direction</b> <i>keyword</i>
Tree	<a href="#">gtp-filter-entry</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <b>high-watermark</b> <i>number</i>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">gtp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <b>low-watermark</b> <i>number</i>
Tree	<a href="#">low-watermark</a>

Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** [*policer-name*] *string direction keyword*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">threshold-crossing-alert policer</a> <i>string direction keyword</i>
Tree	<a href="#">policer</a>
Description	Commands in this context configure a TCA for the counter capturing drops or admit events.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[policer-name]** *string*

Synopsis	Policer name for TCA generation
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">threshold-crossing-alert policer</a> <i>string direction keyword</i>
Tree	<a href="#">policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Direction of traffic for the policer TCA
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">threshold-crossing-alert policer</a> <i>string direction keyword</i>
Tree	<a href="#">policer</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### high-watermark *number*

Synopsis High watermark threshold

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert policer](#) *string* [direction](#) *keyword* [high-watermark](#) *number*

Tree [high-watermark](#)

Range 1 to 4294967295

Default 4294967295

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### low-watermark *number*

Synopsis Low watermark threshold

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert policer](#) *string* [direction](#) *keyword* [low-watermark](#) *number*

Tree [low-watermark](#)

Range 0 to 4294967294

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### sctp-filter [[sctp-filter-name](#)] *reference* [criteria](#) *keyword* [direction](#) *keyword*

Synopsis Enter the **sctp-filter** list instance

Context **configure** [application-assurance group](#) *number* [partition](#) *number* [threshold-crossing-alert](#) [sctp-filter](#) *reference* [criteria](#) *keyword* [direction](#) *keyword*

Tree [sctp-filter](#)

Description Commands in this context configure TCA generation for an SCTP filter.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sctp-filter-name]** *reference*

Synopsis	SCTP filter name for TCA generation
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">sctp-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**criteria** *keyword*

Synopsis	Criteria ID for SCTP filter TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">sctp-filter</a>
Options	ppid-default-action, packet-sanity, ppid-range
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of traffic for SCTP filter TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter reference criteria keyword direction keyword</a>
Tree	<a href="#">sctp-filter</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark** *number*

Synopsis	High watermark threshold
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">threshold-crossing-alert</a> <a href="#">sctp-filter</a> <a href="#">reference</a> <a href="#">criteria</a> <a href="#">keyword</a> <a href="#">direction</a> <a href="#">keyword</a> <a href="#">high-watermark</a> <a href="#">number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">threshold-crossing-alert</a> <a href="#">sctp-filter</a> <a href="#">reference</a> <a href="#">criteria</a> <a href="#">keyword</a> <a href="#">direction</a> <a href="#">keyword</a> <a href="#">low-watermark</a> <a href="#">number</a>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sctp-filter-entry** [[sctp-filter-name](#)] *reference* [entry-id](#) *reference* [direction](#) *keyword*

Synopsis	Enter the <b>sctp-filter-entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">threshold-crossing-alert</a> <a href="#">sctp-filter-entry</a> <a href="#">reference</a> <a href="#">entry-id</a> <a href="#">reference</a> <a href="#">direction</a> <a href="#">keyword</a>
Tree	<a href="#">sctp-filter-entry</a>
Description	Commands in this context configure the AA SCTP filter PPID entry TCA fields.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[sctp-filter-name]** *reference*

Synopsis	AA SCTP filter name for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">threshold-crossing-alert</a> <a href="#">sctp-filter-entry</a> <a href="#">reference</a> <a href="#">entry-id</a> <a href="#">reference</a> <a href="#">direction</a> <a href="#">keyword</a>
Tree	<a href="#">sctp-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">sctp-filter</a> <a href="#">string</a>



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

### **entry-id** *reference*

Synopsis	ID for SCTP filter entry TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">sctp-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number sctp-filter string ppid entry number</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">sctp-filter-entry</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert sctp-filter-entry reference entry-id reference direction keyword high-watermark number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert sctp-filter-entry</a> <i>reference</i> <a href="#">entry-id</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i> <b>low-watermark</b> <i>number</i>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-filter** [[session-filter-name](#)] *reference* [criteria](#) *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>session-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert session-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">session-filter</a>
Description	Commands in this context configure TCA generation for a session filter.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[session-filter-name]** *reference*

Synopsis	AA session filter name for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert session-filter</a> <i>reference</i> <a href="#">criteria</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">session-filter</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">session-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**criteria** *keyword*

Synopsis	ID for session filter entry TCA
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">threshold-crossing-alert</a> <a href="#">session-filter</a> <a href="#">reference</a> <b>criteria</b> <a href="#">keyword</a> <a href="#">direction</a> <a href="#">keyword</a>
Tree	<a href="#">session-filter</a>
Options	default-action
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">threshold-crossing-alert</a> <a href="#">session-filter</a> <a href="#">reference</a> <b>criteria</b> <a href="#">keyword</a> <b>direction</b> <a href="#">keyword</a>
Tree	<a href="#">session-filter</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">threshold-crossing-alert</a> <a href="#">session-filter</a> <a href="#">reference</a> <b>criteria</b> <a href="#">keyword</a> <a href="#">direction</a> <a href="#">keyword</a> <b>high-watermark</b> <a href="#">number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**low-watermark** *number*

Synopsis	Low watermark threshold
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Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter reference criteria keyword direction keyword low-watermark number</a>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-filter-entry** [[session-filter-name](#)] *reference* [entry-id](#) *reference* [direction](#) *keyword*

Synopsis	Enter the <b>session-filter-entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">session-filter-entry</a>
Description	Commands in this context configure the AA session filter entry TCA fields for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[session-filter-name]** *reference*

Synopsis	AA session filter name for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">session-filter-entry</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry-id** *reference*

Synopsis	ID for session filter entry TCA
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">session-filter-entry</a>

Reference	<b>configure</b> <a href="#">application-assurance group number partition number session-filter string entry number</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword</a>
Tree	<a href="#">session-filter-entry</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword high-watermark number</a>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group number partition number threshold-crossing-alert session-filter-entry reference entry-id reference direction keyword low-watermark number</a>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294

Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp-validate** [[tcp-validate-name](#)] *reference* [direction](#) *keyword*

Synopsis	Enter the <b>tcp-validate</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">tcp-validate</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">tcp-validate</a>
Description	Commands in this context configure TCP validation policy TCA fields for the partition.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tcp-validate-name]** *reference*

Synopsis	AA TCP validate name for configuration
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">tcp-validate</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">tcp-validate</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">tcp-validate</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Direction of traffic for TCA configuration
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert</a> <a href="#">tcp-validate</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">tcp-validate</a>
Options	from-sub, to-sub
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high-watermark** *number*

Synopsis	High watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert tcp-validate</a> <a href="#">reference</a> <a href="#">direction</a> <a href="#">keyword</a> <b>high-watermark</b> <i>number</i>
Tree	<a href="#">high-watermark</a>
Range	1 to 4294967295
Default	4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**low-watermark** *number*

Synopsis	Low watermark threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">threshold-crossing-alert tcp-validate</a> <a href="#">reference</a> <a href="#">direction</a> <a href="#">keyword</a> <b>low-watermark</b> <i>number</i>
Tree	<a href="#">low-watermark</a>
Range	0 to 4294967294
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**transit-ip-policy** [[ip-policy-id](#)] *number*

Synopsis	Enter the <b>transit-ip-policy</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <b>transit-ip-policy</b> <i>number</i>
Tree	<a href="#">transit-ip-policy</a>
Description	Commands in this context define a transit AA subscriber IP policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subs are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[ip-policy-id]** *number*

Synopsis	IP transit policy ID
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i>
Tree	<a href="#">transit-ip-policy</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-app-profile** *reference*

Synopsis	Default AA application profile
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> <a href="#">default-app-profile</a> <i>reference</i>
Tree	<a href="#">default-app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **detect-seen-ip** *boolean*

Synopsis	Detect transit subscribers based on IP address
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i> <a href="#">detect-seen-ip</a> <i>boolean</i>
Tree	<a href="#">detect-seen-ip</a>
Default	false
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp

Synopsis Enter the **dhcp** context

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) **dhcp**

Tree [dhcp](#)

Description Commands in this context enable dynamic DHCP-based management of transit aa-subs for the transit IP policy. Dynamic DHCP-based management and other types of management of transit subs for a transit IP policy are mutually exclusive.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state for learning DHCP dynamic transits

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) **dhcp** [admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## diameter

Synopsis Enter the **diameter** context

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) **diameter**

Tree [diameter](#)

Description Commands in this context configure dynamic Diameter-based management of transit AA subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state for Diameter dynamic transits
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <a href="#">diameter admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**application-policy** *reference*

Synopsis	Diameter application policy name for IP transit policy
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <a href="#">diameter application-policy reference</a>
Tree	<a href="#">application-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt diameter-gx-policy string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6-address-prefix-length** *number*

Synopsis	Length of the AA transit IP policy IPv6 address prefix
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <a href="#">ipv6-address-prefix-length number</a>
Tree	<a href="#">ipv6-address-prefix-length</a>
Range	32 to 64
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius**

Synopsis	Enter the <b>radius</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">partition number</a> <a href="#">transit-ip-policy number</a> <a href="#">radius</a>

Tree	<a href="#">radius</a>
Description	Commands in this context enable dynamic RADIUS-based management of transit aa-subs for the transit IP policy. This is mutually exclusive to other types of management of transit subs for a given transit IP policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of learning RADIUS dynamic transit
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number radius admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-policy** *reference*

Synopsis	RADIUS authentication policy
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number radius authentication-policy reference</a>
Tree	<a href="#">authentication-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **seen-ip-radius-acct-policy** *reference*

Synopsis	RADIUS accounting policy to enable seen-IP notification
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number radius seen-ip-radius-acct-policy reference</a>
Tree	<a href="#">seen-ip-radius-acct-policy</a>
Reference	<b>configure</b> <a href="#">application-assurance radius-accounting-policy string</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **static-aa-sub** [**transit-aa-sub-name**] *string*

Synopsis Enter the **static-aa-sub** list instance

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) [static-aa-sub string](#)

Tree [static-aa-sub](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[transit-aa-sub-name]** *string*

Synopsis Static transit subscriber name

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) [static-aa-sub string](#)

Tree [static-aa-sub](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** *reference*

Synopsis Application profile name

Context **configure** [application-assurance group number](#) [partition number](#) [transit-ip-policy number](#) [static-aa-sub string](#) [app-profile reference](#)

Tree [app-profile](#)

Reference **configure** [application-assurance group number](#) [partition number](#) [policy app-profile string](#)

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip** [**address**] (*ipv4-unicast-address* | *ipv6-prefix*)

Synopsis Add a list entry for **ip**

Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">transit-ip-policy</a> <a href="#">number</a> <a href="#">static-aa-sub</a> <a href="#">string</a> <a href="#">ip</a> ( <a href="#">ipv4-unicast-address</a>   <a href="#">ipv6-prefix</a> )
Tree	<a href="#">ip</a>
Description	Commands in this context configure the IP address for a static transit aa-sub.
Max. Instances	32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [**address**] ([ipv4-unicast-address](#) | [ipv6-prefix](#))

Synopsis	IP address for an AA static transit subscriber
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">transit-ip-policy</a> <a href="#">number</a> <a href="#">static-aa-sub</a> <a href="#">string</a> <a href="#">ip</a> ( <a href="#">ipv4-unicast-address</a>   <a href="#">ipv6-prefix</a> )
Tree	<a href="#">ip</a>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sub-ident-policy** *reference*

Synopsis	Subscriber identification policy
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">transit-ip-policy</a> <a href="#">number</a> <a href="#">sub-ident-policy</a> <i>reference</i>
Tree	<a href="#">sub-ident-policy</a>
Description	<p>This command defines the subscriber identification policy for the transit IP policy that will be associated with a SAP. The subscriber identification policy must be defined prior to associating the profile with a SAP in the <b>configure subscriber-mgmt sub-ident-policy</b> context. Subscribers are managed by the system through the use of subscriber identification strings. A subscriber identification string uniquely identifies a subscriber. For static hosts, the subscriber identification string is explicitly defined with each static subscriber host.</p> <p>For dynamic hosts, the subscriber identification string must be derived from the DHCP ACK message sent to the subscriber host. The default value for the string is the content of Option 82 CIRCUIT-ID and REMOTE-ID fields interpreted as an octet string. As an option, the DHCP ACK message may be processed by a subscriber identification policy which has the capability to parse the message into an alternative ASCII or octet string value.</p> <p>When multiple hosts on the same port are associated with the same subscriber identification string, they are considered to be host members of the same subscriber.</p>

A subscriber identification policy can also be used for identifying dynamic transit subscriber names.

Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transit-auto-create**

Synopsis	Enter the <b>transit-auto-create</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number transit-auto-create</a>
Tree	<a href="#">transit-auto-create</a>
Description	Commands in this context enable the seen-IP auto creation of transit subscribers using the transit IP policy name and subscriber IP address as the aa-sub name. The default app-profile configured against the transit IP policy is applied to these subscribers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of the automatic dynamic transits
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number transit-auto-create admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inactivity-monitor** *boolean*

Synopsis	Monitor inactivity on auto-created transit subscribers
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number transit-auto-create inactivity-monitor boolean</a>
Tree	<a href="#">inactivity-monitor</a>
Description	When configured to <b>true</b> , this command enables the auto-removal of inactive transit subscribers. Periodically, AA removes any inactive auto-created subscribers. An inactive subscriber is defined as having no active flows in the last period.

When configured to **false**, this command disables the auto-removal of inactive transit subscribers.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transit-prefix-policy** [[prefix-policy-id](#)] *number*

Synopsis	Enter the <b>transit-prefix-policy</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number</a>
Tree	<a href="#">transit-prefix-policy</a>
Description	Commands in this context define a transit AA subscriber prefix policy. Transit AA subscribers are managed by the system through the use of this policy assigned to services, which determines how transit subscribers are created and removed for that service.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[prefix-policy-id]** *number*

Synopsis	Transit prefix policy ID
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number</a>
Tree	<a href="#">transit-prefix-policy</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [**entry-id**] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number entry number</a>
Tree	<a href="#">entry</a>
Description	Commands in this context configure the index to a specific entry of a transit prefix policy.
Max. Instances	4095
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[entry-id]** *number*

Synopsis	ID for a transit prefix policy entry
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub** *reference*

Synopsis	Name of the transit prefix AA subscriber
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number entry number aa-sub reference</a>
Tree	<a href="#">aa-sub</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number static-aa-sub string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number entry number match</a>
Tree	<a href="#">match</a>
Description	Commands in this context configure transit prefix policy entry match criteria.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-sub-ip (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	AA subscriber IP address prefix
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number entry number match aa-sub-ip (<i>ipv4-prefix</i>   <i>ipv6-prefix</i>)</a>
Tree	<a href="#">aa-sub-ip</a>
Description	This command configures a transit prefix subscriber IP address prefix. It is used when the site is on the local side, the same side of the system as the parent SAP. The local aa-sub-ip addresses represent the source IP in the from-SAP direction and destination IP in the to-SAP direction.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## network-ip (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Network IP address prefix
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number entry number match network-ip (<i>ipv4-prefix</i>   <i>ipv6-prefix</i>)</a>
Tree	<a href="#">network-ip</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## static-aa-sub [[transit-aa-sub-name](#)] *string*

Synopsis	Enter the <b>static-aa-sub</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number static-aa-sub string</a>

Tree	<a href="#">static-aa-sub</a>
Max. Instances	4095
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[transit-aa-sub-name]** *string*

Synopsis	Static transit subscriber name
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number static-aa-sub string</a>
Tree	<a href="#">static-aa-sub</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number static-aa-sub string app-profile reference</a>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-profile string</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **is-remote** *boolean*



#### **WARNING:**

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

Synopsis	Set transit subscriber as remote
Context	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number static-aa-sub string is-remote boolean</a>

Tree	<a href="#">is-remote</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## wap1x

Synopsis	Enter the <b>wap1x</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">wap1x</a>
Tree	<a href="#">wap1x</a>
Description	Commands in this context configure the Wireless Application Protocol (WAP) 1.X.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of WAP1x detection
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">wap1x</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policer

Synopsis	Enter the <b>policer</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a>
Tree	<a href="#">policer</a>
Description	<p>Commands in this context create application assurance policer profiles of a specified type. Policers can be bandwidth or flow-limiting and can have a granularity of system scope (limits traffic entering AA ISA for all or a subset of AA subscribers) or a subscriber scope (limits apply to each AA subscriber traffic).</p> <p>The policer type and granularity can only be configured during creation. They cannot be modified. The policer profile must be removed from all AQPs to be removed. Changes to</p>

policer profile parameters take effect immediately for policers instantiated as a result of AQP actions using this profile.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **anl-bandwidth-policer** [*policer-name*] *string*

Synopsis	Enter the <b>anl-bandwidth-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer anl-bandwidth-policer</a> <i>string</i>
Tree	<a href="#">anl-bandwidth-policer</a>
Description	Commands in this context configure the AA ANL policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[policer-name]** *string*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer anl-bandwidth-policer</a> <i>string</i>
Tree	<a href="#">anl-bandwidth-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis	Action for packets violating configured policer rate
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer anl-bandwidth-policer</a> <i>string</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Description	<p>This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.</p> <p>Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.</p> <p>When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of</p>

the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.

Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer anl-bandwidth-policer string adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pir keyword

Synopsis	Peak information rate value for the adaptation rule
Context	<b>configure</b> <a href="#">application-assurance group number policer anl-bandwidth-policer string adaptation-rule pir keyword</a>
Tree	<a href="#">pir</a>
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">anl-bandwidth-policer</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs** *number*

Synopsis	ANL bandwidth policer maximum burst size
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">anl-bandwidth-policer</a> <i>string</i> <a href="#">mbs</a> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate-percentage** *number*

Synopsis	Rate used by Access-Network-Location policers
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">anl-bandwidth-policer</a> <i>string</i> <a href="#">rate-percentage</a> <i>number</i>
Tree	<a href="#">rate-percentage</a>
Description	This command configures the stage 1 congestion percentage used by Access-Network-Location (ANL) policers. Because ANL total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL policer as the policer rate.  No limiting is performed if not specified.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate-percentage-stage-2** *number*

Synopsis	Rate used by Access-Network-Location policers
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer anl-bandwidth-policer</a> <i>string</i> <a href="#">rate-percentage-stage-2</a> <i>number</i>
Tree	<a href="#">rate-percentage-stage-2</a>
Description	This command configures the stage 2 congestion percentage rate used by Access-Network-Location (ANL) policers. Because ANL stage2 total bandwidth is dynamically measured and estimated by AA, this command allows the operator to configure the ratio of that measured bandwidth to be used by the ANL stage2 policer as the policer rate.  When unconfigured, limiting is not performed.
Range	0 to 200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dual-bucket-bandwidth-policer** [[policer-name](#)] *string*

Synopsis	Enter the <b>dual-bucket-bandwidth-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer</a> <i>string</i>
Tree	<a href="#">dual-bucket-bandwidth-policer</a>
Description	Commands in this context configure the dual-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[policer-name]** *string*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer dual-bucket-bandwidth-policer</a> <i>string</i>
Tree	<a href="#">dual-bucket-bandwidth-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Description	Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### cir keyword

Synopsis	Committed information rate value for adaptation rule
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a>
Tree	<a href="#">cir</a>
Description	This command configures the CIR for the dual-bucket-bandwidth-policer adaptation rule policer. Nokia recommends configuring CIR larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Options	max, min, closest
Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### pir keyword

Synopsis	Peak information rate value for the adaptation rule
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a>
Tree	<a href="#">pir</a>
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Options	max, min, closest



Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cbs number**

Synopsis	Committed burst size when in congested state
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer</a> <i>string</i> <a href="#">cbs number</a>
Tree	<a href="#">cbs</a>
Description	This command configures the committed burst size (CBS) for a policer. Nokia recommends that CBS is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cir (number | keyword)**

Synopsis	Committed information rate value for the policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer</a> <i>string</i> <a href="#">cir (number   keyword)</a>
Tree	<a href="#">cir</a>
Description	This command configures the CIR for the dual-bucket-bandwidth-policer policer. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## congestion-override

Synopsis	Enter the <b>congestion-override</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <b>congestion-override</b>
Tree	<a href="#">congestion-override</a>
Description	Commands in this context configure the congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cbs number

Synopsis	Committed burst size in a congested stage 2 state
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">congestion-override cbs</a> <b>number</b>
Tree	<a href="#">cbs</a>
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cir (number | keyword)

Synopsis	Committed information rate value for policer override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">congestion-override cir</a> ( <i>number   keyword</i> )
Tree	<a href="#">cir</a>
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000

Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs** *number*

Synopsis	Maximum burst size when in a congested state
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override</a> <b>mbs</b> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pir** (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## congestion-override-stage-2

Synopsis	Enter the <b>congestion-override-stage-2</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2</a>
Tree	<a href="#">congestion-override-stage-2</a>
Description	This command enables the context to configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cbs number

Synopsis	Committed burst size in a congested stage 2 state
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2 cbs number</a>
Tree	<a href="#">cbs</a>
Description	This command configures the committed burst size for a policer. The configured CBS should be larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cir (number | keyword)

Synopsis	Committed information rate value for policer override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2 cir (number   keyword)</a>
Tree	<a href="#">cir</a>
Description	This command configures the CIR for the dual-bucket bandwidth policer congestion override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000

Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs** *number*

Synopsis	Maximum burst size when in a congested state
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2</a> <b>mbs</b> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pir** (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string congestion-override-stage-2</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs number**

Synopsis	Bandwidth policer maximum burst size
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">mbs number</a>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir (number | keyword)**

Synopsis	Peak information rate value for the bandwidth policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">pir (number   keyword)</a>
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-of-day-override** [*tod-override-id*] *number*

Synopsis Enter the **time-of-day-override** list instance

Context **configure** *application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number*

Tree [time-of-day-override](#)

Description Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.

Max. Instances 8

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tod-override-id]** *number*

Synopsis ID for time of day override

Context **configure** *application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number*

Tree [time-of-day-override](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis Administrative state of this time of day policer

Context **configure** *application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cbs number**

Synopsis	Committed burst size for time of day override policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string time-of-day-override number</a> <b>cbs number</b>
Tree	<a href="#">cbs</a>
Description	This command configures the committed burst size (CBS) for a policer. Nokia recommends configuring CBS larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. CBS is configurable for dual-bucket bandwidth policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cir (number | keyword)**

Synopsis	Committed information rate for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string time-of-day-override number</a> <b>cir (number   keyword)</b>
Tree	<a href="#">cir</a>
Description	This command configures the committed information rate (CIR) for the dual-bucket-bandwidth-policer policer time of day override. Nokia recommends that the CIR is configured larger than twice the maximum MTU for the traffic handled by the policer to allow for some burstiness of the traffic. The CIR is configurable for dual-bucket bandwidth policers only.
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">dual-bucket-bandwidth-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs** *number*

Synopsis	Maximum burst size for the policer time of day override
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">dual-bucket-bandwidth-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">mbs</a> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends that MBS is configured larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	Peak information rate value for time of day override
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">dual-bucket-bandwidth-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time-range

Synopsis	Enter the <b>time-range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range</a>
Tree	<a href="#">time-range</a>
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## daily

Synopsis	Enable the <b>daily</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily</a>
Tree	<a href="#">daily</a>
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## all-days

Synopsis	Enable policer override on every day
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range daily all-days</a>
Tree	<a href="#">all-days</a>
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end string**

Synopsis	Daily end time
Context	<b>configure</b> <a href="#">application-assurance group</a> <a href="#">number</a> <a href="#">policer</a> <a href="#">dual-bucket-bandwidth-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <a href="#">number</a> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">end</a> <a href="#">string</a>
Tree	<a href="#">end</a>
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**on keyword**

Synopsis	Policer override on selected days
Context	<b>configure</b> <a href="#">application-assurance group</a> <a href="#">number</a> <a href="#">policer</a> <a href="#">dual-bucket-bandwidth-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <a href="#">number</a> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">on</a> <a href="#">keyword</a>
Tree	<a href="#">on</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start string**

Synopsis	Daily start time
Context	<b>configure</b> <a href="#">application-assurance group</a> <a href="#">number</a> <a href="#">policer</a> <a href="#">dual-bucket-bandwidth-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <a href="#">number</a> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">start</a> <a href="#">string</a>
Tree	<a href="#">start</a>
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## weekly

Synopsis	Enable the <b>weekly</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly</a>
Tree	<a href="#">weekly</a>
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end

Synopsis	Enable the <b>end</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly end</a>
Tree	<a href="#">end</a>
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## day keyword

Synopsis	Weekly end day
Context	<b>configure</b> <a href="#">application-assurance group number policer dual-bucket-bandwidth-policer string time-of-day-override number time-range weekly end day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time string**

Synopsis Weekly end time

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [time-range](#) [weekly end time string](#)

Tree [time](#)

Description This command configures the weekly end time of the policer override.  
The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length 3 to 5

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start**

Synopsis Enable the **start** context

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [time-range](#) [weekly start](#)

Tree [start](#)

Description Commands in this context configure the weekly start time for policer override.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **day keyword**

Synopsis Weekly start day

Context **configure** [application-assurance group number](#) [policer dual-bucket-bandwidth-policer string](#) [time-of-day-override number](#) [time-range](#) [weekly start day keyword](#)

Tree [day](#)

Options sunday, monday, tuesday, wednesday, thursday, friday, saturday

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time string**

Synopsis	Weekly start time
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer dual-bucket-bandwidth-policer string</a> <a href="#">time-of-day-override number</a> <a href="#">time-range</a> <a href="#">weekly start time string</a>
Tree	<a href="#">time</a>
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-count-limit-policer [policer-name] string**

Synopsis	Enter the <b>flow-count-limit-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer flow-count-limit-policer string</a>
Tree	<a href="#">flow-count-limit-policer</a>
Description	Commands in this context configure the AA flow count limit policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[policer-name] string**

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer flow-count-limit-policer string</a>
Tree	<a href="#">flow-count-limit-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action** *keyword*

Synopsis	Action for packets violating configured policer rate
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.  Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.  When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**granularity** *keyword***WARNING:**

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

Synopsis	Policer granularity
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">granularity</a> <i>keyword</i>

Tree	<a href="#">granularity</a>
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### limit-gtp-flows *boolean*



#### WARNING:

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

Synopsis	Limit concurrent GTP flows
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">flow-count-limit-policer</a> <i>string</i> <a href="#">limit-gtp-flows</a> <i>boolean</i>
Tree	<a href="#">limit-gtp-flows</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### peak-flow-count (*number* | *keyword*)

Synopsis	Peak flow count limit
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">flow-count-limit-policer</a> <i>string</i> <a href="#">peak-flow-count</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">peak-flow-count</a>
Range	0 to 1000000000
Units	flows
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### time-of-day-override [[tod-override-id](#)] *number*

Synopsis	Enter the <b>time-of-day-override</b> list instance
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Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Description	Commands in this context configure the time of day override policy for a specific policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override ID overrides the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tod-override-id]** *number*

Synopsis	ID for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of this time of day policer
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peak-flow-count** (*number* | *keyword*)

Synopsis	Peak flow count limit
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">peak-flow-count</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">peak-flow-count</a>
Range	0 to 100000000
Units	flows
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-range**

Synopsis	Enter the <b>time-range</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">policer</a> <a href="#">flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a>
Tree	<a href="#">time-range</a>
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**daily**

Synopsis	Enable the <b>daily</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily</a>
Tree	<a href="#">daily</a>
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**all-days**

Synopsis	Enable policer override on every day
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily all-days</a>
Tree	<a href="#">all-days</a>
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end string**

Synopsis	Daily end time
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-count-limit-policer string time-of-day-override number time-range daily end string</a>
Tree	<a href="#">end</a>
Description	This command configures the daily end time of the policer override.  The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**on keyword**

Synopsis	Policer override on selected days
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">on</a> <i>keyword</i>
Tree	<a href="#">on</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start string**

Synopsis	Daily start time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">start</a> <i>string</i>
Tree	<a href="#">start</a>
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**weekly**

Synopsis	Enable the <b>weekly</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly</a>
Tree	<a href="#">weekly</a>
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end**

Synopsis	Enable the <b>end</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly end</a>
Tree	<a href="#">end</a>
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**day keyword**

Synopsis	Weekly end day
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly end</a> <i>day keyword</i>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time string**

Synopsis	Weekly end time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly end</a> <i>time string</i>
Tree	<a href="#">time</a>
Description	This command configures the weekly end time of the policer override.  The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start**

Synopsis	Enable the <b>start</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly start</a>
Tree	<a href="#">start</a>
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**day** *keyword*

Synopsis	Weekly start day
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly start</a> <i>day keyword</i>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time** *string*

Synopsis	Weekly start time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-count-limit-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">weekly start</a> <i>time string</i>
Tree	<a href="#">time</a>
Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-rate-policer** [*policer-name*] *string*

Synopsis	Enter the <b>flow-setup-rate-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer</a> <i>string</i>
Tree	<a href="#">flow-setup-rate-policer</a>
Description	Commands in this context configure the flow setup rate policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[policer-name]** *string*

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer</a> <i>string</i>
Tree	<a href="#">flow-setup-rate-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**action** *keyword*

Synopsis	Action for packets violating configured policer rate
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer</a> <i>string</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Description	This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.  Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.  When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## adaptation-rule

Synopsis Enter the **adaptation-rule** context

Context **configure** [application-assurance group number policer flow-setup-rate-policer string adaptation-rule](#)

Tree [adaptation-rule](#)

Description Commands in this context configure the AA policer adaptation rule fields and define the method used by the system to derive the operational CIR and PIR values when the queue is provisioned. For the CIR and PIR values individually, the system attempts to find the best operational rate depending on the defined option. To change the CIR adaptation rule only, the current PIR rule must be part of the command executed.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peak-flow-setup-rate *keyword*

Synopsis Peak flow setup rate adaptation rule

Context **configure** [application-assurance group number policer flow-setup-rate-policer string adaptation-rule peak-flow-setup-rate keyword](#)

Tree [peak-flow-setup-rate](#)

Options max, min, closest

Default closest

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis Text description

Context **configure** [application-assurance group number policer flow-setup-rate-policer string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**flow-setup-rate-burst-size** *number*

Synopsis	Maximum flow setup rate burst size
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">flow-setup-rate-burst-size</a> <i>number</i>
Tree	<a href="#">flow-setup-rate-burst-size</a>
Range	0 to 131071
Units	flows
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**granularity** *keyword***WARNING:**

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

Synopsis	Policer granularity
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">granularity</a> <i>keyword</i>
Tree	<a href="#">granularity</a>
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peak-flow-setup-rate** (*number* | *keyword*)

Synopsis	Peak flow setup rate
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer flow-setup-rate-policer</a> <i>string</i> <a href="#">peak-flow-setup-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">peak-flow-setup-rate</a>
Range	1 to 100000000
Units	flows per second
Options	max
Default	max

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-of-day-override** [[tod-override-id](#)] *number*

Synopsis	Enter the <b>time-of-day-override</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer flow-setup-rate-policer string</a> <a href="#">time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tod-override-id]** *number*

Synopsis	ID for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer flow-setup-rate-policer string</a> <a href="#">time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of this time of day policer
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer flow-setup-rate-policer string</a> <a href="#">time-of-day-override number</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [application-assurance group number](#) [policer flow-setup-rate-policer string](#) [time-of-day-override number](#) [description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-setup-rate-burst-size** *number*

Synopsis Maximum flow setup rate burst size

Context **configure** [application-assurance group number](#) [policer flow-setup-rate-policer string](#) [time-of-day-override number](#) [flow-setup-rate-burst-size number](#)

Tree [flow-setup-rate-burst-size](#)

Range 0 to 131071

Units flows

Default 0

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peak-flow-setup-rate** (*number* | *keyword*)

Synopsis Peak flow setup rate

Context **configure** [application-assurance group number](#) [policer flow-setup-rate-policer string](#) [time-of-day-override number](#) [peak-flow-setup-rate \(number | keyword\)](#)

Tree [peak-flow-setup-rate](#)

Range 1 to 100000000

Units flows per second

Options max

Default max

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time-range

Synopsis	Enter the <b>time-range</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range</a>
Tree	<a href="#">time-range</a>
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## daily

Synopsis	Enable the <b>daily</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily</a>
Tree	<a href="#">daily</a>
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## all-days

Synopsis	Enable policer override on every day
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range daily all-days</a>
Tree	<a href="#">all-days</a>
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end string**

Synopsis	Daily end time
Context	<b>configure</b> <a href="#">application-assurance group</a> <a href="#">number</a> <a href="#">policer</a> <a href="#">flow-setup-rate-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <a href="#">number</a> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">end</a> <a href="#">string</a>
Tree	<a href="#">end</a>
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**on keyword**

Synopsis	Policer override on selected days
Context	<b>configure</b> <a href="#">application-assurance group</a> <a href="#">number</a> <a href="#">policer</a> <a href="#">flow-setup-rate-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <a href="#">number</a> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">on</a> <a href="#">keyword</a>
Tree	<a href="#">on</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start string**

Synopsis	Daily start time
Context	<b>configure</b> <a href="#">application-assurance group</a> <a href="#">number</a> <a href="#">policer</a> <a href="#">flow-setup-rate-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <a href="#">number</a> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">start</a> <a href="#">string</a>
Tree	<a href="#">start</a>
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5

Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## weekly

Synopsis	Enable the <b>weekly</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly</a>
Tree	<a href="#">weekly</a>
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end

Synopsis	Enable the <b>end</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end</a>
Tree	<a href="#">end</a>
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## day keyword

Synopsis	Weekly end day
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time string**

Synopsis Weekly end time

Context **configure** application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly end time string

Tree time

Description This command configures the weekly end time of the policer override.  
The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.

String Length 3 to 5

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start**

Synopsis Enable the **start** context

Context **configure** application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start

Tree start

Description Commands in this context configure the weekly start time for policer override.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **day keyword**

Synopsis Weekly start day

Context **configure** application-assurance group number policer flow-setup-rate-policer string time-of-day-override number time-range weekly start day keyword

Tree day

Options sunday, monday, tuesday, wednesday, thursday, friday, saturday

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time string**

Synopsis	Weekly start time
Context	<b>configure</b> <a href="#">application-assurance group number policer flow-setup-rate-policer string</a> <a href="#">time-of-day-override number time-range weekly start time string</a>
Tree	<a href="#">time</a>
Description	This command configures the weekly start time of the policer override.  The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**single-bucket-bandwidth-policer [policer-name] string**

Synopsis	Enter the <b>single-bucket-bandwidth-policer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string</a>
Tree	<a href="#">single-bucket-bandwidth-policer</a>
Description	Commands in this context configure the single-bucket bandwidth policer.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[policer-name] string**

Synopsis	Policer name
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string</a>
Tree	<a href="#">single-bucket-bandwidth-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**action keyword**

Synopsis	Action for packets violating configured policer rate
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string</a> <b>action keyword</b>
Tree	<a href="#">action</a>
Description	<p>This command configures the action to be performed by single-bucket bandwidth policers for non-conformant traffic.</p> <p>Dual bucket bandwidth policers cannot have their action configured and always mark traffic below CIR as in-profile, between CIR and PIR as out-of-profile, and drop traffic above PIR. Flow policers always discard non-conformant traffic.</p> <p>When multiple application assurance policers are configured against a single flow (including policers at both subscriber and system), the flow/packet is dropped if one of the policers requires the packet to be discarded. This occurs regardless of the action of the other policers.</p>
Options	permit-deny, priority-mark
Default	permit-deny
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string</a> <b>adaptation-rule</b>
Tree	<a href="#">adaptation-rule</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir keyword**

Synopsis	Peak information rate value for the adaptation rule
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string adaptation-rule</a> <b>pir keyword</b>
Tree	<a href="#">pir</a>
Description	This command configures the adaptation rule to be used while computing the operational PIR value. The adaptation rule specifies the rules to compute the operational values while maintaining minimum offset.
Options	max, min, closest

Default	closest
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## congestion-override

Synopsis	Enter the <b>congestion-override</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <b>congestion-override</b>
Tree	<a href="#">congestion-override</a>
Description	Commands in this context configure the congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mbs number

Synopsis	Maximum burst size when in a congested state
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <b>congestion-override mbs number</b>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pir (number | keyword)

Synopsis	Peak information rate value for the congestion override
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <b>congestion-override pir (number   keyword)</b>
Tree	<a href="#">pir</a>
Range	1 to 100000000

Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## congestion-override-stage-2

Synopsis	Enter the <b>congestion-override-stage-2</b> context
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <b>congestion-override-stage-2</b>
Tree	<a href="#">congestion-override-stage-2</a>
Description	Commands in this context configure per-subscriber stage 2 congestion bandwidth policer override rates.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mbs *number*

Synopsis	Maximum burst size when in a congested state
Context	<b>configure</b> <a href="#">application-assurance group number</a> <a href="#">policer single-bucket-bandwidth-policer string</a> <b>congestion-override-stage-2</b> <b>mbs</b> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pir (*number* | *keyword*)

Synopsis	Peak information rate value for the congestion override
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Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string congestion-override-stage-2 pir</a> ( <i>number   keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **granularity** *keyword*



#### **WARNING:**

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

Synopsis	Policer granularity
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string granularity keyword</a>
Tree	<a href="#">granularity</a>
Options	system, subscriber
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs** *number*

Synopsis	Bandwidth policer maximum burst size
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer single-bucket-bandwidth-policer</a> <i>string</i> <b>mbs</b> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	Peak information rate value for the bandwidth policer
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer single-bucket-bandwidth-policer</a> <i>string</i> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time-of-day-override** [[tod-override-id](#)] *number*

Synopsis	Enter the <b>time-of-day-override</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer single-bucket-bandwidth-policer</a> <i>string</i> <b>time-of-day-override</b> <i>number</i>
Tree	<a href="#">time-of-day-override</a>
Description	Commands in this context configure the time of day override policy for a given policer. Rate/mbs/cbs/flow-rate/flow-count configured in each override-id will override the default policer values at the specified time of day configured in the override.

Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[tod-override-id] number**

Synopsis	ID for time of day override
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number</a>
Tree	<a href="#">time-of-day-override</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of this time of day policer
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs** *number*

Synopsis	Bandwidth policer MBS for time of day override
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>mbs</b> <i>number</i>
Tree	<a href="#">mbs</a>
Description	This command configures the maximum burst size (MBS) for the policer. Nokia recommends configuring MBS larger than twice the MTU for the traffic handled by the policer to allow for some burstiness of the traffic. MBS is configurable for single-bucket, dual-bucket bandwidth, and flow setup rate policers only.
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	Peak information rate value for time of day override
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time-range**

Synopsis	Enter the <b>time-range</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <i>string</i> <a href="#">time-of-day-override</a> <i>number</i> <b>time-range</b>
Tree	<a href="#">time-range</a>
Description	Commands in this context configure the days of the week policer override is enabled as well as the time policer override starts and ends. When using a daily override the

operator can select which days during the week from Sunday to Saturday it is applicable along with the start/end hour/min time range repeated over these days. When using a weekly override the operator can select between which days in the week the policy start up to the hours/min for both start day and end day.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## daily

Synopsis	Enable the <b>daily</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range daily</a>
Tree	<a href="#">daily</a>
Description	Commands in this context configure the daily start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## all-days

Synopsis	Enable policer override on every day
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range daily all-days</a>
Tree	<a href="#">all-days</a>
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end string

Synopsis	Daily end time
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range daily end string</a>
Tree	<a href="#">end</a>
Description	This command configures the daily end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.



String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **on** *keyword*

Synopsis	Policer override on selected days
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">on</a> <i>keyword</i>
Tree	<a href="#">on</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	6
Notes	The following elements are part of a choice: <b>all-days</b> or <b>on</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start** *string*

Synopsis	Daily start time
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">policer</a> <a href="#">single-bucket-bandwidth-policer</a> <a href="#">string</a> <a href="#">time-of-day-override</a> <i>number</i> <a href="#">time-range</a> <a href="#">daily</a> <a href="#">start</a> <i>string</i>
Tree	<a href="#">start</a>
Description	This command configures the daily start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **weekly**

Synopsis	Enable the <b>weekly</b> context
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Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly</a>
Tree	<a href="#">weekly</a>
Description	Commands in this context configure the weekly start and end times for policer override.
Notes	The following elements are part of a choice: <b>daily</b> or <b>weekly</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end

Synopsis	Enable the <b>end</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end</a>
Tree	<a href="#">end</a>
Description	Commands in this context configure the weekly end time for policer override. When using a weekly override, the operator can select between which days in the week the policy ends up to the hours or minutes for both start of the day and end of the day.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## day keyword

Synopsis	Weekly end day
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time string

Synopsis	Weekly end time
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly end time string</a>

Tree	<a href="#">time</a>
Description	This command configures the weekly end time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### start

Synopsis	Enable the <b>start</b> context
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start</a>
Tree	<a href="#">start</a>
Description	Commands in this context configure the weekly start time for policer override.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### day keyword

Synopsis	Weekly start day
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start day keyword</a>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### time string

Synopsis	Weekly start time
Context	<b>configure</b> <a href="#">application-assurance group number policer single-bucket-bandwidth-policer string time-of-day-override number time-range weekly start time string</a>
Tree	<a href="#">time</a>

Description	This command configures the weekly start time of the policer override. The time format must be [hh:mm]. The hh value is 00 to 24. The mm value is 00, 15, 30, or 45. If hh is 24, mm must be 00.
String Length	3 to 5
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp-optimizer** [**tcp-optimizer-name**] *string*

Synopsis	Enter the <b>tcp-optimizer</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <b>tcp-optimizer</b> <i>string</i>
Tree	<a href="#">tcp-optimizer</a>
Description	Commands in this context configure the TCP optimizer policy. When a TCP optimizer policy is removed or deleted, the existing flows using this policy are abandoned, and optimization is stopped.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tcp-optimizer-name]** *string*

Synopsis	TCP optimizer name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <b>tcp-optimizer</b> <i>string</i>
Tree	<a href="#">tcp-optimizer</a>
Description	This command configures the name of the TCP optimizer policy.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dack-timeout** *number*

Synopsis	Delayed acknowledgment timeout for client and server
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <b>tcp-optimizer</b> <i>string</i> <b>dack-timeout</b> <i>number</i>
Tree	<a href="#">dack-timeout</a>

Description	This command configures a delay ACK (DACK) timeout for the TCP optimizer. By entering this command a default of 200 ms timeout is enabled for delayed acknowledgment. This value is not configurable.
Range	200
Units	milliseconds
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number tcp-optimizer string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial-cwnd** *number*

Synopsis	Initial congestion window of the TCP optimizer
Context	<b>configure</b> <a href="#">application-assurance group number tcp-optimizer string initial-cwnd number</a>
Tree	<a href="#">initial-cwnd</a>
Description	This command configures the initial TCP congestion window (cwnd) used during the TCP Slow Start (SS) period.
Range	1 to 256
Default	8
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial-ss-threshold** (*number* | *keyword*)

Synopsis	Initial TCP Slow Start threshold for client and server
Context	<b>configure</b> <a href="#">application-assurance group number tcp-optimizer string initial-ss-threshold (number   keyword)</a>
Tree	<a href="#">initial-ss-threshold</a>

Description	This command configures the initial Slow Start (SS) threshold for a specific TCP optimizer policy. Nokia recommends setting the threshold close to the access network Bandwidth Delay Product (BDP).
Range	0 to 1000000
Units	kilobytes
Options	auto
Default	1000000
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **network-rtt-threshold** *number*

Synopsis	Network round trip time threshold
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">tcp-optimizer</a> <i>string</i> <a href="#">network-rtt-threshold</a> <i>number</i>
Tree	<a href="#">network-rtt-threshold</a>
Description	This command configures the threshold of the Round Trip Time (RTT) delay of the network side (between AA and the content provider) above which TCP Optimization (TCPO) is performed. This enables the operator to disable optimization for content that is served from a location close to the TCP optimizer.
Range	1 to 100
Units	milliseconds
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp-stack** *keyword*

Synopsis	TCP stack congestion control algorithm
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">tcp-optimizer</a> <i>string</i> <a href="#">tcp-stack</a> <i>keyword</i>
Tree	<a href="#">tcp-stack</a>
Description	This command configures the TCP stack used toward the subscriber.  <b>Note:</b> The TCP stack used toward the core network is new-reno, and it is not configurable. TCP BBR, BBRv2, TCP Illinois, and TCP Westwood implement a sender-side modification of the TCP congestion window algorithm that improves the performance of TCP Reno in wireless networks with lossy links.
Options	westwood, illinois, new-reno, bbr
Default	westwood

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-filter** [[url-filter-name](#)] *string*

Synopsis	Enter the <b>url-filter</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a>
Tree	<a href="#">url-filter</a>
Description	Commands in this context configure a URL filter action for flows of a specific type matching this entry. If no URL filters are specified, then no URL filters are evaluated.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[url-filter-name]** *string*

Synopsis	URL filter name
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a>
Tree	<a href="#">url-filter</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Administrative state of the AA URL filter
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## apply-function-specific-behaviour *boolean*

Synopsis	Use function-specific behavior for action or redirect
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a> <a href="#">apply-function-specific-behaviour boolean</a>
Tree	<a href="#">apply-function-specific-behaviour</a>
Description	When configured to <b>true</b> , the function-specific configurations for URL list, ICAP, and web service ( <b>url-list</b> , <b>icap</b> , and <b>web-service</b> ) are used for default action ( <b>default-action</b> ) and HTTP redirect ( <b>http-redirect</b> ).  When configured to <b>false</b> , the configuration at the URL filter level ( <b>url-filter</b> ) is used for default action and HTTP redirect.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-action

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a> <a href="#">default-action</a>
Tree	<a href="#">default-action</a>
Description	Commands in this context configure the default action to take effect when the URL filter cannot be used. This may occur in the following cases: <ul style="list-style-type: none"> <li>• for the local URL list when the URL list is shut down or the file is not loaded due to an error.</li> <li>• in the case of ICAP or web filtering when all TCP connections are busy or down.</li> </ul>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## allow

Synopsis	Allow all requests as the default URL filter action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string</a> <a href="#">default-action allow</a>
Tree	<a href="#">allow</a>
Description	When configured, the router allows all requests as the default URL filter action when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-all

Synopsis Block all requests as the default URL filter action

Context **configure** [application-assurance group number url-filter string default-action block-all](#)

Tree [block-all](#)

Description When configured, the router blocks all requests as the default URL filter action when the URL filter cannot be used.

Notes The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-http-redirect *reference*

Synopsis HTTP URL name for block and redirect request action

Context **configure** [application-assurance group number url-filter string default-action block-http-redirect reference](#)

Tree [block-http-redirect](#)

Description This command specifies the URL that the user is directed to when the router blocks traffic. The information page can be different from the page the user is redirected to when the site that the user tried to access is found in the URL filter. This page is configured using the **configure application-assurance group url-filter http-redirect** command.

Reference **configure** [application-assurance group number http-redirect string](#)

Notes The following elements are part of a choice: **allow**, **block-all**, or **block-http-redirect**.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis Text description

Context **configure** [application-assurance group number url-filter string description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect** *reference*

Synopsis HTTP redirect for a blocked HTTP request

Context **configure** [application-assurance](#) [group](#) *number* [url-filter](#) *string* **http-redirect** *reference*

Tree [http-redirect](#)

Reference **configure** [application-assurance](#) [group](#) *number* **http-redirect** *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-request-filtering** *keyword*

Synopsis HTTP filtering for all HTTP requests

Context **configure** [application-assurance](#) [group](#) *number* [url-filter](#) *string* **http-request-filtering** *keyword*

Tree [http-request-filtering](#)

Options all, first

Default all

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icap**

Synopsis Enter the **icap** context

Context **configure** [application-assurance](#) [group](#) *number* [url-filter](#) *string* **icap**

Tree [icap](#)

Description Commands in this context configure the URL filter ICAP policy fields.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **custom-x-header** *string*

Synopsis Custom x-header field name to include in ICAP requests

Context **configure** [application-assurance](#) [group](#) *number* [url-filter](#) *string* **icap** **custom-x-header** *string*

Tree	<a href="#">custom-x-header</a>
Description	This command configures the URL filter ICAP policy to include a new x-header field; the content of the x-header is populated based on the AQP URL filter action which can optionally specify the ASO characteristic value to include in the x-header.
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-action

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap default-action</a>
Tree	<a href="#">default-action</a>
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## allow

Synopsis	Allow all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap default-action allow</a>
Tree	<a href="#">allow</a>
Description	When configured, this command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-all

Synopsis	Block all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap default-action block-all</a>
Tree	<a href="#">block-all</a>
Description	When configured, this command blocks all traffic when the URL filter cannot be used.

Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **block-http-redirect** *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap default-action block-http-redirect reference</a>
Tree	<a href="#">block-http-redirect</a>
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the <b>configure application-assurance group url-filter http-redirect</b> command.
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect** *reference*

Synopsis	HTTP redirect object used when ICAP blocks HTTP request
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap http-redirect reference</a>
Tree	<a href="#">http-redirect</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap server (ipv4-address-no-zone   ipv6-address-no-zone) port number</a>
Tree	<a href="#">server</a>
Description	Commands in this context configure the IP address and server port of the ICAP server. In the current release, the system supports IPv4 addresses only for the ICAP server.

In the current release, the system supports IPv4 addresses only for the ICAP server.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-address]** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	ICAP server IP address
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number</a>
Tree	<a href="#">server</a>
Description	This command configures the ICAP server address. In the current release, the system supports IPv4 addresses only for the ICAP server.
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port number**

Synopsis	ICAP server port
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number</a>
Tree	<a href="#">server</a>
Range	1 to 65535
MD-CLI	1344
Default	
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state keyword**

Synopsis	Administrative state of this URL filter ICAP server
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### vlan-id *number*



#### WARNING:

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

Synopsis	VLAN ID of the ICAP server service port
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string icap vlan-id number</a>
Tree	<a href="#">vlan-id</a>
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### local-filtering

Synopsis	Enter the <b>local-filtering</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering</a>
Tree	<a href="#">local-filtering</a>
Description	Commands in this context configure a URL filter policy for local filtering to filter traffic based on a list of URLs located on a file stored in the router compact flash.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**allow-list** *reference***WARNING:**

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

Synopsis	Local filtering URL list for allowed URLs
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">local-filtering</a> <a href="#">allow-list</a> <i>reference</i>
Tree	<a href="#">allow-list</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-list</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>deny-list</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">local-filtering</a> <a href="#">deny-list</a> <i>reference</i>
Tree	<a href="#">deny-list</a>
Description	Commands in this context configure a list of denied URLs to be added to the local URL filter policy.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	URL list name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">local-filtering</a> <a href="#">deny-list</a> <i>reference</i>
Tree	<a href="#">deny-list</a>
Description	This command adds a deny-list URL list to the local URL filter policy.
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">url-list</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-action

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference default-action</a>
Tree	<a href="#">default-action</a>
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen in the case of a local URL list when the URL list is disabled or the file is not loaded due to an error.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## allow

Synopsis	Allow all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference default-action allow</a>
Tree	<a href="#">allow</a>
Description	This command allows all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-all

Synopsis	Block all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference default-action block-all</a>
Tree	<a href="#">block-all</a>
Description	This command blocks all traffic when the URL filter cannot be used.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**block-http-redirect** *reference*

Synopsis	HTTP URL for redirection when URL filter cannot be used
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference default-action block-http-redirect reference</a>
Tree	<a href="#">block-http-redirect</a>
Description	This command blocks traffic and redirects the user to an information page, which can be different than the page the user is redirected to when the site they attempted to access was found in the URL filter; this page is configured using the <b>configure application-assurance group url-filter http-redirect</b> command.
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-redirect** *reference*

Synopsis	HTTP redirect object applied to blocked HTTP requests
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string local-filtering deny-list reference http-redirect reference</a>
Tree	<a href="#">http-redirect</a>
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**web-service**

Synopsis	Enter the <b>web-service</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service</a>
Tree	<a href="#">web-service</a>
Description	Commands in this context configure the URL filter policy using web-service filtering. The operator must configure the web service, hostname, DNS server to use, the AA interface VLAN ID, and provision the category profiles.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## category-set *number*

**WARNING:**

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

Synopsis	Web service category ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service category-set</a> <i>number</i>
Tree	<a href="#">category-set</a>
Range	1 to 65535
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## classification-overrides

Synopsis	Enter the <b>classification-overrides</b> context
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service classification-overrides</a>
Tree	<a href="#">classification-overrides</a>
Description	Commands in this context create a classification override and allow the operator to manually set the category of a hostname.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## entry [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service classification-overrides entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	Commands in this context configure a classification override, manually setting the category of a hostname.
Max. Instances	200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id] number**

Synopsis	Classification override entry ID
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service classification-overrides entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**category-name string**

Synopsis	Web service category name
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service classification-overrides entry number category-name string</a>
Tree	<a href="#">category-name</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**expression string**

Synopsis	Hostname of the configured override category
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service classification-overrides entry number expression string</a>
Tree	<a href="#">expression</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## classifier *keyword*

**WARNING:**

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

Synopsis	Web service classifier
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">url-filter</a> <a href="#">string</a> <a href="#">web-service</a> <a href="#">classifier</a> <a href="#">keyword</a>
Tree	<a href="#">classifier</a>
Options	web-service-1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-action

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">url-filter</a> <a href="#">string</a> <a href="#">web-service</a> <a href="#">default-action</a>
Tree	<a href="#">default-action</a>
Description	Commands in this context configure a default action for the URL filter. The default action takes effect when the URL filter cannot be used. This may happen when all TCP connections are busy or down.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## allow

Synopsis	Allow all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">url-filter</a> <a href="#">string</a> <a href="#">web-service</a> <a href="#">default-action</a> <a href="#">allow</a>
Tree	<a href="#">allow</a>
Description	This command allows all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-all

Synopsis	Block all requests as the default action
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service default-action block-all</a>
Tree	<a href="#">block-all</a>
Description	This command blocks all traffic when the web service is unavailable.
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## block-http-redirect *reference*

Synopsis	HTTP URL for redirection when traffic is blocked
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service default-action block-http-redirect reference</a>
Tree	<a href="#">block-http-redirect</a>
Description	This command specifies the HTTP URL to be redirected to when traffic is blocked. This URL can be different than the URL the user is redirected to when the site they attempted to access was found in the URL filter (which is configured in the <b>configure application-assurance group url-filter http-redirect</b> command).
Reference	<b>configure</b> <a href="#">application-assurance group number http-redirect string</a>
Notes	The following elements are part of a choice: <b>allow</b> , <b>block-all</b> , or <b>block-http-redirect</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-profile *reference*



### WARNING:

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

Synopsis	Web service default profile
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service default-profile reference</a>
Tree	<a href="#">default-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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



**WARNING:**

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

Synopsis Web service DNS server

Context **configure** [application-assurance](#) [group](#) [number](#) [url-filter](#) [string](#) [web-service](#) [dns-server](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [dns-server](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fqdn** *string*



**WARNING:**

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

Synopsis Web service fully qualified domain name

Context **configure** [application-assurance](#) [group](#) [number](#) [url-filter](#) [string](#) [web-service](#) [fqdn](#) [string](#)

Tree [fqdn](#)

String Length 1 to 255

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect** *reference*

Synopsis Web service HTTP redirect

Context **configure** [application-assurance](#) [group](#) [number](#) [url-filter](#) [string](#) [web-service](#) [http-redirect](#) [reference](#)

Tree [http-redirect](#)

Reference **configure** [application-assurance](#) [group](#) [number](#) [http-redirect](#) [string](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>profile</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string</a>
Tree	<a href="#">profile</a>
Description	Commands in this context configure the category profiles of the web service.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[profile-name]** *string*

Synopsis	Web service profile name
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string</a>
Tree	<a href="#">profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**block**

Synopsis	Enter the <b>block</b> context
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string block</a>
Tree	<a href="#">block</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Add a list entry for <b>category</b>
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string block category string</a>
Tree	<a href="#">category</a>

Description	Commands in this context configure the category that is blocked in the category profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[category-name]** *string*

Synopsis	Web service profile category name to be blocked
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string</a> <a href="#">block category string</a>
Tree	<a href="#">category</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service profile string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service server (ipv4-address-no-zone   ipv6-address-no-zone) port number</a>
Tree	<a href="#">server</a>
Max. Instances	4
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



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

Synopsis	AA web service server IP address
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number</a>
Tree	<a href="#">server</a>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port number**

Synopsis	AA web service server port
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number</a>
Tree	<a href="#">server</a>
Range	1 to 65535
MD-CLI Default	8080
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of URL filter web service server
Context	<b>configure</b> <a href="#">application-assurance group number url-filter string web-service server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vlan-id** *number***WARNING:**

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

Synopsis	Web-service VLAN ID
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">url-filter</a> <i>string</i> <a href="#">web-service</a> <a href="#">vlan-id</a> <i>number</i>
Tree	<a href="#">vlan-id</a>
Description	This command configures the VLAN ID on which the AA ISA emits the traffic mapping to a preconfigured AA interface.
Range	1 to 4094
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>url-list</b> list instance
Context	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">url-list</a> <i>string</i>
Tree	<a href="#">url-list</a>
Description	Commands in this context configure a URL list object. The URL list points to a file containing a list of URLs located on the system Compact Flash and is then referenced in a URL filter object to filter and redirect subscribers when a URL from this file is accessed.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[url-list-name] string**

Synopsis	URL list name
Context	<b>configure</b> <a href="#">application-assurance group number url-list string</a>
Tree	<a href="#">url-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the URL list
Context	<b>configure</b> <a href="#">application-assurance group number url-list string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance group number url-list string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**file string**

Synopsis	File name of the URL list on compact flash
Context	<b>configure</b> <a href="#">application-assurance group number url-list string file string</a>
Tree	<a href="#">file</a>
String Length	1 to 180
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### host-expressions *boolean*



**WARNING:**

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

Synopsis Allow URL list to contain hostnames with wildcards

Context **configure** [application-assurance group](#) *number url-list string host-expressions boolean*

Tree [host-expressions](#)

Description When configured to **true**, this command adds hostnames with wildcards to the URL list. When configured to **false**, the URL list containing hostnames with wildcards is removed from the configuration.

Default false

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### key *string*

Synopsis URL list decryption key

Context **configure** [application-assurance group](#) *number url-list string key string*

Tree [key](#)

Description This command configures the secret key for decrypting the URL list.

String Length 1 to 115

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### size *keyword*



**WARNING:**

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

Synopsis Size limit of the URL list

Context **configure** [application-assurance group](#) *number url-list string size keyword*

Tree [size](#)

Options	standard, extended
Default	standard
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## http-enrich

Synopsis	Enter the <b>http-enrich</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-enrich</a>
Tree	<a href="#">http-enrich</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>field</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-enrich</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [\[field-name\]](#) *string*

Synopsis	HTTP enrich field name (void, do not use)
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-enrich</a> <a href="#">field</a> <i>string</i>
Tree	<a href="#">field</a>
Description	This command should not be used by the operators. Configuring it has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-enrich field</a> <i>string</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-error-redirect**

Synopsis	Enter the <b>http-error-redirect</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a>
Tree	<a href="#">http-error-redirect</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **error-code** [[error-code-number](#)] *number*

Synopsis	Enter the <b>error-code</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">error-code</a> <i>number</i>
Tree	<a href="#">error-code</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[error-code-number]** *number*

Synopsis	Error code for HTTP error redirection
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">error-code</a> <i>number</i>
Tree	<a href="#">error-code</a>
Range	400 to 999
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">error-code</a> <i>number</i> <a href="#">comment</a> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**template** [[template-id](#)] *number*

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[template-id]** *number*

Synopsis	HTTP error redirect template ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Max. Range	0 to 4294967295

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

### **comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-error-redirect</a> <a href="#">template</a> <i>number</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-notification**

Synopsis	Enter the <b>http-notification</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-notification</a>
Tree	<a href="#">http-notification</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **template** [[template-id](#)] *number*

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-notification</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[template-id] number**

Synopsis	HTTP notification template ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-notification</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**comment string**

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-notification</a> <a href="#">template</a> <i>number</i> <a href="#">comment</a> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**http-redirect**

Synopsis	Enter the <b>http-redirect</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-redirect</a>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**template [template-id] number**

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-redirect</a> <a href="#">template</a> <i>number</i>
Tree	<a href="#">template</a>

Description	Commands in this context should not be used by the operators. Configuring them has no effect. Operators should use the commands in the <b>application-assurance group</b> context.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [**template-id**] *number*

Synopsis	HTTP redirect template ID
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-redirect template</a> <i>number</i>
Tree	<a href="#">template</a>
Description	This command specifies the HTTP policy redirect template ID. The available options are: <b>1</b> - JavaScript based redirect embedded in HTTP 200 OK response with a predefined number of arguments automatically appended to the redirect URL <b>2</b> - HTTP 302 redirect with a predefined number of arguments automatically appended to the redirect URL <b>3</b> - HTTP 302 redirect with no parameters appended to the URL (empty) <b>4</b> - Empty redirect format using JavaScript <b>5</b> - Redirect supporting macro substitution using HTTP 302 <b>6</b> - Redirect supporting macro substitution using JavaScript
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **comment** *string*

Synopsis	User information comment
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">http-redirect template</a> <i>number</i> <b>comment</b> <i>string</i>
Tree	<a href="#">comment</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

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

Synopsis	Enter the <b>protocol</b> list instance
Context	<b>configure</b> <a href="#">application-assurance protocol</a> <i>string</i>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure the administrative state of system-wide protocols. Some protocols are always enabled and cannot be disabled. These are "base protocols" that were present in R1 of the release. Some protocols are disabled by default and can be enabled. There are protocols that were introduced post R1, which are all enabled by default but may be disabled if not desired.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[protocol-name]** *string*

Synopsis	AA protocol name
Context	<b>configure</b> <a href="#">application-assurance protocol</a> <i>string</i>
Tree	<a href="#">protocol</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the protocol
Context	<b>configure</b> <a href="#">application-assurance protocol</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy** [[rad-acct-plcy-name](#)] *string*

Synopsis	Enter the <b>radius-accounting-policy</b> list instance
Context	<b>configure</b> <a href="#">application-assurance radius-accounting-policy</a> <i>string</i>
Tree	<a href="#">radius-accounting-policy</a>

Description	Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the <b>configure application-assurance radius-accounting-policy</b> context.
Max. Instances	8
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[rad-acct-plcy-name]** *string*

Synopsis	AA RADIUS accounting policy name
Context	<b>configure</b> <a href="#">application-assurance radius-accounting-policy</a> <i>string</i>
Tree	<a href="#">radius-accounting-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">application-assurance radius-accounting-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interim-update-interval** *number*

Synopsis	AA RADIUS accounting policy interim update interval
Context	<b>configure</b> <a href="#">application-assurance radius-accounting-policy</a> <i>string</i> <a href="#">interim-update-interval</a> <i>number</i>
Tree	<a href="#">interim-update-interval</a>
Range	5 to 1080
Units	minutes
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## radius-accounting-server

Synopsis Enter the **radius-accounting-server** context

Context **configure** [application-assurance radius-accounting-policy](#) *string* [radius-accounting-server](#)

Tree [radius-accounting-server](#)

Description Commands in this context configure an existing subscriber RADIUS-based accounting policy to use for AA. RADIUS accounting policies are configured in the **configure application-assurance radius-accounting-policy** context.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## access-algorithm *keyword*

Synopsis Access algorithm for the list of RADIUS servers

Context **configure** [application-assurance radius-accounting-policy](#) *string* [radius-accounting-server access-algorithm](#) *keyword*

Tree [access-algorithm](#)

Options direct, round-robin

Default direct

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## retry *number*

Synopsis Number of retries for contacting the RADIUS server

Context **configure** [application-assurance radius-accounting-policy](#) *string* [radius-accounting-server retry](#) *number*

Tree [retry](#)

Range 1 to 10

Default 3

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string*

Synopsis	Router or VPRN service name
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [[server-index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Description	<p>Commands in this context configure the RADIUS server and the RADIUS server IP address, index, and key values.</p> <p>RADIUS servers are accessed in order from lowest to highest index for authentication requests until a response from a server is received. A higher indexed server is only queried if no response is received from a lower indexed server (which implies that the server is not available). If a response from a server is received, no other RADIUS servers are queried.</p>
Max. Instances	5
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[server-index]** *number*

Synopsis	RADIUS accounting server index
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Description	This command configures the index for the RADIUS server. The index determines the sequence in which the servers are queried for authentication requests. Servers are queried in order from lowest to highest index.
Range	1 to 5
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address string**

Synopsis RADIUS server IP address

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [radius-accounting-server](#) [server](#) *number* [address](#) *string*

Tree [address](#)

Description This command configures the IP address of the RADIUS server. Two RADIUS servers cannot have the same IP address. An error message is generated if the server address is a duplicate.

Notes This element is mandatory.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port number**

Synopsis RADIUS server UDP port used for authentication

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [radius-accounting-server](#) [server](#) *number* [port](#) *number*

Tree [port](#)

Range 1 to 65535

Default 1813

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **secret string**

Synopsis RADIUS server secret key

Context **configure** [application-assurance](#) [radius-accounting-policy](#) *string* [radius-accounting-server](#) [server](#) *number* [secret](#) *string*

Tree [secret](#)

Description This command configures the secret key to access the RADIUS server. This secret key must match the password on the RADIUS server.

String Length 1 to 54

Notes This element is mandatory.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-address** *string*

Synopsis	Source IP address of RADIUS packets
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <b>source-address</b> <i>string</i>
Tree	<a href="#">source-address</a>
Description	<p>This command configures the source IP address of the RADIUS packet.</p> <p>The system IP address must be configured for the RADIUS client to work. The system IP address must only be configured if the source address is not specified. When this command reverts to its default, the source address is determined at the moment the request is sent.</p> <p>This address is also used in the <b>nas-ip-address</b> command in the <b>configure aaa radius isa-policy accounting include-attributes</b> and <b>configure aaa radius isa-policy authentication include-attributes</b> contexts as it is set to the system IP address if no source address was given.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	RADIUS accounting server response timeout
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">radius-accounting-server</a> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 90
Units	seconds
Default	5
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **significant-change** *number*

Synopsis	Change delta for RADIUS accounting record updates
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">radius-accounting-policy</a> <i>string</i> <b>significant-change</b> <i>number</i>



Tree	<a href="#">significant-change</a>
Description	This command configures the number of changes required to generate the record.
Range	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### usage-alert-thresholds

Synopsis	Enter the <b>usage-alert-thresholds</b> context
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a>
Tree	<a href="#">usage-alert-thresholds</a>
Description	Commands in this context configure the AA performance monitoring alerts.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### bit-rate-high-wmark (*number* | *keyword*)

Synopsis	High watermark for bit rate alarms
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">bit-rate-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">bit-rate-high-wmark</a>
Description	This command configures the high watermark for bit rate alarms. The value must be larger than or equal to the low watermark value.
Range	1 to 100000
Units	megabps
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### bit-rate-low-wmark *number*

Synopsis	Low watermark for bit rate alarms
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">bit-rate-low-wmark</a> <i>number</i>
Tree	<a href="#">bit-rate-low-wmark</a>

Description	This command configures the utilization of the flow records on the ISA-AA group when the full alarm is cleared by the agent.
Range	0 to 99999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **datapath-cpu-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for datapath CPU alarms
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">datapath-cpu-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">datapath-cpu-high-wmark</a>
Description	This command configures the system-wide high watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.
Range	0 to 100
Units	percent
Options	max
Default	95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **datapath-cpu-low-wmark** *number*

Synopsis	Low watermark for datapath CPU alarms
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">datapath-cpu-low-wmark</a> <i>number</i>
Tree	<a href="#">datapath-cpu-low-wmark</a>
Description	This command configures the system-wide low watermark threshold as a percentage of the per-ISA datapath core CPU utilization, where an alarm is raised by the agent. CPU usage is the average usage across all datapath cores.
Range	0 to 100
Units	percent
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-rate-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for flow setup rate
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">flow-setup-rate-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">flow-setup-rate-high-wmark</a>
Description	This command configures the system-wide high watermark threshold for per-ISA throughput in packets/second when an alarm is raised by the agent. The value must be larger than or equal to the <b>packet-rate-low-wmark</b> value.
Range	1 to 2000000
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-setup-rate-low-wmark** *number*

Synopsis	Low watermark for flow setup rate
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">flow-setup-rate-low-wmark</a> <i>number</i>
Tree	<a href="#">flow-setup-rate-low-wmark</a>
Description	This command configures the flow setup rate on the ISA-AA when a flow setup alarm is raised by the agent.
Range	0 to 1999999
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-table-high-wmark** *number*

Synopsis	Flow table high watermark
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">flow-table-high-wmark</a> <i>number</i>
Tree	<a href="#">flow-table-high-wmark</a>
Description	This command configures the system-wide high watermark threshold as a percentage of the flow table size for the per-ISA utilization of the flow records when a full alarm is raised by the agent.
Range	0 to 100

Units	percent
Default	95
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-table-low-wmark** *number*

Synopsis	Flow table low watermark
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">flow-table-low-wmark</a> <i>number</i>
Tree	<a href="#">flow-table-low-wmark</a>
Description	This command configures the system-wide low watermark threshold as a percentage of the flow table size for per-ISA.
Range	0 to 100
Units	percent
Default	90
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packet-rate-high-wmark** (*number* | *keyword*)

Synopsis	Packet rate high watermark
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">packet-rate-high-wmark</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">packet-rate-high-wmark</a>
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is raised by the agent.
Range	1 to 148809524
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packet-rate-low-wmark** *number*

Synopsis	Packet rate low watermark
Context	<b>configure</b> <a href="#">application-assurance</a> <a href="#">usage-alert-thresholds</a> <a href="#">packet-rate-low-wmark</a> <i>number</i>

---

Tree	<a href="#">packet-rate-low-wmark</a>
Description	This command configures the packet rate on the ISA-AA when a packet rate alarm is cleared by the agent.
Range	0 to 148809523
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.4 aps commands

```
configure
- aps number
- advertise-interval number
- annexb
- wait-to-restore-time number
- working-circuit reference
- apply-groups reference
- apply-groups-exclude reference
- hold-time number
- neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
- protect-circuit reference
- revert
- time number
- switching-mode keyword
- working-circuit reference
```

### 3.4.1 aps command descriptions

#### **aps** [group-id] *number*

Synopsis	Enter the <b>aps</b> list instance
Context	<b>configure</b> <b>aps</b> <i>number</i>
Tree	<b>aps</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

#### [group-id] *number*

Synopsis	APS group ID
Context	<b>configure</b> <b>aps</b> <i>number</i>
Tree	<b>aps</b>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

#### **advertise-interval** *number*

Synopsis	Time between subsequent advertisement messages
Context	<b>configure</b> <b>aps</b> <i>number</i> <b>advertise-interval</b> <i>number</i>
Tree	<b>advertise-interval</b>
Range	10 to 650
Units	deciseconds
Default	10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

#### **annexb**

Synopsis	Enable the <b>annexb</b> context
Context	<b>configure</b> <b>aps</b> <i>number</i> <b>annexb</b>

Tree	<a href="#">annexb</a>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **wait-to-restore-time** *number*

Synopsis	Annex B mode operation wait to restore time
Context	<b>configure</b> <b>aps</b> <i>number</i> <a href="#">annexb</a> <b>wait-to-restore-time</b> <i>number</i>
Tree	<a href="#">wait-to-restore-time</a>
Description	This command specifies the delay after which the newly active section becomes the primary section after a switchover from the primary section to the secondary section occurs and the switch request clears normally.
Range	0 to 3600
Units	seconds
Default	300
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **working-circuit** *reference*

Synopsis	Working circuit port for the APS group
Context	<b>configure</b> <b>aps</b> <i>number</i> <a href="#">annexb</a> <b>working-circuit</b> <i>reference</i>
Tree	<a href="#">working-circuit</a>
Reference	<b>configure</b> <b>port</b> <i>string</i>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **hold-time** *number*

Synopsis	Time to wait for an advertisement packet
Context	<b>configure</b> <b>aps</b> <i>number</i> <b>hold-time</b> <i>number</i>



Tree	<a href="#">hold-time</a>
Range	10 to 650
Units	deciseconds
Default	30
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

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

Synopsis	Neighbor IP address for multi-chassis APS
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">neighbor</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">neighbor</a>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **protect-circuit** *reference*

Synopsis	Protection circuit port for the APS group
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">protect-circuit</a> <i>reference</i>
Tree	<a href="#">protect-circuit</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **revert**

Synopsis	Enable the <b>revert</b> context
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">revert</a>
Tree	<a href="#">revert</a>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**time** *number*

Synopsis	Wait time before switching back to the working circuit
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">revert</a> <i>time</i> <i>number</i>
Tree	<a href="#">time</a>
Range	0   60 to 3600
Units	seconds
Default	300
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**switching-mode** *keyword*

Synopsis	Switching mode for the APS port
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">switching-mode</a> <i>keyword</i>
Tree	<a href="#">switching-mode</a>
Options	uni-directional, bi-directional
Default	bi-directional
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**working-circuit** *reference*

Synopsis	Working circuit port for the APS group
Context	<b>configure</b> <a href="#">aps</a> <i>number</i> <a href="#">working-circuit</a> <i>reference</i>
Tree	<a href="#">working-circuit</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	The following elements are part of a choice: <b>annexb</b> or ( <b>neighbor</b> , <b>protect-circuit</b> , <b>revert</b> , and <b>working-circuit</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## 3.5 bfd commands

```
configure
- bfd
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-template string
    - apply-groups reference
    - apply-groups-exclude reference
    - echo-receive number
    - multiplier number
    - receive-interval number
    - transmit-interval number
    - type keyword
  - seamless-bfd
    - reflector string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - discriminator number
      - local-state keyword
```

### 3.5.1 bfd command descriptions

#### **bfd**

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

#### **bfd-template** [[name](#)] *string*

Synopsis	Enter the <b>bfd-template</b> list instance
Context	<b>configure bfd bfd-template</b> <i>string</i>
Tree	<a href="#">bfd-template</a>
Introduced	16.0.R1
Platforms	All

#### **[name]** *string*

Synopsis	BFD template name
Context	<b>configure bfd bfd-template</b> <i>string</i>
Tree	<a href="#">bfd-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **echo-receive** *number*

Synopsis	Echo receive interval
Context	<b>configure bfd bfd-template</b> <i>string</i> <b>echo-receive</b> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds

---

Default	100
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Detection multiplier
Context	<b>configure</b> <b>bfd bfd-template</b> <i>string multiplier number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **receive-interval** *number*

Synopsis	Receive interval
Context	<b>configure</b> <b>bfd bfd-template</b> <i>string receive-interval number</i>
Tree	<a href="#">receive-interval</a>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **transmit-interval** *number*

Synopsis	Transmit interval
Context	<b>configure</b> <b>bfd bfd-template</b> <i>string transmit-interval number</i>
Tree	<a href="#">transmit-interval</a>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Local termination point for the BFD session
Context	<b>configure bfd bfd-template</b> <i>string type keyword</i>
Tree	<a href="#">type</a>
Options	cpm-np, fp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**seamless-bfd**

Synopsis	Enter the <b>seamless-bfd</b> context
Context	<b>configure bfd seamless-bfd</b>
Tree	<a href="#">seamless-bfd</a>
Introduced	19.7.R1
Platforms	All

**reflector [name] string**

Synopsis	Enter the <b>reflector</b> list instance
Context	<b>configure bfd seamless-bfd reflector</b> <i>string</i>
Tree	<a href="#">reflector</a>
Max. Instances	1
Introduced	19.7.R1
Platforms	All

**[name] string**

Synopsis	S-BFD reflector name
Context	<b>configure bfd seamless-bfd reflector</b> <i>string</i>
Tree	<a href="#">reflector</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1

Platforms All

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

Synopsis Administrative state of the seamless BFD reflector  
 Context **configure** [bfd seamless-bfd reflector](#) *string* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 19.7.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [bfd seamless-bfd reflector](#) *string* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 19.7.R1  
 Platforms All

### **discriminator** *number*



**WARNING:**

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

Synopsis Discriminator of the seamless BFD reflector  
 Context **configure** [bfd seamless-bfd reflector](#) *string* **discriminator** *number*  
 Tree [discriminator](#)  
 Range 524288 to 526335  
 Introduced 19.7.R1  
 Platforms All

**local-state** *keyword*

Synopsis	Local state of the seamless BFD reflector
Context	<b>configure</b> <b>bfd seamless-bfd reflector</b> <i>string</i> <b>local-state</b> <i>keyword</i>
Tree	<b>local-state</b>
Options	admin-down, up
Default	up
Introduced	19.7.R1
Platforms	All



## 3.6 bmp commands

```

configure
-  bmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - collector
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connection
      - ipv4
        - address string
        - port number
      - ipv6
        - address string
        - port number
  - station string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - connection
      - connect-retry number
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - router-instance string
      - station-address
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - port number
      - tcp-keepalive
        - admin-state keyword
        - keep-count number
        - keep-idle number
        - keep-interval number
    - description string
  - family
    - evpn boolean
    - ipv4 boolean
    - ipv6 boolean
    - l2-vpn boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - mcast-ipv4 boolean
    - mcast-ipv6 boolean
    - mcast-vpn-ipv4 boolean
    - mcast-vpn-ipv6 boolean
    - sr-policy-ipv4 boolean
    - sr-policy-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - initiation-message string
  - report-local-routes boolean
  - stats-report-interval number

```

### 3.6.1 bmp command descriptions

#### **bmp**

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

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

Synopsis	Administrative state of the BMP operation
Context	<b>configure bmp admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

#### **collector**

Synopsis	Enter the <b>collector</b> context
Context	<b>configure bmp collector</b>
Tree	<a href="#">collector</a>
Introduced	19.10.R1
Platforms	VSR-NRC

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

Synopsis	Administrative state of the BMP collector
Context	<b>configure bmp collector admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 19.10.R1  
Platforms VSR-NRC

## connection

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **connection** context  
Context **configure** bmp collector connection  
Tree [connection](#)  
Introduced 19.10.R1  
Platforms VSR-NRC

## ipv4

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **ipv4** context  
Context **configure** bmp collector connection ipv4  
Tree [ipv4](#)  
Introduced 19.10.R1  
Platforms VSR-NRC

## address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 address  
Context **configure** bmp collector connection ipv4 address *string*  
Tree [address](#)  
Introduced 19.10.R1

Platforms VSR-NRC

### port number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 TCP destination port number

Context **configure** bmp collector connection ipv4 port number

Tree port

Range 1 to 65535

Default 4210

Introduced 19.10.R1

Platforms VSR-NRC

### ipv6



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **ipv6** context

Context **configure** bmp collector connection ipv6

Tree ipv6

Introduced 19.10.R1

Platforms VSR-NRC

### address string



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv6 address

Context **configure** bmp collector connection ipv6 address string

Tree address

Introduced 19.10.R1

Platforms VSR-NRC

### **port number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv6 TCP destination port  
 Context **configure bmp collector connection ipv6 port number**  
 Tree [port](#)  
 Range 1 to 65535  
 Default 4210  
 Introduced 19.10.R1  
 Platforms VSR-NRC

### **station [name] string**

Synopsis Enter the **station** list instance  
 Context **configure bmp station string**  
 Tree [station](#)  
 Max. Instances 8  
 Introduced 16.0.R1  
 Platforms All

### **[name] string**

Synopsis BMP monitoring station name  
 Context **configure bmp station string**  
 Tree [station](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of the BMP monitoring station
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**connection**

Synopsis	Enter the <b>connection</b> context
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>connection</b>
Tree	<b>connection</b>
Introduced	16.0.R1
Platforms	All

**connect-retry** *number*

Synopsis	Maximum time between connection attempts
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>connection</b> <b>connect-retry</b> <i>number</i>
Tree	<b>connect-retry</b>
Range	1 to 65535
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

**local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Local IP address to communicate with monitoring station
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>connection</b> <b>local-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>local-address</b>

Introduced 16.0.R1  
 Platforms All

### **router-instance** *string*

Synopsis Router instance used to reach the BMP station  
 Context **configure** [bmp station string connection router-instance string](#)  
 Tree [router-instance](#)  
 Default Base  
 Introduced 16.0.R4  
 Platforms All

### **station-address**

Synopsis Enter the **station-address** context  
 Context **configure** [bmp station string connection station-address](#)  
 Tree [station-address](#)  
 Introduced 16.0.R1  
 Platforms All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the remote BMP monitoring station  
 Context **configure** [bmp station string connection station-address ip-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)  
 Tree [ip-address](#)  
 Introduced 16.0.R1  
 Platforms All

### **port** *number*

Synopsis BMP monitoring station port  
 Context **configure** [bmp station string connection station-address port number](#)  
 Tree [port](#)  
 Range 1 to 65535  
 Introduced 16.0.R1

Platforms All

### tcp-keepalive

Synopsis Enter the **tcp-keepalive** context  
Context **configure** **bmp station** *string* **connection tcp-keepalive**  
Tree **tcp-keepalive**  
Introduced 16.0.R1  
Platforms All

### admin-state *keyword*

Synopsis Administrative state of the TCP keepalive  
Context **configure** **bmp station** *string* **connection tcp-keepalive admin-state** *keyword*  
Tree **admin-state**  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### keep-count *number*

Synopsis Keepalive threshold before connection is declared down  
Context **configure** **bmp station** *string* **connection tcp-keepalive keep-count** *number*  
Tree **keep-count**  
Range 3 to 100  
Default 4  
Introduced 16.0.R1  
Platforms All

### keep-idle *number*

Synopsis Time until the first TCP keepalive probe is sent  
Context **configure** **bmp station** *string* **connection tcp-keepalive keep-idle** *number*  
Tree **keep-idle**



Range	1 to 100000
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

### **keep-interval** *number*

Synopsis	Time between two TCP keepalive probes
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>connection tcp-keepalive keep-interval</b> <i>number</i>
Tree	<b>keep-interval</b>
Range	1 to 100000
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **family**

Synopsis	Enter the <b>family</b> context
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family</b>
Tree	<b>family</b>
Description	Commands in this context specify the address families that are reported to a BMP monitoring station.
Introduced	16.0.R1
Platforms	All

### **evpn boolean**

Synopsis	Support EVPN address family
Context	<b>configure bmp station string family evpn boolean</b>
Tree	<a href="#">evpn</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **ipv4 boolean**

Synopsis	Support IPv4 address family
Context	<b>configure bmp station string family ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6 boolean**

Synopsis	Support IPv6 address family
Context	<b>configure bmp station string family ipv6 boolean</b>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **l2-vpn boolean**

Synopsis	Support L2 VPN address family
Context	<b>configure bmp station string family l2-vpn boolean</b>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv4** *boolean*

Synopsis	Support labeled IPv4 address family
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Support labeled IPv6 address family
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv4** *boolean*

Synopsis	Support IPv4 multicast address family
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family mcast-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**mcast-ipv6** *boolean*

Synopsis	Support IPv6 multicast address family
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>family mcast-ipv6</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **mcast-vpn-ipv4** *boolean*

Synopsis	Support IPv4 VPN multicast address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family mcast-vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **mcast-vpn-ipv6** *boolean*

Synopsis	Support IPv6 VPN multicast address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family mcast-vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **sr-policy-ipv4** *boolean*

Synopsis	Support SR policy IPv4 address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family sr-policy-ipv4</a> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv4</a>
Default	false
Introduced	22.5.R1
Platforms	All

### **sr-policy-ipv6** *boolean*

Synopsis	Support SR policy IPv6 address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family sr-policy-ipv6</a> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv6</a>
Default	false
Introduced	22.5.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Support VPN IPv4 address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Support VPN IPv6 address family
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">family vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**initiation-message** *string*

Synopsis	Free form initiation message sent to monitoring station
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">initiation-message</a> <i>string</i>
Tree	<a href="#">initiation-message</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**report-local-routes** *boolean*

Synopsis	Allow local route reporting to BMP monitoring station
Context	<b>configure</b> <a href="#">bmp station</a> <i>string</i> <a href="#">report-local-routes</a> <i>boolean</i>
Tree	<a href="#">report-local-routes</a>
Default	false
Introduced	16.0.R1
Platforms	All

**stats-report-interval** *number*

Synopsis	Frequency of reports sent to the BMP monitoring station
Context	<b>configure</b> <b>bmp station</b> <i>string</i> <b>stats-report-interval</b> <i>number</i>
Tree	<b>stats-report-interval</b>
Range	15 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## 3.7 bof commands

```

bof
- auto-boot
- dhcp
  - client-id (keyword | hex-string | string)
  - inband
    - disabled boolean
    - null-encapsulation boolean
    - vlan number
    - vlan-discovery boolean
  - include-user-class boolean
  - ipv4 boolean
  - ipv6 boolean
  - management-port boolean
- ospf
  - mtu number
  - neid string
  - neip-ipv4 string
  - neip-ipv6 string
  - vendor-id number
  - port-mtu number
  - timeout number
- auto-configure
- ipv4
  - dhcp
    - client-id (hex-string | string)
    - include-user-class boolean
    - timeout number
  - ipv6
    - dhcp
      - client-id (hex-string | string)
      - client-type keyword
      - include-user-class boolean
      - timeout number
- configuration
  - encrypt boolean
  - encryption-key string
  - password string
  - primary-location string
  - secondary-location string
  - tertiary-location string
- console
  - speed number
  - wait-time number
- dns
  - domain string
  - primary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - secondary-server (ipv4-address-no-zone | ipv6-address-no-zone)
  - tertiary-server (ipv4-address-no-zone | ipv6-address-no-zone)
- image
  - primary-location string
  - secondary-location string
  - tertiary-location string
- li
  - local-save boolean
  - separate boolean
- license
  - primary-location string
- port string
  - autonegotiate keyword

```

## bof port duplex

- **duplex** *keyword*
- **speed** *number*
- **router** *string*
- **interface** *string*
  - **cpm** *keyword*
  - **ipv4**
    - **ip-address** *string*
    - **prefix-length** *number*
  - **ipv6**
    - **ipv6-address** *string*
    - **prefix-length** *number*
  - **ip-mtu** *number*
- **static-routes**
  - **route** (*ipv4-prefix | ipv6-prefix*)
    - **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **system**
  - **base-mac-address** *string*
  - **persistent-indices** *boolean*
  - **profile** *keyword*



### 3.7.1 bof command descriptions

#### bof

Synopsis	Configure system boot options
Context	<a href="#">bof</a>
Tree	<a href="#">bof</a>
Description	<p>This command creates or edits the boot option file (BOF) for the specified local storage device.</p> <p>A BOF file specifies where the system searches for runtime images, configuration files, and other operational parameters during system initialization.</p> <p>BOF parameters can be modified. Changes can be saved to a specified compact flash. The BOF must be located in the root directory of either an internal or external compact flash local to the system and have the mandatory filename of bof.cfg.</p> <p>When modifications are made to in-memory parameters that are currently in use or operating, the changes are effective immediately. For example, if the IP address of the management port is changed, the change takes place immediately.</p> <p>Only one entry of the BOF configuration command statement can be saved once the statement has been found to be syntactically correct.</p> <p>When opening an existing BOF that is not the BOF used in the most recent boot, a message is issued notifying the user that the parameters will not affect the operation of the node.</p> <p>No default boot option file exists. The router boots with the factory default boot sequence and options.</p>
Introduced	20.10.R1
Platforms	All

#### auto-boot



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>auto-boot</b> context
Context	<a href="#">bof auto-boot</a>
Tree	<a href="#">auto-boot</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## dhcp

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>dhcp</b> context
Context	<a href="#">bof auto-boot dhcp</a>
Tree	<a href="#">dhcp</a>
Notes	The following elements are part of a choice: <b>dhcp</b> or <b>ospf</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## client-id (*keyword* | *hex-string* | *string*)

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	<a href="#">bof auto-boot dhcp client-id</a> ( <i>keyword</i>   <i>hex-string</i>   <i>string</i> )
Tree	<a href="#">client-id</a>
String Length	3 to 118
Options	use-chassis-mac-address
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## inband

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>inband</b> context
Context	<a href="#">bof auto-boot dhcp inband</a>
Tree	<a href="#">inband</a>
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**disabled** *boolean***Note:**

The new value of this element takes effect when the router boots.

Synopsis	Do not use in-band ports
Context	<a href="#">bof auto-boot dhcp inband disabled</a> <i>boolean</i>
Tree	<a href="#">disabled</a>
Default	true
Notes	The following elements are part of a choice: <b>disabled</b> , <b>null-encapsulation</b> , <b>vlan</b> , or <b>vlan-discovery</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**null-encapsulation** *boolean***Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use null encapsulation
Context	<a href="#">bof auto-boot dhcp inband null-encapsulation</a> <i>boolean</i>
Tree	<a href="#">null-encapsulation</a>
Default	true
Notes	The following elements are part of a choice: <b>disabled</b> , <b>null-encapsulation</b> , <b>vlan</b> , or <b>vlan-discovery</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**vlan** *number***Note:**

The new value of this element takes effect when the router boots.

Synopsis	In-band VLAN ID
Context	<a href="#">bof auto-boot dhcp inband vlan</a> <i>number</i>
Tree	<a href="#">vlan</a>
Range	1 to 4094

Notes	The following elements are part of a choice: <b>disabled</b> , <b>null-encapsulation</b> , <b>vlan</b> , or <b>vlan-discovery</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **vlan-discovery** *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use VLAN discovery
Context	<a href="#">bof auto-boot dhcp inband vlan-discovery</a> <i>boolean</i>
Tree	<a href="#">vlan-discovery</a>
Default	true
Notes	The following elements are part of a choice: <b>disabled</b> , <b>null-encapsulation</b> , <b>vlan</b> , or <b>vlan-discovery</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **include-user-class** *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class in auto boot provisioning
Context	<a href="#">bof auto-boot dhcp include-user-class</a> <i>boolean</i>
Tree	<a href="#">include-user-class</a>
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **ipv4** *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv4
----------	-------------------------

Context	<a href="#">bof auto-boot dhcp ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## ipv6 *boolean*



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot with IPv6
Context	<a href="#">bof auto-boot dhcp ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## management-port *boolean*



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Use auto boot on the management port
Context	<a href="#">bof auto-boot dhcp management-port</a> <i>boolean</i>
Tree	<a href="#">management-port</a>
Default	true
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## ospf



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>ospf</b> context
Context	<a href="#">bof auto-boot ospf</a>

Tree	<a href="#">ospf</a>
Notes	The following elements are part of a choice: <b>dhcp</b> or <b>ospf</b> .
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **mtu number**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	OSPF MTU
Context	<a href="#">bof auto-boot ospf mtu number</a>
Tree	<a href="#">mtu</a>
Range	512 to 9786
Units	bytes
Default	1500
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **neid string**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Network element ID
Context	<a href="#">bof auto-boot ospf neid string</a>
Tree	<a href="#">neid</a>
String Length	3
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **neip-ipv4 string**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Network element IPv4 address
Context	<a href="#">bof auto-boot ospf neip-ipv4 string</a>
Tree	<a href="#">neip-ipv4</a>
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **neip-ipv6 string**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Network element IPv6 address
Context	<a href="#">bof auto-boot ospf neip-ipv6 string</a>
Tree	<a href="#">neip-ipv6</a>
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **vendor-id number**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Vendor ID
Context	<a href="#">bof auto-boot ospf vendor-id number</a>
Tree	<a href="#">vendor-id</a>
Range	1 to 254
Default	140
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **port-mtu number**



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Port MTU setting
Context	<a href="#">bof auto-boot port-mtu number</a>

Tree	<a href="#">port-mtu</a>
Range	512 to 9800
Units	bytes
Introduced	21.2.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## timeout *number*



### Note:

The new value of this element takes effect when the router boots.

Synopsis	ZTP timeout
Context	<a href="#">bof auto-boot timeout <i>number</i></a>
Tree	<a href="#">timeout</a>
Description	This command configures the Zero Touch Provisioning timeout, which is the total time allowed for the ZTP process to execute successfully. If the ZTP process is unsuccessful (in the case of auto-boot using OSPF, if no OSPF adjacency is found), the node is first rebooted, then the ZTP process is retried.
Range	30 to 1440
Units	minutes
Introduced	22.7.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## auto-configure

Synopsis	Enter the <b>auto-configure</b> context
Context	<a href="#">bof auto-configure</a>
Tree	<a href="#">auto-configure</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">bof auto-configure ipv4</a>
Tree	<a href="#">ipv4</a>



Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## dhcp



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>dhcp</b> context
Context	<a href="#">bof auto-configure ipv4 dhcp</a>
Tree	<a href="#">dhcp</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## client-id (*hex-string* | *string*)



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.



### Note:

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	<a href="#">bof auto-configure ipv4 dhcp client-id</a> ( <i>hex-string</i>   <i>string</i> )
Tree	<a href="#">client-id</a>
String Length	3 to 256
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## include-user-class *boolean*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	<a href="#">bof auto-configure ipv4 dhcp include-user-class</a> <i>boolean</i>
Tree	<a href="#">include-user-class</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**timeout** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	<a href="#">bof auto-configure ipv4 dhcp timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<a href="#">bof auto-configure ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## dhcp

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Enable the <b>dhcp</b> context
Context	<a href="#">bof auto-configure ipv6 dhcp</a>
Tree	<a href="#">dhcp</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## client-id (*hex-string* | *string*)

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP client ID
Context	<a href="#">bof auto-configure ipv6 dhcp client-id</a> ( <i>hex-string</i>   <i>string</i> )
Tree	<a href="#">client-id</a>
String Length	3 to 250
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## client-type *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP client type
Context	<a href="#">bof auto-configure ipv6 dhcp client-type</a> <i>keyword</i>
Tree	<a href="#">client-type</a>

Options	duid-enterprise, duid-link-local
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **include-user-class** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Include user class information
Context	<a href="#">bof auto-configure ipv6 dhcp include-user-class</a> <i>boolean</i>
Tree	<a href="#">include-user-class</a>
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **timeout** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



**Note:**

The new value of this element takes effect when the router boots.

Synopsis	DHCP timeout
Context	<a href="#">bof auto-configure ipv6 dhcp timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 65535
Default	30
Introduced	20.10.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## configuration

Synopsis	Enter the <b>configuration</b> context
Context	<a href="#">bof configuration</a>
Tree	<a href="#">configuration</a>
Introduced	20.10.R1
Platforms	All

## encrypt *boolean*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable encryption of BOF configuration files
Context	<a href="#">bof configuration encrypt <i>boolean</i></a>
Tree	<a href="#">encrypt</a>
Description	<p>When configured to <b>true</b>, this command enables encryption of the BOF using AES256 and SHA256.</p> <p>When the BOF is encrypted on the compact flash, it is still reachable using the BOF interactive menu during node startup, and fields can be modified using the BOF interactive menu.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## encryption-key *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Secret key for encryption of configuration files
Context	<a href="#">bof configuration encryption-key <i>string</i></a>
Tree	<a href="#">encryption-key</a>
Description	<p>This command creates a key to be used by AES256 and SHA256 for configuration file encryption and hashing. This key is used for all configuration files (primary, secondary, and tertiary).</p> <p>After creating or deleting a key, save the configuration file with the current encryption key state.</p>

String Length 1 to 71  
Introduced 21.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Password for boot-time modification of boot options  
Context [bof configuration password string](#)  
Tree [password](#)  
String Length 1 to 71  
Introduced 21.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **primary-location** *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Primary configuration location  
Context [bof configuration primary-location string](#)  
Tree [primary-location](#)  
String Length 1 to 199  
Introduced 20.10.R1  
Platforms All

### **secondary-location** *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Secondary configuration location  
Context [bof configuration secondary-location string](#)  
Tree [secondary-location](#)  
String Length 1 to 199

Introduced	20.10.R1
Platforms	All

### **tertiary-location** *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary configuration location
Context	<a href="#">bof configuration tertiary-location</a> <i>string</i>
Tree	<a href="#">tertiary-location</a>
String Length	1 to 199
Introduced	20.10.R1
Platforms	All

### **console**

Synopsis	Enter the <b>console</b> context
Context	<a href="#">bof console</a>
Tree	<a href="#">console</a>
Introduced	20.10.R1
Platforms	All

### **speed** *number*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Console port speed
Context	<a href="#">bof console speed</a> <i>number</i>
Tree	<a href="#">speed</a>
Range	9600   19200   38400   57600   115200
Units	bps
Default	115200
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

### **wait-time** *number*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis Wait time for interrupt to change boot parameters  
 Context [bof console wait-time number](#)  
 Tree [wait-time](#)  
 Range 1 to 10  
 Units seconds  
 Default 3  
 Introduced 20.10.R1  
 Platforms All

### **dns**

Synopsis Enter the **dns** context  
 Context [bof dns](#)  
 Tree [dns](#)  
 Introduced 20.10.R1  
 Platforms All

### **domain** *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis System DNS domain name for DNS address resolution  
 Context [bof dns domain string](#)  
 Tree [domain](#)  
 String Length 1 to 178  
 Introduced 20.10.R1  
 Platforms All



**primary-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Primary DNS server
Context	<a href="#">bof dns primary-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">primary-server</a>
Introduced	20.10.R1
Platforms	All

**secondary-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Secondary DNS server
Context	<a href="#">bof dns secondary-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">secondary-server</a>
Introduced	20.10.R1
Platforms	All

**tertiary-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Tertiary DNS server
Context	<a href="#">bof dns tertiary-server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">tertiary-server</a>
Introduced	20.10.R1
Platforms	All

**image**

Synopsis	Enter the <b>image</b> context
Context	<a href="#">bof image</a>

Tree	<a href="#">image</a>
Introduced	20.10.R1
Platforms	All

### **primary-location** *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Primary image location
Context	<a href="#">bof image primary-location</a> <i>string</i>
Tree	<a href="#">primary-location</a>
String Length	1 to 199
Introduced	20.10.R1
Platforms	All

### **secondary-location** *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Secondary image location
Context	<a href="#">bof image secondary-location</a> <i>string</i>
Tree	<a href="#">secondary-location</a>
String Length	1 to 199
Introduced	20.10.R1
Platforms	All

### **tertiary-location** *string*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	Tertiary image location
Context	<a href="#">bof image tertiary-location</a> <i>string</i>
Tree	<a href="#">tertiary-location</a>
String Length	1 to 199

Introduced 20.10.R1  
Platforms All

## li

Synopsis Enter the **li** context  
Context [bof li](#)  
Tree [li](#)  
Introduced 20.10.R1  
Platforms All

## local-save *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis Save the LI configuration locally  
Context [bof li local-save \*boolean\*](#)  
Tree [local-save](#)  
Introduced 20.10.R1  
Platforms All

## separate *boolean*



**Note:**

The new value of this element takes effect when the router boots.

Synopsis Separate access to the LI information  
Context [bof li separate \*boolean\*](#)  
Tree [separate](#)  
Introduced 20.10.R1  
Platforms All

## license

Synopsis Enter the **license** context

Context	<a href="#">bof license</a>
Tree	<a href="#">license</a>
Introduced	20.10.R1
Platforms	All

### **primary-location** *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Primary license file location
Context	<a href="#">bof license primary-location</a> <i>string</i>
Tree	<a href="#">primary-location</a>
String Length	1 to 199
Introduced	20.10.R1
Platforms	All

### **port** [[router-name](#)] *string*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>port</b> list instance
Context	<a href="#">bof port</a> <i>string</i>
Tree	<a href="#">port</a>
Max. Instances	1
Introduced	20.10.R1
Platforms	All

### **[router-name]** *string*

Synopsis	Administrative router name
Context	<a href="#">bof port</a> <i>string</i>
Tree	<a href="#">port</a>
String Length	1 to 64

MD-CLI	management
Default	
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **autonegotiate** *keyword*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Auto-negotiate speed and duplex type on Ethernet port
Context	<a href="#">bof port string autonegotiate keyword</a>
Tree	<a href="#">autonegotiate</a>
Options	false, true
Default	true
Introduced	20.10.R1
Platforms	All

### **duplex** *keyword*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Duplex type for the Ethernet port
Context	<a href="#">bof port string duplex keyword</a>
Tree	<a href="#">duplex</a>
Options	full, half
Default	full
Introduced	20.10.R1
Platforms	All

### **speed** *number*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Speed of the Ethernet port
Context	<code>bof port string speed number</code>
Tree	<code>speed</code>
Range	10   100   1000
Units	megabps
Default	100
Introduced	20.10.R1
Platforms	All

### **router** [`router-name`] *string*



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>router</b> list instance
Context	<code>bof router string</code>
Tree	<code>router</code>
Description	This command creates a router instance which represents a virtual router in the system. There will always be at least two instances in the system. The Base or transport router and the management router are created when the system is initialized and cannot be deleted.
Max. Instances	1
Introduced	20.10.R1
Platforms	All

### **[router-name]** *string*

Synopsis	Administrative router name
Context	<code>bof router string</code>
Tree	<code>router</code>
String Length	1 to 64
MD-CLI Default	management
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**interface** [[interface-name](#)] *string***Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>interface</b> list instance
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Description	Commands in this context create a logical IP routing or unnumbered MPLS-TP interface. Once created, an IP address, port, or system can be associated with the IP interface.
Max. Instances	1
Introduced	20.10.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Router interface name
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
MD-CLI Default	management
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**cpm** [[cpm-type](#)] *keyword***Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enter the <b>cpm</b> list instance
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpm</a> <i>keyword</i>
Tree	<a href="#">cpm</a>
Introduced	20.10.R1

Platforms All

### [cpm-type] keyword

Synopsis CPM type  
 Context [bof router string interface string cpm keyword](#)  
 Tree [cpm](#)  
 Options active, standby, a, b, c, d  
 Notes This element is part of a list key.  
 Introduced 20.10.R1  
 Platforms All

### ipv4



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Enable the **ipv4** context  
 Context [bof router string interface string cpm keyword ipv4](#)  
 Tree [ipv4](#)  
 Introduced 20.10.R1  
 Platforms All

### ip-address string



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis IPv4 address assigned to the interface  
 Context [bof router string interface string cpm keyword ipv4 ip-address string](#)  
 Tree [ip-address](#)  
 Description This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.  
 Notes This element is mandatory.  
 Introduced 20.10.R1  
 Platforms All



**prefix-length** *number***Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv4 address prefix length
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpm</a> <i>keyword</i> <a href="#">ipv4</a> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**ipv6****Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Enable the <b>ipv6</b> context
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpm</a> <i>keyword</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	20.10.R1
Platforms	All

**ipv6-address** *string***Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address assigned to the interface
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpm</a> <i>keyword</i> <a href="#">ipv6</a> <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Description	This command assigns an IP address to the management Ethernet port on a CPM. The active and standby IP addresses must be on the same subnet.
Introduced	20.10.R1
Platforms	All

## prefix-length *number*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	IPv6 address prefix length
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpm</a> <i>keyword</i> <a href="#">ipv6</a> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 128
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

## ip-mtu *number*

**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis	Interface IP MTU
Context	<a href="#">bof router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	<p>This command configures the MTU for IP packets transmitted out the interface of the management router instance associated to the management port.</p> <p>The operational MTU for the port is set to the lesser of the values configured with this command and the management port MTU.</p> <p>If the interface supports IPv6 packets, the command value must be set to 1280 or higher.</p>
Range	512 to 9786
Units	bytes
Introduced	20.10.R1
Platforms	All

## static-routes

Synopsis	Enter the <b>static-routes</b> context
Context	<a href="#">bof router</a> <i>string</i> <a href="#">static-routes</a>
Tree	<a href="#">static-routes</a>

Introduced 20.10.R1  
 Platforms All

## **route** [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Enter the **route** list instance  
 Context **bof router string static-routes route** (*ipv4-prefix* | *ipv6-prefix*)  
 Tree **route**  
 Introduced 20.10.R1  
 Platforms All

## **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix for the static route  
 Context **bof router string static-routes route** (*ipv4-prefix* | *ipv6-prefix*)  
 Tree **route**  
 Notes This element is part of a list key.  
 Introduced 20.10.R1  
 Platforms All

## **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



**Note:**

The new value of this element takes effect when the candidate is committed.

Synopsis Next-hop IP address  
 Context **bof router string static-routes route** (*ipv4-prefix* | *ipv6-prefix*) **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree **next-hop**  
 Notes This element is mandatory.

Introduced	20.10.R1
Platforms	All

## system

Synopsis	Enter the <b>system</b> context
Context	<a href="#">bof system</a>
Tree	<a href="#">system</a>
Introduced	20.10.R1
Platforms	All

## base-mac-address *string*



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Base system MAC address
Context	<a href="#">bof system base-mac-address string</a>
Tree	<a href="#">base-mac-address</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS-20, 7950 XRS-20e, VSR

## persistent-indices *boolean*



### Note:

The new value of this element takes effect when the router boots.

Synopsis	Classic and mixed management mode persistent indices
Context	<a href="#">bof system persistent-indices boolean</a>
Tree	<a href="#">persistent-indices</a>
Introduced	20.10.R1
Platforms	All

## **profile** *keyword*

**Note:**

The new value of this element takes effect when the router boots.

Synopsis	System capabilities profile
Context	<a href="#">bof system profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	profile-a, profile-b
Introduced	20.10.R1
Platforms	All

## 3.8 call-trace commands

```
configure
- call-trace
  - apply-groups reference
  - apply-groups-exclude reference
  - buffering boolean
  - location keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - size-limit (number | keyword)
  - max-files-number number
  - primary-cf keyword
  - trace-profile string
    - applications
      - connectivity-management boolean
      - gx boolean
      - gy boolean
      - ladb boolean
      - msap boolean
      - nasreq boolean
      - ppp-event boolean
      - python boolean
      - radius-acct boolean
      - radius-auth boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - events keyword
    - output
      - debug
      - live
        - fqdn string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - port number
        - router-instance string
      - local-storage
    - size-limit number
    - time-limit number
```

### 3.8.1 call-trace command descriptions

#### call-trace

Synopsis	Enter the <b>call-trace</b> context
Context	<b>configure</b> <a href="#">call-trace</a>
Tree	<a href="#">call-trace</a>
Description	Commands in this context configure the attributes of the call trace debugging functionality.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### buffering *boolean*

Synopsis	Buffer messages until the trace key is known
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">buffering</a> <i>boolean</i>
Tree	<a href="#">buffering</a>
Description	<p>When configured to <b>true</b>, the router buffers initial messages for sessions where the trace key is not yet known, for example, a username for a PPP session.</p> <p>When the trace key, for example, a username, indicates a match for a traced session, the router sends the buffered messages immediately. If the key does not match a trace, the router discards the buffered messages.</p> <p>When configured to <b>false</b>, the router does not buffer any messages and therefore initial messages may not be traced.</p>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### location [[location-type](#)] *keyword*

Synopsis	Enter the <b>location</b> list instance
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">location</a> <i>keyword</i>
Tree	<a href="#">location</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[location-type] keyword**

Synopsis	Compact flash card to be used
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">location</a> <i>keyword</i>
Tree	<a href="#">location</a>
Options	cf1, cf2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of compact flash for log storage
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">location</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**size-limit (number | keyword)**

Synopsis	Maximum cumulative size of call trace files on the card
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">location</a> <i>keyword</i> <a href="#">size-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">size-limit</a>
Range	1 to 65536
Options	unlimited
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-files-number number**

Synopsis	Maximum number of files call trace can create
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">max-files-number</a> <i>number</i>



Tree	<a href="#">max-files-number</a>
Range	1 to 1024
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **primary-cf** *keyword*

Synopsis	Primary CF card as local storage location
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">primary-cf</a> <i>keyword</i>
Tree	<a href="#">primary-cf</a>
Options	cf1, cf2
Default	cf1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **trace-profile** [[name](#)] *string*

Synopsis	Enter the <b>trace-profile</b> list instance
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i>
Tree	<a href="#">trace-profile</a>
Description	Commands in this context configure the attributes of the call-trace profile list.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Call trace profile name
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i>
Tree	<a href="#">trace-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## applications

Synopsis	Enter the <b>applications</b> context
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a>
Tree	<a href="#">applications</a>
Description	Commands in this context configure call trace attributes for the specified application.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## connectivity-management *boolean*

Synopsis	Trace messages used for connectivity protocols
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">connectivity-management</a> <i>boolean</i>
Tree	<a href="#">connectivity-management</a>
Description	When configured to <b>true</b> , this command enables call trace for connectivity protocols, such as DHCP, ARP, and DHCPv6, and events related to connectivity management; for example, migrant or data-triggered host creation, idling, or session timeout. When configured to <b>false</b> , connectivity protocols are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gx *boolean*

Synopsis	Trace Diameter messages used for the Gx application
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">gx</a> <i>boolean</i>
Tree	<a href="#">gx</a>
Description	When configured to <b>true</b> , this command enables call trace for Diameter messages used for the Gx application. When configured to <b>false</b> , Diameter Gx messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gy *boolean*

Synopsis	Trace Diameter messages used for the Gy application
----------	---

Context	<b>configure call-trace trace-profile</b> <i>string applications gy boolean</i>
Tree	<a href="#">gy</a>
Description	When configured to <b>true</b> , this command enables call trace for Diameter messages used for the Gy application. When configured to <b>false</b> , Diameter Gy messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ludb boolean**

Synopsis	Trace local user database lookups
Context	<b>configure call-trace trace-profile</b> <i>string applications ludb boolean</i>
Tree	<a href="#">ludb</a>
Description	When configured to <b>true</b> , this command enables call trace for Local User Data Base (LUDB) lookups. When configured to <b>false</b> , LUDB lookups are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**msap boolean**

Synopsis	Trace MSAP creation events
Context	<b>configure call-trace trace-profile</b> <i>string applications msap boolean</i>
Tree	<a href="#">msap</a>
Description	When configured to <b>true</b> , this command enables tracing of Managed Service Access Point (MSAP) creation events. When configured to <b>false</b> , MSAP create events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nasreq boolean**

Synopsis	Trace Diameter messages used for NASREQ application
Context	<b>configure call-trace trace-profile</b> <i>string applications nasreq boolean</i>

Tree	<a href="#">nasreq</a>
Description	When configured to <b>true</b> , this command enables call trace for Diameter messages used for the Diameter Network Access Server Requirements (NASREQ) application. When configured to <b>false</b> , Diameter NASREQ messages are not traced.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-event** *boolean*

Synopsis	Allow tracing for PPP state machine related events
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">ppp-event</a> <i>boolean</i>
Tree	<a href="#">ppp-event</a>
Description	When configured to <b>true</b> , events related to the PPP state machine are traced. This configuration may result in a large amount of event messages. When configured to <b>false</b> , tracing is not activated for PPP state machine events.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python** *boolean*

Synopsis	Trace Python script execution
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">python</a> <i>boolean</i>
Tree	<a href="#">python</a>
Description	When configured to <b>true</b> , this command enables tracing of Python script execution. When configured to <b>false</b> , Python script execution is not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-acct** *boolean*

Synopsis	Trace messages and events for RADIUS-based accounting
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">radius-acct</a> <i>boolean</i>
Tree	<a href="#">radius-acct</a>

Description	When configured to <b>true</b> , this command enables tracing of messages and events related to RADIUS-based accounting. When configured to <b>false</b> , RADIUS-based accounting messages and events are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth** *boolean*

Synopsis	Trace RADIUS authentication messages and events
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">applications</a> <a href="#">radius-auth</a> <i>boolean</i>
Tree	<a href="#">radius-auth</a>
Description	When configured to <b>true</b> , this command enables tracing of messages and events related to RADIUS authentication, including CoA and Disconnect. When configured to <b>false</b> , messages and events related to RADIUS authentication are not traced.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **events** *keyword*

Synopsis	Events to include in the captured trace
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">events</a> <i>keyword</i>
Tree	<a href="#">events</a>
Options	public-only, all

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## output

Synopsis	Enter the <b>output</b> context
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <b>output</b>
Tree	<a href="#">output</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## debug

Synopsis	Enable output to the debug log
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <b>output</b> <b>debug</b>
Tree	<a href="#">debug</a>
Notes	The following elements are part of a choice: <b>debug</b> , <b>live</b> , or <b>local-storage</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## live

Synopsis	Enable the <b>live</b> context
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <b>output</b> <b>live</b>
Tree	<a href="#">live</a>
Notes	The following elements are part of a choice: <b>debug</b> , <b>live</b> , or <b>local-storage</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fqdn *string*

Synopsis	Fully qualified domain name of live output destination
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <b>output</b> <b>live</b> <b>fqdn</b> <i>string</i>
Tree	<a href="#">fqdn</a>
String Length	1 to 255

Notes	The following elements are part of a mandatory choice: <b>fqdn</b> or <b>ip-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the live output destination server
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">output</a> <a href="#">live</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a mandatory choice: <b>fqdn</b> or <b>ip-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **port number**

Synopsis	TCP IP port
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">output</a> <a href="#">live</a> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65536
Default	29770
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Router instance or VPRN service name
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">output</a> <a href="#">live</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-storage

Synopsis	Destination for output
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">output</a> <a href="#">local-storage</a>
Tree	<a href="#">local-storage</a>
Notes	The following elements are part of a choice: <b>debug</b> , <b>live</b> , or <b>local-storage</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## size-limit *number*

Synopsis	Maximum data output for a single call trace operation
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">size-limit</a> <i>number</i>
Tree	<a href="#">size-limit</a>
Range	1 to 1000
Units	megabytes
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## time-limit *number*

Synopsis	Maximum time for a single call trace job
Context	<b>configure</b> <a href="#">call-trace</a> <a href="#">trace-profile</a> <i>string</i> <a href="#">time-limit</a> <i>number</i>
Tree	<a href="#">time-limit</a>
Range	1 to 604800
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



### 3.9 card commands

```

configure
- card number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- card-type keyword
- fail-on-error boolean
- filter-profile keyword
- fp number
- apply-groups reference
- apply-groups-exclude reference
- egress
- hs-fixed-high-thresh-delta number
- hs-pool-policy reference
- wred-queue-control
- admin-state keyword
- buffer-allocation decimal-number
- reserved-cbs decimal-number
- slope-policy reference
- fp-resource-policy reference
- hi-bw-mcast-src
- alarm boolean
- default-paths-only boolean
- group number
- ingress
- access
- queue-group reference instance-id number
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- description string
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-threshold-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- policer-overrides
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- dist-cpu-protection
- dynamic-enforcement-policer-pool number
- mcast-path-management
- admin-state keyword

```

configure card fp ingress mcast-path-management bandwidth-policy

```

- bandwidth-policy reference
- network
- pool string
  - amber-alarm-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - red-alarm-threshold number
  - resv-cbs
    - amber-alarm-action
      - max number
      - step number
    - cbs number
    - slope-policy reference
- queue-group reference instance-id number
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - description string
  - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-threshold-separation (number | keyword)
        - priority number
          - apply-groups reference
          - apply-groups-exclude reference
          - mbs-contribution (number | keyword)
      - policy-name reference
    - policer-overrides
    - policer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - mbs (number | keyword)
      - packet-byte-offset number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - stat-mode keyword
    - queue-policy reference
  - policy-accounting
    - classes number
    - policers number
- ingress-buffer-allocation decimal-number
- init-extract-prio-mode keyword
- stable-pool-sizing boolean
- level keyword
- mda number
- access
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - apply-groups reference
    - apply-groups-exclude reference
  - ingress
    - apply-groups reference
    - apply-groups-exclude reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- egress-xpl

```

## configure card mda egress-xpl threshold

- **threshold** *number*
- **window** *number*
- **event** *keyword*
- **action** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fail-on-error** *boolean*
- **ingress-xpl**
  - **threshold** *number*
  - **window** *number*
- **level** *keyword*
- **mda-type** *keyword*
- **network**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **ingress**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **power-priority-level** *number*
- **reset-on-recoverable-error** *boolean*
- **sync-e** *keyword*
- **upgrade** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **path** *keyword*
- **xconnect**
  - **mac** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **loopback** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
      - **description** *string*
- **power-save** *boolean*
- **reset-on-recoverable-error** *boolean*
- **upgrade** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **path** *keyword*
- **virtual-scheduler-adjustment**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **internal-scheduler-weight-mode** *keyword*
  - **interval**
    - **rate-calculation-minimum**
      - **fast-queue** *decimal-number*
      - **slow-queue** *decimal-number*
    - **scheduler-run-minimum** *decimal-number*
    - **task-scheduling** *decimal-number*
  - **slow-queue-threshold-rate** *number*
- **xiom** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **fail-on-error** *boolean*
  - **level** *keyword*
  - **mda** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*

## configure card xiom mda apply-groups-exclude

- **apply-groups-exclude** *reference*
- **mda-type** *keyword*
- **power-priority-level** *number*
- **sync-e** *keyword*
- **xconnect**
  - **mac** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **loopback** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
      - **description** *string*
- **reset-on-recoverable-error** *boolean*
- **upgrade** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **path** *keyword*
- **xiom-type** *keyword*

### 3.9.1 card command descriptions

#### **card** [*slot-number*] *number*

Synopsis	Enter the <b>card</b> list instance
Context	<b>configure card</b> <i>number</i>
Tree	<a href="#">card</a>
Description	Commands in this context cover attributes for specific chassis slots for physical cards. Cards include IOM, IMM, and XCM.  In SR OS, cards cover IOM, IMM, and XCM.
Introduced	16.0.R1
Platforms	All

#### **[slot-number]** *number*

Synopsis	Slot number within the chassis
Context	<b>configure card</b> <i>number</i>
Tree	<a href="#">card</a>
Description	This command configures a unique value that identifies the card slot within a chassis in the system.
Range	1 to 20
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the card
Context	<b>configure card</b> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**card-type** keyword**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis      Card type

Context      **configure** *card number* **card-type** *keyword*

Tree          **card-type**

Description    This command adds an IOM, IMM, XCM to the device configuration for the slot.

The card type can be pre-provisioned, meaning that the card does not need to be installed in the chassis.

A card must be provisioned before any contained object can be configured: MDA, XIOM, XMA, MDA-s, connector, or port. A card can only be provisioned in a slot if the card type is allowed in the slot. An error message is generated if an attempt is made to provision a card type that is not allowed.

If a card is inserted that does not match the configured card type for the slot, a log event and facility alarm is raised. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event and facility alarm are raised if an administratively enabled card is removed from the chassis. The alarm is cleared when the correct card type is installed or the configuration is modified. A log event is issued when a card is removed that is administratively disabled.

Because IMM's do not have the capability to install separate MDAs, the configuration of the MDAs is automatic. This configuration only includes the default options such as default buffer policies. Commands to manage the MDA remain in the MDA configuration context.

Some card hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two card types that are the same, except for a "-ptp" suffix to indicate the second loadset. A hard reset of the card occurs when switching between the two provisioned types.

An appropriate alarm is raised if a partial or complete card failure is detected. The alarm is cleared when the error condition ceases.

Options      xcm-x20, imm40-10gb-sfp, imm4-100gb-cxp, iom4-e, iom-a, imm-1pac-fp3, imm-2pac-fp3, iom4-e-hs, imm4-100gb-cfp4, iom-e, iom-v, iom4-e-b, iom-sar-hm, xcm2-x20, iom-1, xcm-14s, imm40-10gb-sfp-ptp, iom-ixr-r6, imm36-100g-qsfp28, imm48-sfp+2-qsfp28, iom5-e, xcm-7s, imm48-sfp++6-qsfp28, xcm-1s, xcm-2s, imm24-sfp++8-sfp28+2-qsfp28, iom-sar-hmc, imm14-10g-sfp++4-1g-tx, iom-ixr-r4, imm6-qsfpdd+48-sfp56, imm32-qsfp28+4-qsfpdd, i48-800g-qsfpdd-1x, imm36-qsfpdd, imm4-1g-tx+20-1g-sfp+6-10g-sfp+, iom-ixr-r6d, xcm2-7s, i24-800g-qsfpdd-1, imm36-800g-qsfpdd, xcm2-14s, i48-400g-qsfpdd-1, i80-200g-sfpdd+12-400g-qsfpdd-1, i40-200g-sfpdd+6-800g-qsfpdd-1, i80-200g-sfpdd+12-800g-qsfpdd-1x,

	xcm-2se, xcm-14s-b, xcm-7s-b, imm2-qsfdd+2-qsf28+24-sfp28, xcmc-2se, imm12-sfp28+2-qsf28, dms24-800g-qsfdd-1
Introduced	16.0.R1
Platforms	All

### **fail-on-error** *boolean*

Synopsis	Set operational state of the card to Failed upon error
Context	<b>configure</b> <b>card</b> <i>number</i> <b>fail-on-error</b> <i>boolean</i>
Tree	<b>fail-on-error</b>
Description	<p>When configured to <b>true</b>, this command controls the behavior of the card when any one of a specific set of card level errors is encountered in the system.</p> <p>When this command is set to <b>true</b>, and any one (or more) of the specific errors is detected, the operational state of the card is set to failed. This failed state persists until the <b>clear card</b> command is issued (reset) or the card is removed and reinserted (reseated). If the condition persists after reseating the card, contact Nokia support to investigate more.</p> <p>Nokia only recommends configuring this command to <b>true</b> when the network is designed to be able to route traffic around a failed card (redundant cards, nodes, or other paths exist).</p> <p>The list of specific errors includes the following:</p> <ul style="list-style-type: none"> <li>CHASSIS event ID# 2063 - tmnxEqCardPChipMemoryEvent</li> <li>CHASSIS event ID# 2076 - tmnxEqCardPChipCamEvent</li> <li>CHASSIS event ID# 2059 - tmnxEqCardPChipError (for ingress Ethernet only)</li> <li>CHASSIS event ID# 2098 - tmnxEqCardQChipBufMemoryEvent</li> <li>CHASSIS event ID# 2099 - tmnxEqCardQChipStatsMemoryEvent</li> <li>CHASSIS event ID# 2101 - tmnxEqCardQChipIntMemoryEvent</li> <li>CHASSIS event ID# 2103 - tmnxEqCardChipIfCellEvent</li> </ul> <p>On platforms with integrated CPM and IOM, IMM, or XCM, the node is rebooted if this command is set to <b>true</b> and one of the card level errors is encountered. The tmnxEqCardPChipError is only considered as a trigger for this command for ingress FCS errors (not egress FCS errors).</p> <p><b>Note:</b> On the detection of the event or error in the system, the reporting of the event (logs) and the fail-on-error behavior of the card are independent. Log event control configuration determines whether the events are reported in logs (or SNMP traps, and so on) and the fail-on-error configuration determines the behavior of the card. This implies that the card can be configured to fail-on-error even if the events are suppressed (some may be suppressed in the system by default). To facilitate post-failure analysis, Nokia recommends reporting the specific events or errors and that <b>configure log log-events</b> be enabled when this command is set to <b>true</b>.</p>
Default	false

Introduced	16.0.R1
Platforms	All

### **filter-profile** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Filter profile for the card
Context	<b>configure</b> <i>card number filter-profile keyword</i>
Tree	<i>filter-profile</i>
Description	This command controls the resources allocated to ingress and egress IPv4 and IPv6 filters on a per-line card basis on the SR-a platform.
Options	none, profile-a
Default	none
Introduced	19.10.R1
Platforms	7750 SR-a

### **fp** [*fp-number*] *number*

Synopsis	Enter the <b>fp</b> list instance
Context	<b>configure</b> <i>card number fp number</i>
Tree	<i>fp</i>
Description	Commands in this context configure forwarding plane (FP) specific options on the card.
Introduced	16.0.R1
Platforms	All

### **[fp-number]** *number*

Synopsis	Forwarding plane within the card
Context	<b>configure</b> <i>card number fp number</i>
Tree	<i>fp</i>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms All

## egress

Synopsis Enter the **egress** context  
 Context **configure** [card number](#) [fp number](#) [egress](#)  
 Tree [egress](#)  
 Introduced 16.0.R1  
 Platforms All

## hs-fixed-high-thresh-delta *number*

Synopsis High threshold delta on the forwarding plane  
 Context **configure** [card number](#) [fp number](#) [egress](#) [hs-fixed-high-thresh-delta](#) *number*  
 Tree [hs-fixed-high-thresh-delta](#)  
 Description This command specifies the egress aggregate shaper high burst limit threshold delta for this HSQ IOM FP.  

An aggregate rate can be applied to each egress HSQ queue group, HS secondary shaper, and (for subscribers configured with HS SLA expanded mode) primary shaper that manages the maximum burst limit over a specified shaping rate. Each aggregate shaper supports two thresholds that are used in conjunction with the low burst class setting. The system uses the lowest value attainable for each low threshold aggregate burst limit without causing shaper under run conditions.

The high burst limit threshold is determined by adding the configured value of this command to the aggregate low burst limit threshold value. An operator must set this configured value to at least two times the maximum frame size to prevent lower threshold class forwarding from also affecting the higher threshold classes when forwarding larger packet sizes. An insufficiently high threshold delta defeats the intended purpose of mapping classes to the higher threshold.

 Range 0 to 65536  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

## hs-pool-policy *reference*

Synopsis HS pool policy  
 Context **configure** [card number](#) [fp number](#) [egress](#) [hs-pool-policy](#) *reference*  
 Tree [hs-pool-policy](#)

Description	<p>This command specifies the HS pool policy for the FP.</p> <p>An HS pool policy contains the required parameters to create and size root and mid-tier buffer pools on an HSQ IOM, and applies a slope policy to each. A single HS pool policy is supported per port FP.</p> <p>This command is only applicable to the HSQ IOM (iom4-e-hs) and fails if configured on other card types.</p>
Reference	<b>configure</b> <a href="#">qos hs-pool-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### wred-queue-control

Synopsis	Enter the <b>wred-queue-control</b> context
Context	<b>configure</b> <a href="#">card number fp number egress wred-queue-control</a>
Tree	<a href="#">wred-queue-control</a>
Description	Commands in this context configure the aggregate Weighted Random Early Detection (WRED) queue options for all WRED queues on an egress forwarding plane.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### admin-state *keyword*

Synopsis	Administrative state of the WRED queue control function
Context	<b>configure</b> <a href="#">card number fp number egress wred-queue-control admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### buffer-allocation *decimal-number*

Synopsis	Buffer allocation for WRED queue buffer pools
Context	<b>configure</b> <a href="#">card number fp number egress wred-queue-control buffer-allocation</a> <i>decimal-number</i>
Tree	<a href="#">buffer-allocation</a>

Description	This command defines the percentage of buffers to set aside for WRED queue buffer pools.
Range	0.01 to 99.99
Units	percent
Default	25.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reserved-cbs** *decimal-number*

Synopsis	Buffers for queues operating within CBS thresholds
Context	<b>configure</b> <i>card number fp number egress wred-queue-control reserved-cbs decimal-number</i>
Tree	<a href="#">reserved-cbs</a>
Description	<p>This command specifies the percentage of buffers within the WRED mega-pool to set aside for WRED queues operating within the configured CBS thresholds. The forwarding plane protects against WRED queue buffer starvation by setting aside a portion of the buffers within the WRED mega-pool.</p> <p>This threshold defines when a WRED queue requests buffers from the reserved portion of the WRED mega-pool and when it starts requesting buffers from the shared portion of the mega-pool. With proper oversubscription provisioning, a seldom active queue is not denied a buffer from the mega-pool when the shared portion of the mega-pool is congested.</p>
Range	0.01 to 99.99
Units	percent
Default	25.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **slope-policy** *reference*

Synopsis	Slope policy for the forwarding plane
Context	<b>configure</b> <i>card number fp number egress wred-queue-control slope-policy reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <i>qos slope-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fp-resource-policy** *reference***WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Resource policy to manage resources on the FP
Context	<b>configure</b> <i>card number fp number fp-resource-policy reference</i>
Tree	<a href="#">fp-resource-policy</a>
Description	<p>This command configures an FP resource policy used to manage resources on a forwarding plane that is FP4-based and later.</p> <p>The system creates a default policy that applies to all FP4 and later FPs. If an FP resource policy is removed from an FP, the system automatically applies the default policy to that FP. The system prevents the modification or deletion of the default policy, and the deletion of any user-created policy that is applied to an FP.</p>
Reference	<b>configure</b> <a href="#">qos fp-resource-policy string</a>
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**hi-bw-mcast-src**

Synopsis	Enable the <b>hi-bw-mcast-src</b> context
Context	<b>configure</b> <i>card number fp number hi-bw-mcast-src</i>
Tree	<a href="#">hi-bw-mcast-src</a>
Description	<p>Commands in this context configure the attributes to designate the FP as a high-bandwidth IP multicast source, expecting the ingress traffic to include high-bandwidth IP multicast traffic.</p> <p>When configured, the system attempts to allocate a dedicated multicast switch fabric plane (MSFP) to the forwarding plane. When a group is specified, all FPs in the group share the same MSFP.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

**alarm** *boolean*

Synopsis	Raise an alarm when multiple traffic taps share a plane
Context	<b>configure</b> <i>card number fp number hi-bw-mcast-src alarm boolean</i>

Tree	<a href="#">alarm</a>
Description	<p>When configured to <b>true</b>, the router generates an event if the MDA must share an MSFP with another MDA in a different group. MDAs within the same group that share an MSFP do not generate an event. Additionally, if a failure occurs during normal operation or resources are removed, the system generates an event if it cannot maintain separation of MSFPs for the MDAs.</p> <p>When configured to <b>false</b>, the router does not generate events.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

### **default-paths-only** *boolean*

Synopsis	Allocate the default paths to dedicated MSFPs
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">hi-bw-mcast-src</a> <b>default-paths-only</b> <i>boolean</i>
Tree	<a href="#">default-paths-only</a>
Description	<p>When configured to <b>true</b>, the system only attempts to allocate the two default paths (one high priority and one low priority) to dedicated MSFPs.</p> <p>When configured to <b>false</b>, the default path allocation is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

### **group** *number*

Synopsis	Logical MSFP group for the MDA
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">hi-bw-mcast-src</a> <b>group</b> <i>number</i>
Tree	<a href="#">group</a>
Description	<p>This command specifies the logical MSFP group for the MDA.</p> <p>If a group is specified, all FPs in the group share the same MSFP.</p>
Range	0 to 32
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## access

Synopsis	Enter the <b>access</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">access</a>
Tree	<a href="#">access</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## queue-group [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">access</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Description	Commands in this context create a named queue group template on the ingress forwarding plane of an IOM or IMM.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## [[queue-group-name](#)] *reference*

Synopsis	Queue group name
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">access</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **instance-id** *number*

Synopsis Instance ID

Context **configure** *card number fp number ingress access queue-group reference instance-id number*

Tree [queue-group](#)

Range 1 to 65535

MD-CLI 1

Default

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **accounting-policy** *reference*

Synopsis Accounting policy for the FP ingress queue group

Context **configure** *card number fp number ingress access queue-group reference instance-id number accounting-policy reference*

Tree [accounting-policy](#)

Description This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.

Reference **configure** *log accounting-policy number*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **collect-stats** *boolean*

Synopsis Collect statistics on FP ingress queue group

Context **configure** *card number fp number ingress access queue-group reference instance-id number collect-stats boolean*

Tree [collect-stats](#)

Description When configured to **true**, the system collects accounting and statistical data for the queue group on the FP.

When configured to **false**, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.

If this command is set to **true** (after it had previously been set to **false**), the counters written to the billing file include the traffic collected when the command was set to **false**.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress access queue-group reference</a> <a href="#">instance-id number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer-control-policy**

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress access queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress access queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-control-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR



**max-rate** (*number* | *keyword*)

Synopsis	Maximum rate override
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides max-rate</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Description	<p>This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.</p> <p>For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.</p> <p>Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.</p> <p>If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority-mbs-thresholds**

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds</i>
Tree	<a href="#">priority-mbs-thresholds</a>
Description	Commands in this context configure the derivative for the shared portion and fair portion for each priority level.

The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **min-threshold-separation** (*number* | *keyword*)

Synopsis Minimum separation between any two active thresholds  
 Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds min-threshold-separation (number | keyword)*  
 Tree [min-threshold-separation](#)  
 Description This command configures the minimum separation between any two active thresholds in the parent policer.  
 Range 0 to 16777216  
 Units bytes  
 Options auto  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority** [*level*] *number*

Synopsis Enter the **priority** list instance  
 Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*  
 Tree [priority](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[level]** *number*

Synopsis Priority level, higher number is stricter  
 Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number*  
 Tree [priority](#)  
 Range 1 to 8

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">access</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <a href="#">number</a> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">access</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <a href="#">reference</a>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer-overrides**

Synopsis	Enter the <b>policer-overrides</b> context
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">access</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-overrides</a>
Tree	<a href="#">policer-overrides</a>

Description	Commands in this context configure specific overrides to one or more policers created on the SAP through SAP ingress QoS policies.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer** [**policer-id**] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <i>card number</i> <b>fp</b> <i>number</i> <b>ingress access queue-group</b> <i>reference</i> <b>instance-id</b> <i>number</i> <b>policer-overrides</b> <b>policer</b> <i>reference</i>
Tree	<b>policer</b>
Description	<p>Commands in this context create, modify, or delete a policer. Policers are created and used in a similar manner to queues. Unlike queues that have dedicated counters, policers allow various stat-mode settings that define the counters to be associated with the policer. Packet byte offset provides a policer with the ability to modify the size of each packet based on a defined number of bytes. All policers must be created within the QoS policies.</p> <p>After a policer is created, it cannot be deleted from the QoS policy unless all forwarding classes mapped to the policer are first moved to other policers or queues.</p> <p>The system allows a policer to be created on a SAP QoS policy regardless of the ability to support policers on objects where the policy is currently applied. The system only scans the current objects for policer support and sufficient resources to create the policer when a forwarding class is first mapped to the policer ID. If the policer cannot be created because one or more instances of the policy do not support policing or have insufficient resources to create the policer, the forwarding class mapping fails.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[policer-id]** *reference*

Synopsis	Policer ID
Context	<b>configure</b> <i>card number</i> <b>fp</b> <i>number</i> <b>ingress access queue-group</b> <i>reference</i> <b>instance-id</b> <i>number</i> <b>policer-overrides</b> <b>policer</b> <i>reference</i>
Tree	<b>policer</b>
Reference	<b>configure</b> <b>qos queue-group-templates</b> <b>ingress queue-group</b> <i>string</i> <b>policer</b> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS tolerance allowed by the policer
Context	<b>configure</b> <i>card number</i> <b>fp</b> <i>number</i> <b>ingress access queue-group</b> <i>reference</i> <b>instance-id</b> <i>number</i> <b>policer-overrides policer</b> <i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cbs</b>
Description	This command configures the CIR leaky bucket exceed threshold of the policer.  If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs** (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
Context	<b>configure</b> <i>card number</i> <b>fp</b> <i>number</i> <b>ingress access queue-group</b> <i>reference</i> <b>instance-id</b> <i>number</i> <b>policer-overrides policer</b> <i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mbs</b>
Description	This command configures the PIR leaky bucket violate threshold of the policer.  Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.  If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.  The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis Packet size adjustment

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number*

Tree [packet-byte-offset](#)

Description This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.

Use this command to add downstream frame encapsulation or remove portions of packet headers.

When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.

Range -32 to 31

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate**

Synopsis Enter the **rate** context

Context **configure** *card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate*

Tree [rate](#)

Description Commands in this context configure the metering and optional profiling rates of the policer.

The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** (*number* | *keyword*)

Synopsis CIR for the policer

Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate cir (number   keyword)</i>
Tree	<a href="#">cir</a>
Description	This command overrides the default CIR rate of the policer. When the policer is first created, the profiling rate defaults to 0 kb/s. When <b>max</b> is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number | keyword*)

Synopsis	PIR for the policer
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference rate pir (number   keyword)</i>
Tree	<a href="#">pir</a>
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When <b>max</b> is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis	Stat mode for the policer
Context	<b>configure</b> <i>card number fp number ingress access queue-group reference instance-id number policer-overrides policer reference stat-mode keyword</i>

Tree	<a href="#">stat-mode</a>
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## dist-cpu-protection

Synopsis	Enter the <b>dist-cpu-protection</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress</a> <a href="#">dist-cpu-protection</a>
Tree	<a href="#">dist-cpu-protection</a>
Description	Commands in this context configure the distributed CPU protection forwarding plane settings.
Introduced	21.2.R1
Platforms	All

## dynamic-enforcement-policer-pool *number*

Synopsis	Number of policers reserved as enforcement policers use
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress</a> <a href="#">dist-cpu-protection</a> <a href="#">dynamic-enforcement-policer-pool</a> <i>number</i>
Tree	<a href="#">dynamic-enforcement-policer-pool</a>
Description	<p>This command reserves a set of policers for use as dynamic enforcement policers for the Distributed CPU Protection (DCP) feature. Policers are allocated from this pool and instantiated as per-object per-protocol dynamic enforcement policers after a local monitor is triggered for an object, such as a SAP or network interface.</p> <p>A change to this configured value automatically clears the high water mark, timestamp, and failed allocation count.</p> <p>If the command is configured to a value below the currently used or allocated number, all dynamic policers are returned to the free pool (and traffic returns to the local monitors).</p>
Range	1000 to 32000
Introduced	21.2.R1
Platforms	All



## mcast-path-management

Synopsis	Enter the <b>mcast-path-management</b> context
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress</i> <b>mcast-path-management</b>
Tree	<b>mcast-path-management</b>
Description	Commands in this context configure the IOM ingress multicast path management forwarding plane settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## admin-state *keyword*

Synopsis	Administrative state of multicast path management
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress</i> <b>mcast-path-management</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## bandwidth-policy *reference*

Synopsis	Bandwidth policy for ingress multicast path management
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress</i> <b>mcast-path-management</b> <b>bandwidth-policy</b> <i>reference</i>
Tree	<b>bandwidth-policy</b>
Description	<p>This command specifies the bandwidth policy associated with the forwarding plane.</p> <p>The bandwidth policy defines the dynamic rate table and the multicast paths bandwidth and queuing parameters.</p> <p>If a bandwidth policy is not explicitly associated with a forwarding plane, the default bandwidth policy is used with ingress multicast path management.</p>
Reference	<b>configure</b> <b>multicast-management</b> <b>bandwidth-policy</b> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## network

Synopsis Enter the **network** context

Context **configure** *card number fp number ingress network*

Tree *network*

Description Commands in this context configure the IOM ingress network forwarding plane settings.

Introduced 16.0.R1

Platforms All

## pool [*name*] *string*

Synopsis Enter the **pool** list instance

Context **configure** *card number fp number ingress network pool string*

Tree *pool*

Description Commands in this context configure the list of forwarding plane ingress network pool settings.

Introduced 19.5.R1

Platforms All

## [*name*] *string*

Synopsis Network ingress pool name for the FP

Context **configure** *card number fp number ingress network pool string*

Tree *pool*

String Length 1 to 32

MD-CLI default

Default

Notes This element is part of a list key.

Introduced 19.5.R1

Platforms All

**amber-alarm-threshold** *number*

Synopsis	Amber alarm threshold allowed on oversubscription
Context	<b>configure</b> <i>card number fp number ingress network pool string</i> <b>amber-alarm-threshold</b> <i>number</i>
Tree	<a href="#">amber-alarm-threshold</a>
Description	This command configures the threshold for the amber alarm on oversubscription. If both amber and red alarm thresholds are configured, the amber alarm threshold must be equal to or less than the red alarm threshold.
Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**red-alarm-threshold** *number*

Synopsis	Red alarm threshold allowed on oversubscription
Context	<b>configure</b> <i>card number fp number ingress network pool string</i> <b>red-alarm-threshold</b> <i>number</i>
Tree	<a href="#">red-alarm-threshold</a>
Description	This command configures the threshold for the red alarm on oversubscription. If both amber and red alarm thresholds are configured, the red alarm threshold must be equal to or exceed the amber alarm threshold.
Range	1 to 1000
Units	percent
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**resv-cbs**

Synopsis	Enter the <b>resv-cbs</b> context
Context	<b>configure</b> <i>card number fp number ingress network pool string</i> <b>resv-cbs</b>
Tree	<a href="#">resv-cbs</a>
Description	Commands in this context specify the pool buffer settings. The commands do not set aside buffers within the buffer pool for CBS reservation. The CBS value per queue only determines the point at which enqueueing packets are subject to a RED slope. CBS oversubscription can result in a queue operating within its CBS configuration and still being unable to enqueue a packet due to unavailable buffers.

Introduced	19.5.R1
Platforms	All

### **amber-alarm-action**

Synopsis	Enter the <b>amber-alarm-action</b> context
Context	<b>configure</b> <i>card number fp number ingress network pool string resv-cbs</i> <b>amber-alarm-action</b>
Tree	<b>amber-alarm-action</b>
Description	<p>Commands in this context specify settings for the reserved Committed Burst Size (CBS) and step change when the amber alert threshold is exceeded.</p> <p>The reserved CBS defines the amount of buffer space within the pool that is not considered shared.</p>
Introduced	19.5.R1
Platforms	All

### **max number**

Synopsis	Maximum reserved CBS size of the pool
Context	<b>configure</b> <i>card number fp number ingress network pool string resv-cbs</i> <b>amber-alarm-action</b> <b>max number</b>
Tree	<b>max</b>
Description	<p>This command configures the maximum reserved CBS size of the pool.</p> <p>To enable adaptive CBS sizing, this command and the <b>step</b> command must be configured.</p> <p>The value for this command must not be more than the <b>configure card fp ingress network pool resv-cbs cbs</b> command.</p> <p>When the <b>configure card fp ingress network pool resv-cbs cbs</b> command is set to a value of zero (0), adaptive CBS sizing is disabled.</p>
Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

### **step number**

Synopsis	Step-size percentage for reserved CBS size of the pool
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Context	<b>configure card number fp number ingress network pool string resv-cbs amber-alarm-action step number</b>
Tree	<a href="#">step</a>
Description	<p>This command configures the step-size percentage for the reserved CBS size of the pool.</p> <p>To enable adaptive CBS sizing, this command and the <b>max</b> command must be configured.</p> <p>When the <b>configure card fp ingress network pool resv-cbs cbs</b> command is set to a value of zero (0), adaptive CBS sizing is disabled.</p>
Range	1 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

### **cbs number**

Synopsis	Pool size reserved for CBS
Context	<b>configure card number fp number ingress network pool string resv-cbs cbs number</b>
Tree	<a href="#">cbs</a>
Description	<p>This command configures the percentage of pool size reserved for CBS.</p> <p>For network, the default value is computed as the sum of the CBS request by the entities using the pool. For access, the default value is 30%.</p>
Range	0 to 100
Units	percent
Introduced	19.5.R1
Platforms	All

### **slope-policy reference**

Synopsis	Slope policy
Context	<b>configure card number fp number ingress network pool string slope-policy reference</b>
Tree	<a href="#">slope-policy</a>
Description	This command specifies the slope policy that defines the high and low priority RED slope parameters and the time average factor.
Reference	<b>configure qos slope-policy string</b>
Introduced	19.5.R1

Platforms All

### **queue-group** [[queue-group-name](#)] *reference* [instance-id](#) *number*

Synopsis Enter the **queue-group** list instance

Context **configure** [card](#) *number* [fp](#) *number* [ingress network](#) [queue-group](#) *reference* [instance-id](#) *number*

Tree [queue-group](#)

Description Commands in this context configure IOM ingress network forwarding plane queue-group settings.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[queue-group-name]** *reference*

Synopsis Queue group name

Context **configure** [card](#) *number* [fp](#) *number* [ingress network](#) [queue-group](#) *reference* [instance-id](#) *number*

Tree [queue-group](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **instance-id** *number*

Synopsis Instance ID

Context **configure** [card](#) *number* [fp](#) *number* [ingress network](#) [queue-group](#) *reference* [instance-id](#) *number*

Tree [queue-group](#)

Range 1 to 65535

MD-CLI Default 1

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**accounting-policy** *reference*

Synopsis	Accounting policy for the FP ingress queue group
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number accounting-policy reference</i>
Tree	<a href="#">accounting-policy</a>
Description	This command configures an accounting policy for the FP ingress queue group. You can only apply accounting policies associated with service billing to SAPs. Only associate the accounting policy with one interface at a time.
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**collect-stats** *boolean*

Synopsis	Collect statistics on FP ingress queue group
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number collect-stats boolean</i>
Tree	<a href="#">collect-stats</a>
Description	<p>When configured to <b>true</b>, the system collects accounting and statistical data for the queue group on the FP.</p> <p>When configured to <b>false</b>, the system still accumulates the statistics; however, the CPU does not obtain the results and write them to the billing file.</p> <p>If this command is set to <b>true</b> (after it had previously been set to <b>false</b>), the counters written to the billing file include the traffic collected when the command was set to <b>false</b>.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **policer-control-policy**

Synopsis Enter the **policer-control-policy** context

Context **configure** *card number fp number ingress network queue-group reference instance-id number* **policer-control-policy**

Tree **policer-control-policy**

Description Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy settings.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **overrides**

Synopsis Enable the **overrides** context

Context **configure** *card number fp number ingress network queue-group reference instance-id number* **policer-control-policy overrides**

Tree **overrides**

Description Commands in this context configure the IOM ingress network forwarding plane queue-group policer control policy override settings.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **max-rate** (*number* | *keyword*)

Synopsis Maximum rate override

Context **configure** *card number fp number ingress network queue-group reference instance-id number* **policer-control-policy overrides max-rate** (*number* | *keyword*)

Tree **max-rate**

Description This command defines the PIR leaky bucket decrement rate of the parent policer. Each time you apply the policer control policy to a SAP or subscriber instance a parent policer is created. Packets not discarded by the child policer associated with the SAP or subscriber instance are evaluated against the leaky bucket of the parent policer.

For each packet, the system first decrements the bucket by the correct amount based on the decrement rate to derive the current bucket depth. The system compares the current depth to one of two discard thresholds associated with the packet. The first discard threshold is applied if the Fair Information Rate (FIR) leaky bucket of the child



policer is in the confirming state. The second discard threshold is applied if the FIR leaky bucket of the child policer is in the exceed state.

Only one of the two thresholds is applied per packet. If the current depth of the parent policer PIR bucket is less than the threshold value, the parent PIR bucket is in the conform state for that particular packet. If the depth is equal to or greater than the applied threshold, the bucket is in the violate state for the packet.

If the result is conform, the bucket depth is increased by the size of the packet (plus or minus the per-packet offset setting in the child policer) and the parent policer does not discard the packet. If the result is violate, the bucket depth is not increased and the parent policer discards the packet. When the parent policer discards a packet, the bucket depth increases (PIR, CIR, and FIR) in the parent policer are canceled. This prevents packets that the parent policer discards from consuming the PIR, CIR, and FIR bandwidth of the child policers.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">priority-mbs-thresholds</a>
Tree	<a href="#">priority-mbs-thresholds</a>
Description	Commands in this context configure settings to derive the shared portion and fair portion for each priority level.  The system uses the shared portion and fair portion values to calculate the discard-unfair and discard-all MBS thresholds that enforce priority-sensitive rate-based discards within the root arbiter parent policer.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## min-threshold-separation (*number* | *keyword*)

Synopsis	Minimum separation between any two active thresholds
Context	<b>configure</b> <a href="#">card</a> <a href="#">number</a> <a href="#">fp</a> <a href="#">number</a> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">priority-mbs-thresholds</a> <a href="#">min-threshold-separation</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-threshold-separation</a>

Description	This command configures the minimum separation between any two active thresholds in the parent policer.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority** [*level*] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number</i>
Tree	<a href="#">priority</a>
Description	Commands in this context configure the list of priority MBS threshold priority settings for IOM ingress network forwarding plane queue-group policer control policy overrides.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[level]** *number*

Synopsis	Priority level, higher number is stricter
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis	MBS contribution size override
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy overrides priority-mbs-thresholds priority number mbs-contribution (number   keyword)</i>
Tree	<a href="#">mbs-contribution</a>

Description	This command specifies the packet burst capacity required at the parent policer for a specified priority level with at least one child, and where the total capacity also includes the capacity of all lower thresholds.
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-control-policy policy-name reference</i>
Tree	<i>policy-name</i>
Reference	<b>configure</b> <i>qos policer-control-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer-overrides**

Synopsis	Enter the <b>policer-overrides</b> context
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides</i>
Tree	<i>policer-overrides</i>
Description	Commands in this context configure the policer overrides for the IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policer** [*policy-id*] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference</i>
Tree	<i>policer</i>

Description	Commands in this context configure the list of policer override parameters for IOM ingress network forwarding plane queue-groups.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### [policer-id] *reference*

Synopsis	Policer ID
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference</i>
Tree	<i>policer</i>
Reference	<b>configure</b> <i>qos queue-group-templates ingress queue-group string policer number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cbs** (*number | keyword*)

Synopsis	CBS tolerance allowed by the policer
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference cbs (number   keyword)</i>
Tree	<i>cbs</i>
Description	This command configures the CIR leaky bucket exceed threshold of the policer.  If the forwarding rate of the policer is equal to or less than the defined CIR, the CIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the forwarding rate increases beyond the profiling rate, the threshold caps the amount of data allowed to be in-profile above the rate.
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number | keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
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Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference mbs (number   keyword)</i>
Tree	<a href="#">mbs</a>
Description	<p>This command configures the PIR leaky bucket violate threshold of the policer.</p> <p>Ingress, trusted in-profile packets and untrusted high priority packets use the high priority violate threshold and trusted out-of-profile. Untrusted low priority packets use the low priority violate threshold.</p> <p>If the offered rate of the policer is equal to or less than the defined rate, the PIR bucket depth hovers around the 0 depth, with spikes up to the maximum packet size in the offered load. If the offered rate increases beyond the metering rate, the threshold caps the amount of data allowed above the rate.</p> <p>The low priority violate threshold provides a smaller burst size for the lower priority traffic associated with the policer. Because all lower priority traffic is discarded at the lower burst tolerance size, the remaining burst tolerance is available for higher priority traffic.</p>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size adjustment
Context	<b>configure</b> <i>card number fp number ingress network queue-group reference instance-id number policer-overrides policer reference packet-byte-offset number</i>
Tree	<a href="#">packet-byte-offset</a>
Description	<p>This command modifies the size of each packet handled by the policer by adding or subtracting a number of bytes. The actual packet size is not modified; only the size used to determine the bucket depth impact is changed.</p> <p>Use this command to add downstream frame encapsulation or remove portions of packet headers.</p> <p>When child policers add to or subtract from the packet size, the minimum threshold separation value of the parent policer must be modified by the same amount.</p>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-overrides policer reference</a> <b>rate</b>
Tree	<a href="#">rate</a>
Description	<p>Commands in this context configure the metering and optional profiling rates of the policer.</p> <p>The metering rate is used by the system to configure the PIR leaky bucket decrement rate and the profiling rate configures the CIR leaky bucket decrement rate. The decrement function empties the bucket; packets applied to the bucket attempt to fill it based on its packet size. If the bucket fills faster than the rate that it empties, the bucket depth eventually reaches its exceeded (CIR) or violate (PIR) threshold.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR for the policer
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-overrides policer reference</a> <b>rate</b> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Description	<p>This command overrides the default CIR rate of the policer.</p> <p>When the policer is first created, the profiling rate defaults to 0 kb/s.</p> <p>When <b>max</b> is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the CIR used is equivalent to maximum.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR for the policer
Context	<b>configure</b> <a href="#">card number</a> <a href="#">fp number</a> <a href="#">ingress network queue-group reference</a> <a href="#">instance-id number</a> <a href="#">policer-overrides policer reference</a> <b>rate</b> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">pir</a>
Description	This command configures the metering rate of the policer for the PIR leaky bucket. When the policer is first created, the metering rate defaults to max. When <b>max</b> is configured, the maximum policer rate used is equal to the maximum capacity of the card that the policer is configured for. If the policer rate is set to a value larger than the maximum rate possible for the card, the PIR used is equivalent to maximum.
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis	Stat mode for the policer
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">policer-overrides</a> <a href="#">policer</a> <i>reference</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Description	This command specifies the forwarding plane counters that allow offered, output, and discard accounting to occur for the policer.
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue-policy** *reference*

Synopsis	Network queue policy
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">fp</a> <i>number</i> <a href="#">ingress</a> <a href="#">network</a> <a href="#">queue-policy</a> <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">network-queue</a> <i>string</i>
Introduced	19.5.R1
Platforms	All

## policy-accounting

Synopsis	Enter the <b>policy-accounting</b> context
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress</i> <i>policy-accounting</i>
Tree	<i>policy-accounting</i>
Description	Commands in this context configure policy accounting. Use policy accounting to collect statistics about the amount of traffic matching particular routes or to police traffic associated with certain routes as destinations of the traffic.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## classes *number*

Synopsis	Number of accounting classes for the forwarding plane
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress</i> <i>policy-accounting</i> <i>classes</i> <i>number</i>
Tree	<i>classes</i>
Description	This command specifies the maximum number of source and destination classes that can be instantiated for accounting purposes on the interfaces of a specific card or FP. When unconfigured, resources are not reserved for source or destination classes.
Range	1000 to 128000
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## policers *number*

Synopsis	Number of policer resources for policy accounting
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress</i> <i>policy-accounting</i> <i>policers</i> <i>number</i>
Tree	<i>policers</i>
Range	1 to 64000
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## ingress-buffer-allocation *decimal-number*

Synopsis	Ingress buffer pool allocation for the forwarding plane
Context	<b>configure</b> <i>card number</i> <i>fp number</i> <i>ingress-buffer-allocation</i> <i>decimal-number</i>



Tree	<a href="#">ingress-buffer-allocation</a>
Description	This command configures an ingress buffer allocation for the FP. Ingress buffer allocation applies to user-accessible buffers (total buffers less those reserved for system use). The ingress buffer allocation determines how much of the user-accessible buffers are available for ingress purposes. The remaining buffers are available for egress purposes.
Range	20.00 to 80.00
Units	percent
Default	50.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7950 XRS

### **init-extract-prio-mode** *keyword*

Synopsis	Initial drop priority mode of extracted traffic
Context	<b>configure</b> <i>card number fp number</i> <a href="#">init-extract-prio-mode</a> <i>keyword</i>
Tree	<a href="#">init-extract-prio-mode</a>
Description	This command specifies the scheme to select the initial drop priority of extracted control plane traffic.  The initial drop priority of extracted packets can be either low or high priority. The drop priority can be altered subsequently by mechanisms such as CPU protection.  High priority traffic receives preferential treatment in control plane congestion situations over low priority traffic.
Options	uniform, l3-classify
Default	uniform
Introduced	16.0.R1
Platforms	All

### **stable-pool-sizing** *boolean*

Synopsis	Enable stable pool sizing for the forwarding plane
Context	<b>configure</b> <i>card number fp number</i> <a href="#">stable-pool-sizing</a> <i>boolean</i>
Tree	<a href="#">stable-pool-sizing</a>
Description	When configured to <b>true</b> , the router provides a stable buffer pool allocation environment for all default port buffer pools on the forwarding plane. This stable environment is provided at the expense of optimal buffer allocation between the various port buffer pools.

When configured to **false**, the router disables stable pool sizing on the forwarding plane. Existing buffer pools are resized according to normal pool sizing behavior.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### level keyword



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	License level of the card
Context	<b>configure</b> <b>card</b> <i>number</i> <b>level</b> <i>keyword</i>
Tree	<b>level</b>
Description	<p>This command configures the license level of the card.</p> <p>New generations of cards include variants controlled by hardware and software licensing. For these cards, the license level must be provisioned in addition to the card type. A card cannot become operational unless the provisioned license level matches the license level of the card installed into the slot. The set of license levels varies by card type.</p> <p>The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress user queues and egress policers. Changes to the provisioned license level may be blocked if configuration exists that would not be permitted with the new target license level.</p> <p>If the license level is not specified, the level is set to the highest license level for that card.</p>
Options	unrestricted, he, er, cr, he1200g+, er1200g+, cr1200g+, he400g, er400g, cr400g, he400g+, er400g+, cr400g+, he800g+, er800g+, cr800g+, he4800g+, er4800g+, cr4800g+, he4800g, er4800g, cr4800g, he2400g+, er2400g+, cr2400g+, he2400g, er2400g, cr2400g, he9600g, er9600g, cr9600g, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he2800g+, er2800g+, cr2800g+, he6000g+, er6000g+, cr6000g+, he18000g+, er18000g+, cr18000g+, he19200g, er19200g, cr19200g
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

### mda [*mda-slot*] *number*

Synopsis	Enter the <b>mda</b> list instance
Context	<b>configure</b> <b>card</b> <i>number</i> <b>mda</b> <i>number</i>

Tree	<a href="#">mda</a>
Description	Commands in this context cover attributes for specific MDA and XMA.
Introduced	16.0.R1
Platforms	All

### **[mda-slot] number**

Synopsis	MDA or XMA slot
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i>
Tree	<a href="#">mda</a>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">access</a>
Tree	<a href="#">access</a>
Description	Commands in this context configure egress and ingress pool policy parameters. Access egress and ingress pools are only allocated on channelized MDAs.
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">access</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">access ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the MDA
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## egress-xpl

Synopsis	Enter the <b>egress-xpl</b> context
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">egress-xpl</a>
Tree	<a href="#">egress-xpl</a>
Description	Commands in this context specify settings for the fail-on-error feature.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## threshold *number*

Synopsis	Threshold value for XPL errors
Context	<b>configure</b> <a href="#">card number</a> <a href="#">mda number</a> <a href="#">egress-xpl threshold number</a>
Tree	<a href="#">threshold</a>
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the <b>window value</b> command, the MDA is placed in the failed state.
Range	1 to 1000000

Units	xpl errors
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **window number**

Synopsis	Time interval to measure XPL error frequency
Context	<b>configure</b> <i>card number mda number egress-xpl window number</i>
Tree	<a href="#">window</a>
Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Units	minutes
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **event [type] keyword**

Synopsis	Enter the <b>event</b> list instance
Context	<b>configure</b> <i>card number mda number event keyword</i>
Tree	<a href="#">event</a>
Description	<p>Commands in this context allow the user to control the action taken when a specific hardware error event is raised against the target MDA. If no event action has been created for a specific event type, the management plane of the router ignores the hardware errors related to that event type.</p> <p>The log raised for any event, such as soft-error and memory-error, is tmnxEqHwEvent Detected.</p>
Introduced	19.7.R1
Platforms	All

### **[type] keyword**

Synopsis	MDA event type being monitored
Context	<b>configure</b> <i>card number mda number event keyword</i>

Tree	<a href="#">event</a>
Description	This command configures the type of event to be acted upon. <ul style="list-style-type: none"> <li>• <code>soft-error</code> — Defines the action to take when soft errors are detected on the MDA.</li> <li>• <code>internal-frame-loss</code> — Provides system detected frame loss in the traffic transiting the MDA.</li> <li>• <code>memory-error</code> — Provides the user options to handle MDA memory error events on MDAs. This feature is supported on FP2- and FP3-based Ethernet MDAs and IMMs.</li> <li>• <code>data-link-error</code> — Provides the user options to handle datapath link errors on an MDA.</li> </ul>
Options	<code>soft-error</code> , <code>internal-frame-loss</code> , <code>memory-error</code> , <code>datapath-link-error</code>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

### **action** *keyword*

Synopsis	Action when a specific hardware error event is raised
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">event</a> <i>keyword</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Description	This command defines the action taken when a specific hardware error event is detected on the target MDA.  When no event action is specified for an event type, the hardware errors related to the event type are ignored by the management plane of the router.  Actions include the following: <ul style="list-style-type: none"> <li>• <code>log-only</code> — Pass the log event to log management. No other action is taken.</li> <li>• <code>reset-md</code> — Reset the MDA.</li> <li>• <code>fail-md</code> — Set the operational state of the MDA to Failed. This Failed state persists until the <code>clear mda</code> command is issued (<code>reset</code>) or the MDA is removed and reinserted (<code>re-seated</code>).</li> </ul>
Options	<code>none</code> , <code>log-only</code> , <code>reset</code> , <code>fail</code>
Introduced	19.7.R1
Platforms	All

### **fail-on-error** *boolean*

Synopsis	Set operational state to Failed if an error is detected
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">fail-on-error</a> <i>boolean</i>

Tree	<a href="#">fail-on-error</a>
Description	<p>When configured to <b>true</b>, the fail-on-error feature is enabled on the MDA. When a defined rate of egress or ingress XPL errors occur on an MDA within a specified time interval, the MDA is placed in the Failed state. This can force an APS switchover or traffic to be rerouted.</p> <p>The purpose of this feature is to avoid situations where traffic is forced to use a physical link that suffers from errors but is still technically operational. The feature uses values configured in the <b>configure card mda egress-xpl</b> and <b>configure card mda ingress-xpl</b> contexts.</p> <p>See "Fail-on-error overview" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Troubleshooting Guide</i> for more information.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## ingress-xpl

Synopsis	Enter the <b>ingress-xpl</b> context
Context	<b>configure card number mda number ingress-xpl</b>
Tree	<a href="#">ingress-xpl</a>
Description	Commands in this context specify settings for ingress XPL error occurrences.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## threshold *number*

Synopsis	Threshold value for XPL errors
Context	<b>configure card number mda number ingress-xpl threshold number</b>
Tree	<a href="#">threshold</a>
Description	This command configures the threshold for XPL errors. If the number of XPL errors exceeds the threshold value defined by the <b>window value</b> command, the MDA is placed in the failed state.
Range	1 to 1000000
Units	xpl errors
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**window number**

Synopsis	Time interval to measure XPL error frequency
Context	<b>configure</b> <i>card number mda number ingress-xpl window number</i>
Tree	<a href="#">window</a>
Description	This command configures the time interval used to measure the frequency of XPL errors for the fail-on-error feature. If the number of XPL errors exceeds the threshold value in defined by this command, the MDA is placed in the Failed state.
Range	1 to 1440
Units	minutes
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**level keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MDA card level
Context	<b>configure</b> <i>card number mda number level keyword</i>
Tree	<a href="#">level</a>
Options	unrestricted, he2400g, he1600g, he1200g, er2400g, er1600g, er1200g, cr2400g, cr1600g, cr1200g, he2400g+, er2400g+, cr2400g+, he3600g, er3600g, cr3600g, he3600gdd, er3600gdd, cr3600gdd, he4800g, er4800g, cr4800g, he4800g+, er4800g+, cr4800g+, he600g, er600g, cr600g, he1200g+, er1200g+, cr1200g+, he2400g+4t, er2400g+4t, cr2400g+4t, he9600g, er9600g, cr9600g, he9600g+, er9600g+, cr9600g+, he14400g, er14400g, cr14400g, he14400g+, er14400g+, cr14400g+, he12000g+, er12000g+, cr12000g+, he18000g+, er18000g+, cr18000g+
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**mda-type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



Synopsis	MDA type for the slot
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <i>mda-type</i> <i>keyword</i>
Tree	<i>mda-type</i>
Description	<p>This command provisions a specific MDA type to the device configuration for the slot. The MDA can be pre-provisioned and an MDA must be provisioned before connectors or ports can be configured.</p> <p>A maximum of two MDAs can be provisioned on an IOM or XCM. XMAs are provisioned using MDA commands.</p> <p>A medium severity alarm is generated if an MDA is inserted that does not match the MDA type configured for the slot. This alarm is cleared when the correct MDA is inserted or the configuration is modified. A high severity alarm is raised when an administratively enabled MDA is removed from the chassis. This alarm is cleared if either the correct MDA type is inserted or the configuration is modified. A low severity alarm is issued if an MDA is removed that is administratively disabled.</p> <p>An MDA can only be provisioned in a slot if the MDA type is allowed in the MDA slot. An error message is generated when an MDA is provisioned in a slot where it is not allowed.</p> <p>Some MDA hardware can support two different firmware loads. One load includes the base Ethernet functionality, including 10G WAN mode, but does not include 1588 port-based timestamping. The second load includes the base Ethernet functionality and 1588 port-based timestamping, but does not include 10G WAN mode. These are identified as two MDA types that are the same, except for a “-ptp” suffix to indicate the second loadset. A hard reset of the MDA occurs when switching between the two provisioned types.</p> <p>An alarm is raised if partial or complete MDA failure is detected. The alarm is cleared when the error condition ceases.</p> <p>New generations of XMAs include variants controlled through hardware and software licensing. For these XMAs, the license level must be provisioned in addition to the MDA type. An XMA cannot become operational unless the provisioned license level matches the license level of the XMA installed into the slot.</p> <p>The set of license levels varies by MDA type. The provisioned level controls aspects related to connector provisioning and the consumption of hardware egress queues and egress policers. Changes to the provisioned license level may be blocked if configuration that would not be permitted with the new target license level exists. If the license level is not specified, the level is set to the highest license level for that XMA.</p>
Options	<p>x12-400g-qsfppd, x6-200g-cfp2-dco, cx20-10g-sfp, cx2-100g-cfp, p10-10g-sfp, p1-100g-cfp, p3-40g-qsf, p6-10g-sfp, x40-10g-sfp, m40-10g-sfp, x4-100g-cxp, cx6-40g-qsf, m4-100g-cxp, p20-1gb-sfp, s36-100gb-qsf28-3.6t, p-isa2-ms, p-isa2-ms-e, isa2-aa, isa2-tunnel, isa2-bb, x4-100g-cfp2, cx72-1g-csfp, maxp1-100gb-cfp, ma4-10gb-sfp+, maxp10-10gb-sfp+, me10-10gb-sfp+, ma2-10gb-sfp+12-1gb-sfp, maxp6-10gb-sfp+1-40gb-qsf+, ma44-1gb-csfp, ma20-1gb-tx, m20-10g-sfp+, me1-100gb-cfp2, m4-100g-cfp4, p1-100g-tun-b, maxp1-100gb-cfp2, maxp1-100gb-cfp4, isa-ms-v, isa-aa-v, isa-tunnel-v, isa-bb-v, m20-v, me-isa2-ms, me-isa2-ms-e, me40-1gb-csfp, m4-1g-tx+20-1g-sfp+6-10g-sfp+, me2-100gb-cfp4, me6-10gb-sfp+, isa2-video, me2-100gb-qsf28, i6-10/100eth-tx, x2-100g-tun, i2-sdi, i2-cellular, me12-10/1gb-sfp+, me16-25gb-sfp28+2-100gb-qsf28,</p>

me6-100gb-qsfp28, x6-400g-cfp8, me2-100gb-ms-qsfp28, s18-100gb-qsfp28, x40-10g-sfp-ptp, m40-10g-sfp-ptp, m36-100g-qsfp28, m48-sfp+2-qsfp28, m10-10g-sfp+, m20-1g-csfp, m6-10g-sfp++1-100g-qsfp28, me3-200gb-cfp2-dco, x24-100g-qsfp28, me12-100gb-qsfp28, i1-wlan, s36-400gb-qsfpdd, m24-sfp++8-sfp28+2-qsfp28, s36-100gb-qsfp28, a32-chds1v2, m48-sfp++6-qsfp28, maxp10-10/1gb-msec-sfp+, m4-10g-sfp++1-100g-cfp2, i3-10/100eth-tx, me3-400gb-qsfpdd, m18-25g-sfp28, m14-10g-sfp++4-1g-tx, m6-10g-sfp++4-25g-sfp28, me6-400gb-qsfpdd, me8-10/25gb-sfp28, m10-1g-sfp+2-10g-sfp+, m6-qsfpdd+48-sfp56, m32-qsfp28+4-qsfpdd, m36-qsfpdd, m1-400g-qsfpdd+1-100g-qsfp28, m5-100g-qsfp28, m48-800g-qsfpdd-1x, m24-800g-qsfpdd-1, ms36-800g-qsfpdd, x2-s36-800g-qsfpdd-18.0t, m48-400g-qsfpdd-1, m80-200g-sfpdd+12-800g-qsfpdd-1x, m40-200g-sfpdd+6-800g-qsfpdd-1, m80-200g-sfpdd+12-400g-qsfpdd-1, m46-10g-sfp+, m2-cfp2, m2-qsfpdd+2-qsfp28+24-sfp28, x2-s36-800g-qsfpdd-12.0t, me16-25gb-sfp28+2-100gb-qsfp-b, m10-50g-sfp56, m32-1g-csfp, m12-sfp28+2-qsfp28, d24-800g-qsfpdd-1

Introduced 16.0.R1

Platforms All

## network

Synopsis Enter the **network** context

Context **configure** *card number mda number network*

Tree [network](#)

Description Commands in this context configure egress and ingress pool policy parameters for the network. Network egress pools are only allocated on channelized MDAs.

Introduced 16.0.R1

Platforms All

## egress

Synopsis Enter the **egress** context

Context **configure** *card number mda number network egress*

Tree [egress](#)

Introduced 16.0.R1

Platforms All

## ingress

Synopsis Enter the **ingress** context

Context **configure** *card number mda number network ingress*

Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

### **power-priority-level** *number*

Synopsis	Power priority level for the MDA
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">power-priority-level</a> <i>number</i>
Tree	<a href="#">power-priority-level</a>
Range	1 to 200
Default	150
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **reset-on-recoverable-error** *boolean*

Synopsis	Reset MDA for fatal memory parity error on a Q-chip
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">reset-on-recoverable-error</a> <i>boolean</i>
Tree	<a href="#">reset-on-recoverable-error</a>
Description	When configured to <b>true</b> , the MDA resets when a fatal memory parity error is detected on a Q-chip of the MDA, regardless of the setting of the <b>fail-on-error</b> configuration for the MDA.  When configured to <b>false</b> , the recovery action is taken instead of resetting the MDA.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **sync-e** *keyword*

Synopsis	Synchronous Ethernet capability
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">sync-e</a> <i>keyword</i>
Tree	<a href="#">sync-e</a>
Description	This command enables synchronous Ethernet on the MDA. When enabled, any port on the MDA can be used as a source port in the central frequency clock configuration, under the <b>configure system central-frequency-clock</b> context.
Options	true, false

Introduced	16.0.R1
Platforms	All

### **upgrade** [*upgrade-index*] *number*

Synopsis	Enter the <b>upgrade</b> list instance
Context	<b>configure</b> <i>card number mda number upgrade number</i>
Tree	<i>upgrade</i>
Description	<p>Commands in this context configure the license level upgrade for the MDA. You can apply multiple upgrades to an MDA. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, remove the largest index first, followed by the next largest, and so on.</p> <p>Some upgrades require a hard reset of the MDA to take effect. In general, this is required when the full duplex bandwidth changes as a result of the upgrade.</p>
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **[upgrade-index]** *number*

Synopsis	Order of the upgrade instance
Context	<b>configure</b> <i>card number mda number upgrade number</i>
Tree	<i>upgrade</i>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **path** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade path of the MDA for the slot
Context	<b>configure</b> <i>card number mda number upgrade number path keyword</i>
Tree	<i>path</i>

Description	This command configures the upgrade path for the MDA in the slot. The path indicates the starting level and the new level that is applied due to the upgrade.
Options	cr1200g-cr1600g, cr1600g-cr2400g, er1200g-er1600g, er1600g-er2400g, he1200g-he1600g, he1600g-he2400g, cr1200g-er1200g, er1200g-he1200g, cr1600g-er1600g, er1600g-he1600g, cr2400g-er2400g, er2400g-he2400g, any2400g-2400g+, cr3600g-cr4800g, er3600g-er4800g, he3600g-he4800g, cr3600g-er3600g, er3600g-he3600g, cr4800g-er4800g, er4800g-he4800g, any3600g-3600gdd, any4800g-4800g+, cr600g-cr1200g, er600g-er1200g, he600g-he1200g, cr600g-er600g, er600g-he600g, any1200g-1200g+, any2400g-2400g+4t, cr-er9600g, er-he9600g, any9600g-9600g+, cr-er14400g, er-he14400g, any14400g-14400g+, he9600g-he12000g+, er9600g-er12000g+, cr9600g-cr12000g+, he14400g-he18000g+, er14400g-er18000g+, cr14400g-cr18000g+, cr-er12000g+, er-he12000g+, cr-er18000g+, er-he18000g+
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## xconnect

Synopsis	Enter the <b>xconnect</b> context
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <b>xconnect</b>
Tree	<b>xconnect</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## mac [*mac-id*] *number*

Synopsis	Enter the <b>mac</b> list instance
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <b>xconnect</b> <b>mac</b> <i>number</i>
Tree	<b>mac</b>
Description	Commands in this context configure the attributes of the MDA loopback (cross-connect) in the MAC chip.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## [*mac-id*] *number*

Synopsis	MAC ID for the MDA cross-connect
Context	<b>configure</b> <i>card number</i> <i>mda number</i> <b>xconnect</b> <b>mac</b> <i>number</i>

Tree	<a href="#">mac</a>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">xconnect</a> <a href="#">mac</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **loopback** [[loopback-id](#)] *number*

Synopsis	Enter the <b>loopback</b> list instance
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">xconnect</a> <a href="#">mac</a> <i>number</i> <a href="#">loopback</a> <i>number</i>
Tree	<a href="#">loopback</a>
Description	Commands in this context configure the attributes of the loopback on a MAC chip. The system and services can start using the loopback only when a port is associated with it (for example, port 1/1/m1/1, where m1 represents the MAC ID).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **[loopback-id]** *number*

Synopsis	Loopback ID for the MDA cross-connect
Context	<b>configure</b> <a href="#">card</a> <i>number</i> <a href="#">mda</a> <i>number</i> <a href="#">xconnect</a> <a href="#">mac</a> <i>number</i> <a href="#">loopback</a> <i>number</i>
Tree	<a href="#">loopback</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**bandwidth** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
Context	<b>configure</b> <i>card number mda number xconnect mac number loopback number bandwidth number</i>
Tree	<i>bandwidth</i>
Range	10   25   40   100   400   800
Units	gigabps
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>card number mda number xconnect mac number loopback number description string</i>
Tree	<i>description</i>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**power-save** *boolean*

Synopsis	Place card in power-save mode when not in use
Context	<b>configure</b> <i>card number power-save boolean</i>
Tree	<i>power-save</i>
Description	<p>When configured to <b>true</b>, this command enables the power-save mode on the card when it is not in use. The power-save mode allows the card to be installed and configured in a platform for future use, while having minimal impact on the overall power consumption.</p> <p>A card placed in the power-save mode is reset, forced into an idle state, and consumes minimal power. In power save mode, the download of a software image to the card is</p>

not allowed. The card must be administratively disabled before it is placed in the power-save mode.

Cards in the power save mode do not count in the intelligent power management budget and they also do not pass traffic.

When configured to **false**, this command removes the card from power-save mode.

Default	false
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a8, 7750 SR-2e, 7750 SR-3e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **reset-on-recoverable-error** *boolean*

Synopsis	Reset card for fatal memory parity error on a Q-chip
Context	<b>configure</b> <i>card number</i> <b>reset-on-recoverable-error</b> <i>boolean</i>
Tree	<b>reset-on-recoverable-error</b>
Description	When configured to <b>true</b> , the card is reset when a fatal memory parity error is detected on a Q-chip of the card, regardless of the setting of the <b>fail-on-error</b> configuration for the card.  When configured to <b>false</b> , the recovery action is taken instead of resetting the card.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e

### **upgrade** [**upgrade-index**] *number*

Synopsis	Enter the <b>upgrade</b> list instance
Context	<b>configure</b> <i>card number</i> <b>upgrade</b> <i>number</i>
Tree	<b>upgrade</b>
Description	Commands in this context assign a license level upgrade to the card, XIOM, or XMA. There can be multiple upgrades applied to a card, XIOM, or XMA. The first upgrade must use index 1, and then next index 2, and so on. Also, when removing upgrades, the largest index must be removed first, and then the next largest removed, and so on.  The path indicates the starting level and the new level that will apply due to the upgrade. For example, "cr1200g-cr1600g" can be applied to an XMA that is currently at the cr1200g level and after application of the upgrade, the operational level of the XMA will be cr1600g.  There must be an upgrade license available for the path specified. Available upgrades can be checked using the <b>show licensing entitlements</b> command.



Some upgrades require a hard reset of the card or MDA to take effect. In general, this is required when the Full Duplex bandwidth is being changed.

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

### [upgrade-index] *number*

Synopsis	Order of the upgrade value
Context	<b>configure</b> <i>card number upgrade number</i>
Tree	<a href="#">upgrade</a>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1se

### path *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade path of the target module for the slot
Context	<b>configure</b> <i>card number upgrade number path keyword</i>
Tree	<a href="#">path</a>
Description	This command configures the upgrade path associated with the upgrade instance for the target module in the slot. The path indicates the starting level and the new level that applies during the upgrade.
Options	cr-er, er-he, cr400g-cr1200g+, er400g-er1200g+, he400g-he1200g+, cr-er1200g+, er-he1200g+, cr-er400g+, er-he400g+, cr-er800g+, er-he800g+, cr400g-cr800g+, er400g-er800g+, he400g-he800g+, cr800g-cr1200g+, er800g-er1200g+, he800g-he1200g+, cr-er2400g, er-he2400g, any2400g-2400g+, cr-er4800g, er-he4800g, any4800g-4800g+, cr-er9600g, er-he9600g, cr-er14400g, er-he14400g, he9600g-he14400g, er9600g-er14400g, cr9600g-cr14400g, any14400g-14400g+, any2400g-2800g+, any4800g-6000g+, any14400g-18000g+, he2400g-he2800g+, er2400g-er2800g+, cr2400g-cr2800g+, he4800g-he6000g+, er4800g-er6000g+, cr4800g-cr6000g+, he14400g-he19200g, er14400g-er19200g, cr14400g-cr19200g, cr-er2800g+, er-he2800g+, cr-er6000g+, er-he6000g+, cr-er19200g, er-he19200g
Notes	This element is mandatory.
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-1se

## virtual-scheduler-adjustment

Synopsis Enter the **virtual-scheduler-adjustment** context

Context **configure** [card](#) *number* [virtual-scheduler-adjustment](#)

Tree [virtual-scheduler-adjustment](#)

Description Commands in this context configure virtual scheduler options. This is applicable to queues and policiers associated to a scheduler.

Introduced 16.0.R1

Platforms All

## internal-scheduler-weight-mode *keyword*

Synopsis Internal scheduler weight mode

Context **configure** [card](#) *number* [virtual-scheduler-adjustment](#) [internal-scheduler-weight-mode](#) *keyword*

Tree [internal-scheduler-weight-mode](#)

Description This command specifies the internal scheduler (tier 0) weight mode for all ingress queues on a LAG on the card on which it is applied.

Options auto, force-equal, offered-load, capped-offered-load

Default auto

Introduced 16.0.R1

Platforms All

## interval

Synopsis Enter the **interval** context

Context **configure** [card](#) *number* [virtual-scheduler-adjustment](#) [interval](#)

Tree [interval](#)

Introduced 16.0.R1

Platforms All

## rate-calculation-minimum

Synopsis Enter the **rate-calculation-minimum** context

Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval rate-calculation-minimum</a>
Tree	<a href="#">rate-calculation-minimum</a>
Description	<p>Commands in this context override the default minimum time that must elapse before a policer or queue's offered rate can be recalculated. A minimum time between offered rate calculations is enforced to both prevent inaccurate estimation of the offered rate and excessive input to the virtual scheduler process.</p> <p>To smooth out rapidly fluctuating offered rates, the system averages the measured offered rate with a window of previously measured offered traffic statistics and knowledge of the time between the samples.</p>
Introduced	16.0.R1
Platforms	All

### **fast-queue** *decimal-number*

Synopsis	Minimum rate calculation time for fast queues
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval rate-calculation-minimum fast-queue decimal-number</a>
Tree	<a href="#">fast-queue</a>
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

### **slow-queue** *decimal-number*

Synopsis	Minimum rate calculation time for slow queues
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval rate-calculation-minimum slow-queue decimal-number</a>
Tree	<a href="#">slow-queue</a>
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

**scheduler-run-minimum** *decimal-number*

Synopsis	Minimum time of the scheduler run
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval</a> <a href="#">scheduler-run-minimum decimal-number</a>
Tree	<a href="#">scheduler-run-minimum</a>
Description	<p>This command overrides the default minimum time that must elapse before a virtual scheduler can redistribute bandwidth based on changes to the offered rates of member policers or queues.</p> <p>A minimum run interval is enforced to manage the number of batched queue changes before reacting to the changed rates. Because the periodic function of determining policer or queue offered rates is performed sequentially, the interval allows the policer and queue rates to be determined before the bandwidth distribution to the policers and queues.</p>
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

**task-scheduling** *decimal-number*

Synopsis	Task scheduling interval
Context	<b>configure</b> <i>card number</i> <a href="#">virtual-scheduler-adjustment interval</a> <a href="#">task-scheduling decimal-number</a>
Tree	<a href="#">task-scheduling</a>
Description	<p>This command overrides the system default time interval for scheduling the hierarchical virtual scheduler task.</p> <p>By default, the system wakes the virtual scheduler task every 50 ms which is equivalent to five 10 ms timer ticks.</p>
Range	0.01 to 1000.00
Units	percent
Default	100.00
Introduced	16.0.R1
Platforms	All

**slow-queue-threshold-rate** *number*

Synopsis	Slow queue threshold rate
----------	---------------------------

Context	<b>configure card number virtual-scheduler-adjustment slow-queue-threshold-rate number</b>
Tree	<b>slow-queue-threshold-rate</b>
Description	<p>This command overrides the system default threshold rate used to place policers and queues in the slow queue category. Slow rate policers and queues use a different minimum rate calculation interval time than fast rate queues.</p> <p>The fast rate threshold is derived by multiplying the adjusted slow rate threshold by a factor of 1.5.</p> <p>Configuring a value of zero (0) forces all policers and queues to be treated as fast rate queues.</p>
Range	0 to 1000000
Units	kilobps
Default	1000
Introduced	16.0.R1
Platforms	All

### **xiom [xiom-slot] string**

Synopsis	Enter the <b>xiom</b> list instance
Context	<b>configure card number xiom string</b>
Tree	<b>xiom</b>
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### **[xiom-slot] string**

Synopsis	XIOM slot ID
Context	<b>configure card number xiom string</b>
Tree	<b>xiom</b>
String Length	2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### **admin-state keyword**

Synopsis	Administrative state of the XIOM
----------	----------------------------------

Context	<b>configure card number xiom string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### **fail-on-error** *boolean*

Synopsis	Set operational state of the card to failed on error
Context	<b>configure card number xiom string fail-on-error boolean</b>
Tree	<a href="#">fail-on-error</a>
Description	When configured to <b>true</b> , the operational state of the card is set to failed when at least one of a specific set of card-level errors is detected. The failed state persists until the operator reseats the card or resets it using the <b>clear</b> command.
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### **level** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	License level of the XIOM
Context	<b>configure card number xiom string level keyword</b>
Tree	<a href="#">level</a>
Description	<p>This command provisions the license level of the XIOM, which controls aspects related to connector provisioning and consumption of hardware egress queues and policers.</p> <p>An XIOM only becomes operational if the provisioned license level matches the license level of the card installed into the slot.</p> <p>The set of license levels varies by XIOM type. Changes to the provisioned license level may be blocked if a configuration exists that is not permitted with the new target license level.</p> <p>If the license level is not specified, the level is set to the highest license level for the XIOM.</p>

Options	unrestricted, he800g+, er800g+, cr800g+, he1500g+, er1500g+, cr1500g+, he1600g+, er1600g+, cr1600g+, he2400g+, er2400g+, cr2400g+, he3000g+, er3000g+, cr3000g+, he2400g, er2400g, cr2400g, he4800g, er4800g, cr4800g, he6000g+, er6000g+, cr6000g+, he3200g+, er3200g+, cr3200g+
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### **mda** [**mda-slot**] *number*

Synopsis	Enter the <b>mda</b> list instance
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>mda</b> <i>number</i>
Tree	<b>mda</b>
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### **[mda-slot]** *number*

Synopsis	MDA slot number
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>mda</b> <i>number</i>
Tree	<b>mda</b>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### **admin-state** *keyword*

Synopsis	Administrative state of the MDA
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>mda</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**mda-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MDA-s type provisioned for the XIOM slot
Context	<b>configure</b> <i>card number xiom string mda number mda-type keyword</i>
Tree	<a href="#">mda-type</a>
Description	<p>This command provisions the MDA-s type for the XIOM slot.</p> <p>The MDA-s type can be preprovisioned, which means that the MDA-s does not have to be installed in the chassis.</p> <p>You can preprovision the MDA type before you install the MDA in the chassis. An MDA-s can only be provisioned in a slot that is vacant. No other MDA-s can be provisioned (configured) for that particular slot. An error message or log event is generated if the wrong MDA type is provisioned or inserted.</p>
Options	ms6-200gb-cfp2-dco, ms3-200gb-cfp2-dco, ms16-100gb-sfpdd+4-100gb-qsfp28, ms18-100gb-qsfp28, ms4-400gb-qsfpdd+4-100gb-qsfp28, ms24-10/100gb-sfpdd, ms2-400gb-qsfpdd+2-100gb-qsfp28, ms8-100gb-sfpdd+2-100gb-qsfp28, ms16-sdd+4-qsfp28-b, ms8-sdd+2-qsfp28-b, mse24-200g-sfpdd, mse6-800g-cfp2-dco, mse14-800g+4-400g, m36-800g-qsfpdd, mse6-800g-qsfpdd, m36-400g-qsfp112
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**power-priority-level** *number*

Synopsis	Power priority level for the XIOM MDA-s
Context	<b>configure</b> <i>card number xiom string mda number power-priority-level number</i>
Tree	<a href="#">power-priority-level</a>
Description	<p>This command configures the power-priority level for the XIOM MDA-s.</p> <p>Consider the following suggestions when configuring the power-priority level:</p> <ul style="list-style-type: none"> <li>• The lowest number has the highest priority.</li> <li>• Use the priority numbers from 1 to 100 for modules that are essential for system operation.</li> <li>• Use the priority numbers from 101 to 200 for non-essential modules.</li> </ul>
Range	1 to 200
Default	150
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s



**sync-e keyword**

Synopsis	Synchronous Ethernet capability
Context	<b>configure card number xiom string mda number sync-e keyword</b>
Tree	<b>sync-e</b>
Options	true, false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**xconnect**

Synopsis	Enter the <b>xconnect</b> context
Context	<b>configure card number xiom string mda number xconnect</b>
Tree	<b>xconnect</b>
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**mac [mac-id] number**

Synopsis	Enter the <b>mac</b> list instance
Context	<b>configure card number xiom string mda number xconnect mac number</b>
Tree	<b>mac</b>
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**[mac-id] number**

Synopsis	MAC ID for the MDA cross-connect
Context	<b>configure card number xiom string mda number xconnect mac number</b>
Tree	<b>mac</b>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">card number</a> <a href="#">xiom string</a> <a href="#">mda number</a> <a href="#">xconnect mac number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**loopback [loopback-id] number**

Synopsis	Enter the <b>loopback</b> list instance
Context	<b>configure</b> <a href="#">card number</a> <a href="#">xiom string</a> <a href="#">mda number</a> <a href="#">xconnect mac number</a> <a href="#">loopback number</a>
Tree	<a href="#">loopback</a>
Description	Commands in this context configure a MAC loopback on a MAC chip. The system and services only start using the loopback when a port is associated with it. For example, port 1/1/m1/1, where m1 represents the MAC ID.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**[loopback-id] number**

Synopsis	Loopback ID for the MDA cross-connect
Context	<b>configure</b> <a href="#">card number</a> <a href="#">xiom string</a> <a href="#">mda number</a> <a href="#">xconnect mac number</a> <a href="#">loopback number</a>
Tree	<a href="#">loopback</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**bandwidth** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum bandwidth for a Layer 2 rate for MAC loopback
Context	<b>configure</b> <i>card number xiom string mda number xconnect mac number loopback number bandwidth number</i>
Tree	<a href="#">bandwidth</a>
Range	10   25   40   100   400   800
Units	gigabps
Default	100
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>card number xiom string mda number xconnect mac number loopback number description string</i>
Tree	<a href="#">description</a>
String Length	0 to 255
Introduced	21.5.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**reset-on-recoverable-error** *boolean*

Synopsis	Reset XIOM for fatal memory parity error on a Q-chip
Context	<b>configure</b> <i>card number xiom string reset-on-recoverable-error boolean</i>
Tree	<a href="#">reset-on-recoverable-error</a>
Description	When configured to <b>true</b> , the XIOM is reset when a fatal memory parity error is detected on a Q-chip of the XIOM, regardless of the setting of the <b>fail-on-error</b> configuration for the XIOM.  When configured to <b>false</b> , the recovery action is taken instead of resetting the XIOM.
Default	false
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**upgrade** [*upgrade-index*] *number*

Synopsis	Enter the <b>upgrade</b> list instance
Context	<b>configure</b> <i>card number xiom string upgrade number</i>
Tree	<i>upgrade</i>
Description	<p>Commands in this context assign a license level upgrade to the XIOM. Multiple upgrades can be applied to an XIOM. The first upgrade must use index 1, then index 2, and so on. When removing upgrades, the largest index must be removed first, followed by the next largest, and so on.</p> <p>Some upgrades require a hard reset of the XIOM to take effect. In general, this is required when the Full Duplex bandwidth is changed as a result of the upgrade.</p>
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**[upgrade-index]** *number*

Synopsis	Order of the upgrade value
Context	<b>configure</b> <i>card number xiom string upgrade number</i>
Tree	<i>upgrade</i>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

**path** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upgrade name
Context	<b>configure</b> <i>card number xiom string upgrade number path keyword</i>
Tree	<i>path</i>
Description	<p>This command specifies the upgrade name. An upgrade license must be available for the specified path.</p> <p>Available upgrades can be checked using the <b>show licensing entitlements</b> command.</p>
Options	cr800g-cr1500g+, er800g-er1500g+, he800g-he1500g+, cr1600g-cr2400g+, er1600g-er2400g+, he1600g-he2400g+, cr2400g-cr3000g+, er2400g-er3000g+,

he2400g-he3000g+, cr-er800g+, er-he800g+, cr-er1500g+, er-he1500g+, cr-er1600g+, er-he1600g+, cr-er2400g+, er-he2400g+, cr-er3000g+, er-he3000g+, cr4800g-cr6000g+, er4800g-er6000g+, he4800g-he6000g+, cr-er2400g, er-he2400g, cr-er4800g, er-he4800g, cr-er6000g+, er-he6000g+, cr1600g-cr3000g+, er1600g-er3000g+, he1600g-he3000g+, cr-er3200g+, er-he3200g+, cr3200g-cr6000g+, er3200g-er6000g+, he3200g-he6000g+

Notes	This element is mandatory.
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

### **xiom-type** keyword



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	XIOM type
Context	<b>configure</b> <b>card</b> <i>number</i> <b>xiom</b> <i>string</i> <b>xiom-type</b> <i>keyword</i>
Tree	<b>xiom-type</b>
Description	<p>This command associates the XIOM type with the slot.</p> <p>The XIOM type can be preprovisioned, which means that the XIOM does not have to be installed in the chassis.</p> <p>An XIOM must be provisioned before an MDA-s, a connector, or a port can be configured. An XIOM can only be provisioned in a slot that is vacant. After an XIOM is provisioned in the slot, no other XIOM can be provisioned (configured) for the slot.</p> <p>An XIOM can only be provisioned in a slot if the XIOM type is allowed in the slot. An error message is generated if an attempt is made to provision an XIOM type that is not allowed.</p> <p>If an XIOM is inserted that does not match the configured XIOM type for the slot, then a log event and a facility alarm are raised. The alarm is cleared when the correct XIOM type is installed or the configuration is modified.</p> <p>A log event and a facility alarm are raised if an administratively enabled XIOM is removed from the chassis. The alarm is cleared when the correct XIOM type is installed or the configuration is modified. A log event is issued when an XIOM is removed that is administratively disabled.</p> <p>XIOMs are controlled by hardware and software licensing. In addition to the XIOM type, the license level must be provisioned using the <b>level</b> command.</p>
Options	iom-s-3.0t, iom-s-1.5t, iom2-se-6.0t, iom2-se-3.0t, x2-s36-800g-qsfppdd-6.0t, x2-s36-400g-qsf112-3.0t
Introduced	20.2.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s

## 3.10 cflowd commands

```

configure
- cflowd
  - active-flow-timeout number
  - admin-state keyword
  - analyze-gre-payload boolean
  - analyze-l2tp-traffic boolean
  - analyze-v4overv6-traffic boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - cache-size number
  - collector (ipv4-address-no-zone | ipv6-address-no-zone) port number
    - admin-state keyword
    - aggregation
      - as-matrix boolean
      - destination-prefix boolean
      - protocol-port boolean
      - raw boolean
      - source-destination-prefix boolean
      - source-prefix boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - autonomous-system-type keyword
    - description string
    - export-filter
      - family
        - ipv4 boolean
        - ipv6 boolean
        - l2-ip boolean
        - mcast-ipv4 boolean
        - mcast-ipv6 boolean
        - mpls boolean
    - interface-list
      - router reference interface-name reference
        - apply-groups reference
        - apply-groups-exclude reference
        - direction keyword
      - service
        - ies-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
          - apply-groups reference
          - apply-groups-exclude reference
          - direction keyword
        - ies-interface service-name reference interface-name reference
          - apply-groups reference
          - apply-groups-exclude reference
          - direction keyword
        - vprn-group-interface service-name reference subscriber-interface-
name reference group-interface-name reference
          - apply-groups reference
          - apply-groups-exclude reference
          - direction keyword
        - vprn-interface service-name reference interface-name reference
          - apply-groups reference
          - apply-groups-exclude reference
          - direction keyword
        - vprn-network-interface service-name reference network-interface-
name reference
          - apply-groups reference
          - apply-groups-exclude reference

```

---

configure cflowd collector export-filter interface-list service vprn-network-interface direction

```
    - direction keyword
      - router string
      - router-instance string
      - template-set keyword
      - version number
    - enhanced-distribution boolean
    - export-mode keyword
    - inactive-flow-timeout number
    - inband-collector-export-only boolean
    - overflow number
    - sample-profile number
      - apply-groups reference
      - apply-groups-exclude reference
      - metering-process keyword
      - sample-rate number
    - template-retransmit number
    - use-vrtr-if-index boolean
```

### 3.10.1 cflowd command descriptions

#### **cflowd**

Synopsis	Enable the <b>cflowd</b> context
Context	<b>configure cflowd</b>
Tree	<a href="#">cflowd</a>
Introduced	16.0.R1
Platforms	All

#### **active-flow-timeout** *number*

Synopsis	Maximum time before an active flow is exported
Context	<b>configure cflowd active-flow-timeout</b> <i>number</i>
Tree	<a href="#">active-flow-timeout</a>
Description	<p>This command configures the maximum time before an active flow is aged out of the active cache. If an individual flow is active for the configured time, the flow is exported and a new flow is created on the next packet sampled for the flow.</p> <p>This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.</p>
Range	30 to 36000
Units	seconds
Default	1800
Introduced	20.2.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of cflowd
Context	<b>configure cflowd admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All



**analyze-gre-payload** *boolean*

Synopsis	Perform cflowd analysis on the inner IP packet
Context	<b>configure</b> <a href="#">cflowd analyze-gre-payload</a> <i>boolean</i>
Tree	<a href="#">analyze-gre-payload</a>
Default	false
Introduced	16.0.R1
Platforms	All

**analyze-l2tp-traffic** *boolean*

Synopsis	Analyze the inner IP header of an L2TP packet
Context	<b>configure</b> <a href="#">cflowd analyze-l2tp-traffic</a> <i>boolean</i>
Tree	<a href="#">analyze-l2tp-traffic</a>
Description	<p>When configured to <b>true</b>, cflowd looks for and analyzes the inner IP header of an L2TPv2 frame.</p> <p>L2TPv2 traffic is identified by either the source or destination UDP port numbering that is set to 1701.</p> <p>When configured to <b>false</b>, the analysis is not performed.</p>
Default	false
Introduced	19.10.R1
Platforms	All

**analyze-v4overv6-traffic** *boolean*

Synopsis	Analyze the inner IPv4 packet within an IPv6 packet
Context	<b>configure</b> <a href="#">cflowd analyze-v4overv6-traffic</a> <i>boolean</i>
Tree	<a href="#">analyze-v4overv6-traffic</a>
Description	<p>When configured to <b>true</b>, cflowd looks for and analyzes the inner IPv4 header of IPv4overIPv6 frames that include MAP-E as well as DSLite and SAM traffic.</p> <p>When configured to <b>false</b>, the analysis is not performed.</p>
Default	false
Introduced	19.10.R1
Platforms	All

**cache-size** *number*

Synopsis	Maximum number of active flows in the flow cache table
Context	<b>configure</b> <a href="#">cflowd</a> <b>cache-size</b> <i>number</i>
Tree	<a href="#">cache-size</a>
Range	1000 to 2000000
Units	flows
Introduced	16.0.R1
Platforms	All

**collector** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Synopsis	Enter the <b>collector</b> list instance
Context	<b>configure</b> <a href="#">cflowd</a> <b>collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">collector</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote cflowd collector host
Context	<b>configure</b> <a href="#">cflowd</a> <b>collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">collector</a>
Description	This command specifies the IP address of the remote cflowd collector host to receive the exported cflowd data.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**port** *number*

Synopsis	UDP port number of the remote cflowd collector host
Context	<b>configure</b> <a href="#">cflowd</a> <b>collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">collector</a>

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Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the cflowd collector
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **aggregation**

Synopsis	Enter the <b>aggregation</b> context
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation</b>
Tree	<b>aggregation</b>
Introduced	16.0.R1
Platforms	All

### **as-matrix** *boolean*

Synopsis	Base aggregation data based on AS information
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation as-matrix</b> <i>boolean</i>
Tree	<b>as-matrix</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **destination-prefix** *boolean*

Synopsis	Aggregate data based on destination prefix information
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation destination-prefix</b> <i>boolean</i>
Tree	<a href="#">destination-prefix</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **protocol-port** *boolean*

Synopsis	Aggregate flows based on the IP protocol and ports
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation protocol-port</b> <i>boolean</i>
Tree	<a href="#">protocol-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **raw** *boolean*

Synopsis	Export flow data without aggregation
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation raw</b> <i>boolean</i>
Tree	<a href="#">raw</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **source-destination-prefix** *boolean*

Synopsis	Aggregate data based on prefix information
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation source-destination-prefix</b> <i>boolean</i>
Tree	<a href="#">source-destination-prefix</a>
Default	false

Introduced	16.0.R1
Platforms	All

### **source-prefix** *boolean*

Synopsis	Aggregate flows based on the source prefix information
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>aggregation source-prefix</b> <i>boolean</i>
Tree	<a href="#">source-prefix</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **autonomous-system-type** *keyword*

Synopsis	Basis of the AS information included in flow data
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>autonomous-system-type</b> <i>keyword</i>
Tree	<a href="#">autonomous-system-type</a>
Options	origin, peer
Default	origin
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## export-filter

Synopsis	Enter the <b>export-filter</b> context
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter</b>
Tree	<b>export-filter</b>
Description	Commands in this context configure the export filters that control which flows are sent to the Cflowd Collector.
Introduced	16.0.R1
Platforms	All

## family

Synopsis	Enter the <b>family</b> context
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family</b>
Tree	<b>family</b>
Introduced	16.0.R1
Platforms	All

## ipv4 boolean

Synopsis	Filter IPv4 flow data from being sent to the collector
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family ipv4 boolean</b>
Tree	<b>ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6 boolean

Synopsis	Filter IPv6 flow data from being sent to the collector
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family ipv6 boolean</b>
Tree	<b>ipv6</b>
Default	false

Introduced 16.0.R1  
Platforms All

### ***l2-ip boolean***

Synopsis Filter L2 IP flow data from being sent to the collector  
Context **configure** [cflowd collector](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [port number](#)  
[export-filter family l2-ip boolean](#)  
Tree [l2-ip](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### ***mcast-ipv4 boolean***

Synopsis Filter multicast IPv4 data from going to the collector  
Context **configure** [cflowd collector](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [port number](#)  
[export-filter family mcast-ipv4 boolean](#)  
Tree [mcast-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### ***mcast-ipv6 boolean***

Synopsis Filter multicast IPv6 data from going to the collector  
Context **configure** [cflowd collector](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [port number](#)  
[export-filter family mcast-ipv6 boolean](#)  
Tree [mcast-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### ***mpls boolean***

Synopsis Filter MPLS flow data from being sent to the collector

Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter family mpls boolean</b>
Tree	<b>mpls</b>
Default	false
Introduced	16.0.R1
Platforms	All

## interface-list

Synopsis	Enter the <b>interface-list</b> context
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list</b>
Tree	<b>interface-list</b>
Description	Commands in this context configure the match conditions for the interface that control which flow data is exported to the associated Cflowd Collector.
Introduced	16.0.R4
Platforms	All

## router [**router-name**] *reference interface-name reference*

Synopsis	Enter the <b>router</b> list instance
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list router reference interface-name reference</b>
Tree	<b>router</b>
Description	Commands in this context configure the interface the router uses to send ingress sampled data flows to the associated Cflowd Collector.
Introduced	16.0.R4
Platforms	All

## [**router-name**] *reference*

Synopsis	Administrative router name
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list router reference interface-name reference</b>
Tree	<b>router</b>
Reference	<b>configure router string</b>



Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **interface-name** *reference*

Synopsis	Name for the router to the service interface or SAP
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter interface-list</a> <a href="#">router reference interface-name reference</a>
Tree	<a href="#">router</a>
Reference	<b>configure</b> <a href="#">router string interface string</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **direction** *keyword*

Synopsis	Flow match condition direction for the export filter
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter interface-list</a> <a href="#">router reference interface-name reference</a> <a href="#">direction keyword</a>
Tree	<a href="#">direction</a>
Description	This command configures the direction of the flows as a match condition for the associated export filter. The router only sends flows that match the specified direction to the associated Cflowd Collector.
Options	ingress, egress, both
Default	both
Introduced	23.10.R1
Platforms	All

### **service**

Synopsis	Enter the <b>service</b> context
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter interface-list</a> <a href="#">service</a>
Tree	<a href="#">service</a>

Description	Commands in this context configure which flow data this service interface sends to this Cflowd Collector.
Introduced	16.0.R4
Platforms	All

### **ies-group-interface** *service-name reference* *subscriber-interface-name reference* *group-interface-name reference*

Synopsis	Enter the <b>ies-group-interface</b> list instance
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service ies-group-interface service-name reference subscriber-interface-name reference group-interface-name reference</b>
Tree	<b>ies-group-interface</b>
Description	Commands in this context configure which IES group interface flow data the service sends to the Cflowd Collector.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service-name** *reference*

Synopsis	Administrative service name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service ies-group-interface service-name reference subscriber-interface-name reference group-interface-name reference</b>
Tree	<b>ies-group-interface</b>
Reference	<b>configure</b> <b>service ies</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-interface-name** *reference*

Synopsis	Subscriber interface name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service ies-group-interface service-name reference subscriber-interface-name reference group-interface-name reference</b>
Tree	<b>ies-group-interface</b>

Reference	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface-name** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter interface-list service ies-group-interface service-name</a> <i>reference</i> <a href="#">subscriber-interface-name</a> <i>reference</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">ies-group-interface</a>
Reference	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Flow match condition direction for the export filter
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter interface-list service ies-group-interface service-name</a> <i>reference</i> <a href="#">subscriber-interface-name</a> <i>reference</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Description	This command configures the direction of the flows as a match condition for the associated export filter. The router only sends flows that match the specified direction to the associated Cflowd Collector.
Options	ingress, egress, both
Default	both
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ies-interface** [service-name](#) *reference* [interface-name](#) *reference*

Synopsis	Enter the <b>ies-interface</b> list instance
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Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service</a> <a href="#">ies-interface</a> <a href="#">service-name</a> <a href="#">reference</a> <a href="#">interface-name</a> <a href="#">reference</a>
Tree	<a href="#">ies-interface</a>
Description	Commands in this context configure which IES service interface flow data the service sends to the Cflowd Collector.
Introduced	16.0.R4
Platforms	All

### **service-name** *reference*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service</a> <a href="#">ies-interface</a> <a href="#">service-name</a> <a href="#">reference</a> <a href="#">interface-name</a> <a href="#">reference</a>
Tree	<a href="#">ies-interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **interface-name** *reference*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service</a> <a href="#">ies-interface</a> <a href="#">service-name</a> <a href="#">reference</a> <a href="#">interface-name</a> <a href="#">reference</a>
Tree	<a href="#">ies-interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **direction** *keyword*

Synopsis	Flow match condition direction for the export filter
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Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service ies-interface</a> <a href="#">service-name</a> <a href="#">reference</a> <a href="#">interface-name</a> <a href="#">reference</a> <a href="#">direction</a> <a href="#">keyword</a>
Tree	<a href="#">direction</a>
Description	This command configures the direction of the flows as a match condition for the associated export filter. The router only sends flows that match the specified direction to the associated Cflowd Collector.
Options	ingress, egress, both
Default	both
Introduced	23.10.R1
Platforms	All

### **vprn-group-interface** [service-name](#) [reference](#) [subscriber-interface-name](#) [reference](#) [group-interface-name](#) [reference](#)

Synopsis	Enter the <b>vprn-group-interface</b> list instance
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-group-interface</a> <a href="#">service-name</a> <a href="#">reference</a> <a href="#">subscriber-interface-name</a> <a href="#">reference</a> <a href="#">group-interface-name</a> <a href="#">reference</a>
Tree	<a href="#">vprn-group-interface</a>
Description	Commands in this context configure which VPRN group interface flow data the service sends to the Cflowd Collector.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service-name** [reference](#)

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-group-interface</a> <a href="#">service-name</a> <a href="#">reference</a> <a href="#">subscriber-interface-name</a> <a href="#">reference</a> <a href="#">group-interface-name</a> <a href="#">reference</a>
Tree	<a href="#">vprn-group-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <a href="#">string</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-interface-name** *reference*

Synopsis	Subscriber interface name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-group-interface</a> <a href="#">service-name reference</a> <a href="#">subscriber-interface-name reference</a> <a href="#">group-interface-name reference</a>
Tree	<a href="#">vprn-group-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-interface-name** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-group-interface</a> <a href="#">service-name reference</a> <a href="#">subscriber-interface-name reference</a> <a href="#">group-interface-name reference</a>
Tree	<a href="#">vprn-group-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Flow match condition direction for the export filter
Context	<b>configure</b> <a href="#">cflowd collector</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port number</a> <a href="#">export-filter</a> <a href="#">interface-list</a> <a href="#">service vprn-group-interface</a> <a href="#">service-name reference</a> <a href="#">subscriber-interface-name reference</a> <a href="#">group-interface-name reference</a> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Description	This command configures the direction of the flows as a match condition for the associated export filter. The router only sends flows that match the specified direction to the associated Cflowd Collector.
Options	ingress, egress, both
Default	both
Introduced	23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vprn-interface** *service-name reference interface-name reference*

Synopsis Enter the **vprn-interface** list instance

Context **configure** **cflowd collector** (*ipv4-address-no-zone | ipv6-address-no-zone*) **port number** **export-filter interface-list service vprn-interface service-name reference interface-name reference**

Tree **vprn-interface**

Description Commands in this context configure which VPRN service interface flow data the service sends to the Cflowd Collector.

Introduced 16.0.R4

Platforms All

### **service-name** *reference*

Synopsis Administrative service name

Context **configure** **cflowd collector** (*ipv4-address-no-zone | ipv6-address-no-zone*) **port number** **export-filter interface-list service vprn-interface service-name reference interface-name reference**

Tree **vprn-interface**

Reference **configure** **service vprn** *string*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **interface-name** *reference*

Synopsis IP interface name

Context **configure** **cflowd collector** (*ipv4-address-no-zone | ipv6-address-no-zone*) **port number** **export-filter interface-list service vprn-interface service-name reference interface-name reference**

Tree **vprn-interface**

Reference **configure** **service vprn** *string* **interface** *string*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

**direction** *keyword*

Synopsis	Flow match condition direction for the export filter
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service vprn-interface service-name</b> <i>reference</i> <b>interface-name</b> <i>reference</i> <b>direction</b> <i>keyword</i>
Tree	<b>direction</b>
Description	This command configures the direction of the flows as a match condition for the associated export filter. The router only sends flows that match the specified direction to the associated Cflowd Collector.
Options	ingress, egress, both
Default	both
Introduced	23.10.R1
Platforms	All

**vprn-network-interface** *service-name* *reference* **network-interface-name** *reference*

Synopsis	Enter the <b>vprn-network-interface</b> list instance
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service vprn-network-interface service-name</b> <i>reference</i> <b>network-interface-name</b> <i>reference</i>
Tree	<b>vprn-network-interface</b>
Description	Commands in this context configure which VPRN network interfaces flow data the service sends to the Cflowd Collector.
Introduced	16.0.R4
Platforms	All

**service-name** *reference*

Synopsis	Administrative service name
Context	<b>configure</b> <b>cflowd collector</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port number</b> <b>export-filter interface-list service vprn-network-interface service-name</b> <i>reference</i> <b>network-interface-name</b> <i>reference</i>
Tree	<b>vprn-network-interface</b>
Reference	<b>configure service vprn</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4



Platforms All

### **network-interface-name** *reference*

Synopsis Network interface name

Context **configure** **cflowd collector** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **port number** **export-filter interface-list service vprn-network-interface service-name** *reference* **network-interface-name** *reference*

Tree [vprn-network-interface](#)

Description This command specifies the network interface name. Interface names must be unique within the group of defined IP interfaces for the **configure router interface** and **configure service ies interface** commands. An interface name cannot be in the form of an IP address. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes and must start with a letter.

Reference **configure service vprn** *string* **network-interface** *string*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **direction** *keyword*

Synopsis Flow match condition direction for the export filter

Context **configure** **cflowd collector** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **port number** **export-filter interface-list service vprn-network-interface service-name** *reference* **network-interface-name** *reference* **direction** *keyword*

Tree [direction](#)

Description This command configures the direction of the flows as a match condition for the associated export filter. The router only sends flows that match the specified direction to the associated Cflowd Collector.

Options ingress, egress, both

Default both

Introduced 23.10.R1

Platforms All

### **router** [[router-instance](#)] *string*

Synopsis Add a list entry for **router**

Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number export-filter router string</b>
Tree	<b>router</b>
Description	This command adds an entry to the list of router instances that can send flow data to the associated Cflowd Collector.
Introduced	16.0.R1
Platforms	All

### **[router-instance] string**

Synopsis	Router instance name
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number export-filter router string</b>
Tree	<b>router</b>
Description	This command specifies the router instance name. Only "Base" is supported.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **router-instance string**

Synopsis	Router or service name
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number router-instance string</b>
Tree	<b>router-instance</b>
Description	This command specifies the routing instance used to route traffic to the associated collector IP address.  The "Base" routing instance is the fallback if no route is found. No fallback mechanism is supported for "Base" and "VPRN".
Default	management
Introduced	16.0.R1
Platforms	All

### **template-set keyword**

Synopsis	Templates sent to the collector
----------	---------------------------------

Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>template-set keyword</b>
Tree	<b>template-set</b>
Description	This command specifies the set of templates sent to the collector when using cflowd Version 9 or Version 10.
Options	not-applicable, basic, mpls-ip, l2-ip, mpls-transport, compact, fastpath
Introduced	16.0.R1
Platforms	All

### **version number**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Flow data collector version
Context	<b>configure cflowd collector</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>port number</b> <b>version number</b>
Tree	<b>version</b>
Range	5   8 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **enhanced-distribution boolean**

Synopsis	Include ingress port ID in hashing algorithm for cflowd
Context	<b>configure cflowd enhanced-distribution boolean</b>
Tree	<b>enhanced-distribution</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **export-mode keyword**

Synopsis	Export mode for flow data
Context	<b>configure cflowd export-mode keyword</b>

Tree	<a href="#">export-mode</a>
Options	automatic, manual
Default	automatic
Introduced	16.0.R1
Platforms	All

### **inactive-flow-timeout** *number*

Synopsis	Time without matching packet before flow is inactive
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">inactive-flow-timeout</a> <i>number</i>
Tree	<a href="#">inactive-flow-timeout</a>
Description	This command configures the time interval that must elapse without a packet matching a flow before the flow is considered inactive.  This value is set for a flow when the flow is initially created in the active cache table and does not change dynamically.
Range	10 to 600
Units	seconds
Default	15
Introduced	20.2.R1
Platforms	All

### **inband-collector-export-only** *boolean*

Synopsis	Export the traffic to all collectors only via in-band interfaces
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">inband-collector-export-only</a> <i>boolean</i>
Tree	<a href="#">inband-collector-export-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overflow** *number*

Synopsis	Percentage of entries to remove from Cflowd cache when the maximum number of entries is exceeded
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">overflow</a> <i>number</i>
Tree	<a href="#">overflow</a>

Range	1 to 50
Units	percent
Default	1
Introduced	16.0.R1
Platforms	All

### **sample-profile** [\[profile-id\]](#) *number*

Synopsis	Enter the <b>sample-profile</b> list instance
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i>
Tree	<a href="#">sample-profile</a>
Max. Instances	5
Introduced	19.5.R1
Platforms	All

### [\[profile-id\]](#) *number*

Synopsis	The unique specifier of this sample-profile
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i>
Tree	<a href="#">sample-profile</a>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **metering-process** *keyword*

Synopsis	Metering process for samples taken
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i> <a href="#">metering-process</a> <i>keyword</i>
Tree	<a href="#">metering-process</a>
Description	This command specifies the type of metering process to use for the samples taken from the associated interfaces.
Options	standard, fp-accelerated
Default	standard

Introduced	21.10.R1
Platforms	7750 SR-7s, 7750 SR-14s, 7950 XRS-20e

### **sample-rate** *number*

Synopsis	Cflowd sampling rate for sample profile ID
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i> <a href="#">sample-rate</a> <i>number</i>
Tree	<a href="#">sample-rate</a>
Description	This command defines the cflowd sampling rate for the sample profile ID.  The sample rate indicates that the associated interface samples 1 in N packets for cflowd analysis. You can only associate one rate profile below 1:256 with a specific IOM, IMM, or XMA.
Range	1 to 60000
Default	1000
Introduced	19.5.R1
Platforms	All

### **template-retransmit** *number*

Synopsis	Time to resend template information
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">template-retransmit</a> <i>number</i>
Tree	<a href="#">template-retransmit</a>
Range	10 to 600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

### **use-vrtr-if-index** *boolean*

Synopsis	Export flow data using virtual router interface indexes
Context	<b>configure</b> <a href="#">cflowd</a> <a href="#">use-vrtr-if-index</a> <i>boolean</i>
Tree	<a href="#">use-vrtr-if-index</a>
Default	false
Introduced	16.0.R1

Platforms All

## 3.11 chassis commands

```
configure
- chassis keyword chassis-number number
- apply-groups reference
- apply-groups-exclude reference
- monitor-filter-door boolean
- peq number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - input-power-mode number
  - peq-type keyword
- power-connection-module number
  - apply-groups reference
  - apply-groups-exclude reference
  - pcm-type keyword
- power-shelf number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - power-module number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - power-module-type keyword
  - power-shelf-type keyword
- power-supply number
  - apply-groups reference
  - apply-groups-exclude reference
  - power-supply-type keyword
```



### 3.11.1 chassis command descriptions

#### **chassis** [*chassis-class*] *keyword chassis-number number*

Synopsis	Enter the <b>chassis</b> list instance
Context	<b>configure chassis</b> <i>keyword chassis-number number</i>
Tree	<b>chassis</b>
Introduced	16.0.R1
Platforms	All

#### **[chassis-class]** *keyword*

Synopsis	Functional use of the physical chassis
Context	<b>configure chassis</b> <i>keyword chassis-number number</i>
Tree	<b>chassis</b>
Options	router, ethernet-satellite
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **chassis-number** *number*

Synopsis	Unique index to identify this physical chassis
Context	<b>configure chassis</b> <i>keyword chassis-number number</i>
Tree	<b>chassis</b>
Range	1 to 100
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **monitor-filter-door** *boolean*

Synopsis	Allow filter door monitoring
Context	<b>configure chassis</b> <i>keyword chassis-number number monitor-filter-door boolean</i>

Tree	<a href="#">monitor-filter-door</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7s, 7750 SR-14s

### **peq** [[peq-slot](#)] *number*

Synopsis	Enter the <b>peq</b> list instance
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i>
Tree	<a href="#">peq</a>
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

### **[peq-slot]** *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i>
Tree	<a href="#">peq</a>
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the PEQ
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

**input-power-mode** *number*

Synopsis	Input power mode of the PEQ
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i> <a href="#">input-power-mode</a> <i>number</i>
Tree	<a href="#">input-power-mode</a>
Range	60   80
Units	amperes
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

**peq-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	APEQ type
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">peq</a> <i>number</i> <a href="#">peq-type</a> <i>keyword</i>
Tree	<a href="#">peq-type</a>
Options	apeq-dc-2000, apeq-dc-2200-2800, apeq-ac-3000, apeq-hvdc-3000, apeq-dc-4275, ixr-ac-hvdc-3000, ixr-dc-3000, apeq-ac-4400
Introduced	16.0.R1
Platforms	7750 SR-12e, 7950 XRS

**power-connection-module** [[pcm-slot](#)] *number*

Synopsis	Enter the <b>power-connection-module</b> list instance
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-connection-module</a> <i>number</i>
Tree	<a href="#">power-connection-module</a>
Introduced	16.0.R1
Platforms	7950 XRS-20e

**[pcm-slot]** *number*

Synopsis	Unique identifier index for a power control module in the chassis
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-connection-module</a> <i>number</i>

Tree	<a href="#">power-connection-module</a>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7950 XRS-20e

### **pcm-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PCM type
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-connection-module</a> <i>number</i> <a href="#">pcm-type</a> <i>keyword</i>
Tree	<a href="#">pcm-type</a>
Options	dual, quad
Introduced	16.0.R1
Platforms	7950 XRS-20e

### **power-shelf** [[power-shelf-id](#)] *number*

Synopsis	Enter the <b>power-shelf</b> list instance
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-shelf</a> <i>number</i>
Tree	<a href="#">power-shelf</a>
Introduced	16.0.R1
Platforms	7750 SR-s

### **[power-shelf-id]** *number*

Synopsis	Unique identifier index for a power shelf in chassis
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-shelf</a> <i>number</i>
Tree	<a href="#">power-shelf</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-s

### **admin-state** *keyword*

Synopsis Administrative state of the power shelf

Context **configure chassis** *keyword chassis-number number power-shelf number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7750 SR-s

### **description** *string*

Synopsis Text description

Context **configure chassis** *keyword chassis-number number power-shelf number description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7750 SR-s

### **power-module** [[power-module-id](#)] *number*

Synopsis Enter the **power-module** list instance

Context **configure chassis** *keyword chassis-number number power-shelf number power-module number*

Tree [power-module](#)

Introduced 16.0.R1

Platforms 7750 SR-s

### **[power-module-id]** *number*

Synopsis Unique identifier for a power module in chassis

Context **configure chassis** *keyword chassis-number number power-shelf number power-module number*

Tree	<a href="#">power-module</a>
Range	1 to 12
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-s

### **admin-state** *keyword*

Synopsis	Administrative state of the power module
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-shelf</a> <i>number</i> <a href="#">power-module</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR-s

### **power-module-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Power module type
Context	<b>configure</b> <a href="#">chassis</a> <i>keyword</i> <a href="#">chassis-number</a> <i>number</i> <a href="#">power-shelf</a> <i>number</i> <a href="#">power-module</a> <i>number</i> <a href="#">power-module-type</a> <i>keyword</i>
Tree	<a href="#">power-module-type</a>
Options	ps-b-ac/hv-6000, ps-a-dc-4400, ps-a-dc-6000, ixr-ac-hvdc-3000, ixr-dc-3000
Introduced	16.0.R1
Platforms	7750 SR-s

### **power-shelf-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Power shelf type
Context	<b>configure chassis</b> <i>keyword chassis-number number power-shelf number power-shelf-type keyword</i>
Tree	<a href="#">power-shelf-type</a>
Options	ps-a10-shelf-dc, ps-b10-shelf-ac/hv, ps-a4-shelf-dc, ps-b3-shelf-ac/hv
Introduced	16.0.R1
Platforms	7750 SR-s

### **power-supply** [[power-supply-id](#)] *number*

Synopsis	Enter the <b>power-supply</b> list instance
Context	<b>configure chassis</b> <i>keyword chassis-number number power-supply number</i>
Tree	<a href="#">power-supply</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[power-supply-id]** *number*

Synopsis	Unique identifier index for a power supply tray in the chassis
Context	<b>configure chassis</b> <i>keyword chassis-number number power-supply number</i>
Tree	<a href="#">power-supply</a>
Range	1 to 31
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **power-supply-type** *keyword*

Synopsis	Power supply type
Context	<b>configure chassis</b> <i>keyword chassis-number number power-supply number power-supply-type keyword</i>
Tree	<a href="#">power-supply-type</a>
Options	none, dc-single, ac-single, ac-multiple, auto, dc-multiple
Default	auto
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12



## 3.12 connection-profile commands

```
configure
- connection-profile
- apply-groups reference
- apply-groups-exclude reference
- vlan number
- apply-groups reference
- apply-groups-exclude reference
- description string
- qtag-range number
- apply-groups reference
- apply-groups-exclude reference
- end number
```

### 3.12.1 connection-profile command descriptions

#### connection-profile

Synopsis	Enter the <b>connection-profile</b> context
Context	<b>configure</b> <a href="#">connection-profile</a>
Tree	<a href="#">connection-profile</a>
Introduced	16.0.R1
Platforms	All

#### vlan [[connection-profile-id](#)] *number*

Synopsis	Enter the <b>vlan</b> list instance
Context	<b>configure</b> <a href="#">connection-profile</a> <a href="#">vlan</a> <i>number</i>
Tree	<a href="#">vlan</a>
Introduced	16.0.R7
Platforms	All

#### [[connection-profile-id](#)] *number*

Synopsis	Identifier of this connection profile
Context	<b>configure</b> <a href="#">connection-profile</a> <a href="#">vlan</a> <i>number</i>
Tree	<a href="#">vlan</a>
Range	1 to 8000
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	All

#### description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">connection-profile</a> <a href="#">vlan</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R7

Platforms All

### **qtag-range** [**start**] *number*

Synopsis Enter the **qtag-range** list instance  
 Context **configure connection-profile vlan number qtag-range number**  
 Tree **qtag-range**  
 Introduced 16.0.R7  
 Platforms All

### **[start]** *number*

Synopsis Lower bound of VLAN range for connection profile  
 Context **configure connection-profile vlan number qtag-range number**  
 Tree **qtag-range**  
 Range 1 to 4094  
 Notes This element is part of a list key.  
 Introduced 16.0.R7  
 Platforms All

### **end** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Upper bound of VLAN range for connection profile  
 Context **configure connection-profile vlan number qtag-range number end number**  
 Tree **end**  
 Range 1 to 4094  
 Introduced 16.0.R7  
 Platforms All

### 3.13 debug commands

```

debug
- aaa
- diameter
  - application
    - failures boolean
    - policy string
      - failures boolean
      - messages boolean
    - node string
      - failures boolean
      - peer number
        - failures boolean
        - messages boolean
      - relayed-messages boolean
- call-trace
- ipoe
  - trace string
    - circuit-id string
    - mac string
    - max-jobs number
    - profile string
    - remote-id string
    - sap string
    - trace-existing-sessions boolean
- pppoe
  - trace string
    - circuit-id string
    - mac string
    - max-jobs number
    - profile string
    - remote-id string
    - sap string
    - trace-existing-sessions boolean
    - user-name string
- wlan-gw
  - ue string
    - mac string
    - profile string
- l2tp
  - predictable-id-assignment boolean
- lag string
  - bfd boolean
  - config boolean
  - iom-updates boolean
  - lacp-packets boolean
  - multi-chassis boolean
  - multi-chassis-packets boolean
  - port string
    - bfd boolean
    - config boolean
    - lacp-packets boolean
    - multi-chassis boolean
    - port-states boolean
    - redundancy boolean
    - selection-logic boolean
    - state-machine boolean
    - timers boolean
  - port-states boolean
  - redundancy boolean

```

## debug lag selection-logic

```

- selection-logic boolean
- state-machine boolean
- timers boolean
- nat
- l2-aware
  - subscriber string
  - upnp
    - subscriber string
    - events boolean
    - packets
      - detail boolean
- large-scale
- dual-stack-lite
  - subscriber inside-router string b4-address string
- nat44
  - subscriber inside-router string ip-address string
- nat64
  - subscriber inside-router string ipv6-prefix string
- nat-import
  - route (ipv4-unicast-address | keyword) inside-router string
- pcp
  - router string
  - server string
    - packets
      - detail boolean
      - direction keyword
- router string
- dhcp
  - all-packets
    - detail-level keyword
    - mode keyword
  - interface string
    - detail-level keyword
    - mode keyword
  - mac string
    - detail-level keyword
    - mode keyword
  - sap string
    - detail-level keyword
    - mode keyword
- igmp
  - group-interface
    - all-group-interfaces
    - forwarding-service string
    - group-interface-name string
  - host
    - group-interface
      - forwarding-service string
      - group-interface-name string
    - ip-address string
  - interface
    - all-interfaces
    - interface-name string
  - mcs
    - all-interfaces
    - interface-name string
  - miscellaneous boolean
  - packet
    - all-origins
    - dropped boolean
    - egress boolean
    - group-interface-name string
    - host-ip-address string
    - ingress boolean

```

debug router igmp packet interface-ip-address

```

- interface-ip-address string
- interface-name string
- type keyword
- ip
- icmp
- all-packets
- interface string
- icmp6
- all-packets
- interface string
- interface-events
- all-events
- interface string
- neighbor
- all-events
- address-family keyword
- interface string
- address-family keyword
- packet
- all-packets
- address-family keyword
- headers boolean
- protocol-id number
- interface string
- address-family keyword
- headers boolean
- protocol-id number
- route-table
- all
- filter
- ipv4
- prefix string
- longest-prefix-match boolean
- ipv6
- prefix string
- longest-prefix-match boolean
- tunnel-table
- all
- filter
- id
- sdp-id number
- tunnel-id number
- ipv4
- prefix string
- longest-prefix-match boolean
- tunnel-type (keyword | keyword)
- ipv6
- prefix string
- longest-prefix-match boolean
- tunnel-type (keyword | keyword)
- l2tp
- assignment-id string
- events
- all
- call-disconnect-notification boolean
- finite-state-machine boolean
- lac
- state-recovery boolean
- state-recovery-failed boolean
- lns
- ppp
- terminate-only boolean
- stop-control-connection-notification boolean
- packets

```

debug router l2tp assignment-id packets all

```

- all
- detail-level keyword
- direction keyword
- l2tp boolean
- lns
  - dhcp-client boolean
  - ppp
    - all
    - chap boolean
    - ipcp boolean
    - ipv6cp boolean
    - lcp boolean
    - other boolean
    - pap boolean
- events
  - all
  - call-disconnect-notification boolean
  - finite-state-machine boolean
  - lac
    - state-recovery boolean
    - state-recovery-failed boolean
  - lns
    - ppp
      - terminate-only boolean
  - session-setup
    - attempted-tunnels boolean
    - skipped-tunnels boolean
  - stop-control-connection-notification boolean
- group string
  - events
    - all
    - call-disconnect-notification boolean
    - finite-state-machine boolean
    - lac
      - state-recovery boolean
      - state-recovery-failed boolean
    - lns
      - ppp
        - terminate-only boolean
  - session-setup
    - attempted-tunnels boolean
    - skipped-tunnels boolean
  - stop-control-connection-notification boolean
- packets
  - all
  - detail-level keyword
  - direction keyword
  - l2tp boolean
  - lns
    - dhcp-client boolean
    - ppp
      - all
      - chap boolean
      - ipcp boolean
      - ipv6cp boolean
      - lcp boolean
      - other boolean
      - pap boolean
- ip-peer (ipv4-address-no-zone | ipv6-address-no-zone)
  - events
    - all
    - call-disconnect-notification boolean
    - finite-state-machine boolean
    - lac

```

debug router l2tp ip-peer events lac state-recovery

```

- state-recovery boolean
- state-recovery-failed boolean
- lns
- ppp
  - terminate-only boolean
- stop-control-connection-notification boolean
- packets
- all
- detail-level keyword
- direction keyword
- l2tp boolean
- lns
  - dhcp-client boolean
  - ppp
    - all
    - chap boolean
    - ipcp boolean
    - ipv6cp boolean
    - lcp boolean
    - other boolean
    - pap boolean
- packets
- all
- detail-level keyword
- direction keyword
- l2tp boolean
- lns
  - dhcp-client boolean
  - ppp
    - all
    - chap boolean
    - ipcp boolean
    - ipv6cp boolean
    - lcp boolean
    - other boolean
    - pap boolean
- tunnel number
- events
- all
- call-disconnect-notification boolean
- finite-state-machine boolean
- lac
  - state-recovery boolean
  - state-recovery-failed boolean
- lns
  - ppp
    - terminate-only boolean
  - stop-control-connection-notification boolean
- packets
- all
- detail-level keyword
- direction keyword
- l2tp boolean
- lns
  - dhcp-client boolean
  - ppp
    - all
    - chap boolean
    - ipcp boolean
    - ipv6cp boolean
    - lcp boolean
    - other boolean
    - pap boolean
- udp-peer (ipv4-address-no-zone | ipv6-address-no-zone) udp-port number

```



## debug router l2tp udp-peer events

```

- events
- all
- call-disconnect-notification boolean
- finite-state-machine boolean
- lac
- state-recovery boolean
- state-recovery-failed boolean
- lns
- ppp
- terminate-only boolean
- stop-control-connection-notification boolean
- packets
- all
- detail-level keyword
- direction keyword
- l2tp boolean
- lns
- dhcp-client boolean
- ppp
- all
- chap boolean
- ipcp boolean
- ipv6cp boolean
- lcp boolean
- other boolean
- pap boolean
- ldp
- interface string
- ipv4
- event
- messages
- packet
- hello
- detail boolean
- ipv6
- event
- messages
- packet
- hello
- detail boolean
- peer (ipv4-address-no-zone | ipv6-address-no-zone)
- event
- bindings
- messages
- packet
- hello
- detail boolean
- init
- detail boolean
- keepalive
- label
- detail boolean
- mld
- group-interface
- all-group-interfaces
- forwarding-service string
- group-interface-name string
- host
- group-interface
- forwarding-service string
- group-interface-name string
- ip-address string
- interface
- all-interfaces

```

debug router mld interface interface-name

```

- interface-name string
- mcs
- all-interfaces
- interface-name string
- miscellaneous boolean
- packet
- all-origins
- dropped boolean
- egress boolean
- group-interface-name string
- host-ip-address string
- ingress boolean
- interface-ip-address string
- interface-name string
- type keyword
- msdp
- packet
- all-packet-types
- packet-types
- keep-alive
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sa-request
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sa-response
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-active
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pim
- group-address string
- rtm
- rp-address string
- sa-db
- group-address string
- rp-address string
- source-address string
- mtrace
- miscellaneous
- packet
- all-packet-types
- packet-types
- query boolean
- request boolean
- response boolean
- mtrace2
- miscellaneous
- packet
- all-packet-types
- packet-types
- query boolean
- request boolean
- response boolean
- pim
- events
- adjacency
- all
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- assert
- detail boolean
- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- auto-rp
- bgp

```

## debug router pim events bgp group-address

```

- group-address (ipv4-address-no-zone | ipv6-address-no-zone)
- peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- bier-inband
  - detail boolean
- bsr
  - detail boolean
- data
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- db
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- dynmlpd
  - detail boolean
- extranet
  - detail boolean
- graft
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- interface
  - interface-name string
- jp
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- mofrr
- mrrib
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- msg
- mvpn-rtcach
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - peer-address (ipv4-address-no-zone | ipv6-address-no-zone)
- red
  - detail boolean
- register
  - detail boolean
  - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- rpfv
  - detail boolean
- rtm
  - detail boolean
- s-pmsi
  - detail boolean
  - vpn-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- tunnel-interface
  - ldp-p2mp-id number
  - rsvp-p2mp string
  - sender-address string
- packet
  - all-origins
  - all-packet-types
  - egress boolean
  - ingress boolean
  - interface-name string
  - ipv4 boolean
  - ipv6 boolean
  - packet-types

```

debug router pim packet packet-types assert

- **assert**
  - **all-origins**
  - **interface-name** *string*
- **auto-rp-announcement**
  - **all-origins**
  - **interface-name** *string*
- **auto-rp-mapping**
  - **all-origins**
  - **interface-name** *string*
- **bsr**
  - **all-origins**
  - **interface-name** *string*
- **crp**
  - **all-origins**
  - **interface-name** *string*
- **graft**
  - **all-origins**
  - **interface-name** *string*
- **graft-ack**
  - **all-origins**
  - **interface-name** *string*
- **hello**
  - **all-origins**
  - **interface-name** *string*
- **jp**
  - **all-origins**
  - **interface-name** *string*
- **mdt-tlv**
  - **all-origins**
  - **interface-name** *string*
- **register**
  - **all-origins**
  - **interface-name** *string*
- **register-stop**
  - **all-origins**
  - **interface-name** *string*
- **radius**
  - **proxy** *string*
  - **all-packet-types**
  - **client-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **detail-level** *keyword*
  - **direction** *keyword*
  - **dropped-only** *boolean*
  - **packet-types**
    - **access-accept** *boolean*
    - **access-challenge** *boolean*
    - **access-reject** *boolean*
    - **access-request** *boolean*
    - **accounting-request** *boolean*
    - **accounting-response** *boolean*
    - **other** *boolean*
- **servers**
  - **attribute** *string*
  - **extended-type** *number*
  - **transaction** *boolean*
  - **type** *number*
  - **value**
    - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **hex** *string*
    - **integer** *number*
    - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
    - **string** *string*
  - **vendor-specific**
    - **encoding**

debug router radius servers attribute vendor-specific encoding length-size

```

    - length-size number
    - type-size number
    - vendor (number | keyword)
    - vendor-type number
  - detail-level keyword
  - packet-types
    - accounting boolean
    - authentication boolean
    - coa boolean
  - server-address (ipv4-address-no-zone | ipv6-address-no-zone)
- vrrp
  - events
    - all-events
    - interface string
      - all-vrids
      - ipv4
        - vrid number
      - ipv6
        - vrid number
  - packet
    - all-packets
    - interface string
      - all-vrids
      - ipv4
        - vrid number
      - ipv6
        - vrid number
- wpp
  - packets
    - detail-level keyword
  - portal string
    - packets
      - detail-level keyword
- service
  - ies string
    - ppp
      - circuit-id string
      - events
        - all
        - dhcp-client
          - terminate-only boolean
        - l2tp
          - terminate-only boolean
        - local-address-assignment
          - terminate-only boolean
        - ppp
          - terminate-only boolean
      - mac string
    - packets
      - all
      - detail-level keyword
      - dhcp-client boolean
      - discovery
        - all
        - padi boolean
        - pado boolean
        - padr boolean
        - pads boolean
        - padt boolean
      - mode keyword
      - ppp-session
        - all
        - chap boolean
        - ipcp boolean

```

```
debug service ies ppp packets ppp-session ipv6cp
```

```

    - ipv6cp boolean
    - lcp boolean
    - pap boolean
  - remote-id string
  - sap string
  - user-name string
- vpls string
- igmp-snooping
  - packet
    - detail keyword
    - dropped boolean
    - egress boolean
    - evpn-mpls boolean
    - evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
    - ingress boolean
    - mac string
    - sap string
    - sdp-bind string
  - mld-snooping
    - packet
      - detail keyword
      - dropped boolean
      - egress boolean
      - evpn-mpls boolean
      - evpn-vxlan (ipv4-address-no-zone | ipv6-address-no-zone) vni number
      - ingress boolean
      - mac string
      - sap string
      - sdp-bind string
    - mrp
      - events
        - all-events
        - event-types
          - applicant-sm boolean
          - leave-all-sm boolean
          - mrpdu boolean
          - periodic-sm boolean
          - registrant-sm boolean
      - mrrp-mac string
      - mvrp-vlan number
      - sap string
      - sdp-bind string
  - pim-snooping
    - events
      - adjacency
      - all
        - detail boolean
        - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - db
        - detail boolean
        - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - jp
        - detail boolean
        - group-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - mcs
        - detail boolean
      - port
        - detail boolean
        - evpn-mpls
        - sap-id string
        - sdp-bind-id string

```

debug service vpls pim-snooping events port vni

```

    - vni number
    - vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - red
    - detail boolean
- packet
  - all-origins
  - all-packet-types
  - packet-types
    - hello boolean
    - jp boolean
  - port
    - evpn-mpls
    - sap-id string
    - sdp-bind-id string
    - vni number
    - vtep (ipv4-address-no-zone | ipv6-address-no-zone)
- ppp
  - circuit-id string
  - events
    - all
    - dhcp-client
      - terminate-only boolean
    - l2tp
      - terminate-only boolean
    - local-address-assignment
      - terminate-only boolean
    - ppp
      - terminate-only boolean
  - mac string
  - packets
    - all
    - detail-level keyword
    - dhcp-client boolean
    - discovery
      - all
      - padi boolean
      - pado boolean
      - padr boolean
      - pads boolean
      - padt boolean
    - mode keyword
    - ppp-session
      - all
      - chap boolean
      - ipcp boolean
      - ipv6cp boolean
      - lcp boolean
      - pap boolean
  - remote-id string
  - sap string
  - user-name string
- proxy-arp
  - all
  - ip
    - address string
  - mac
    - address string
- proxy-nd
  - all
  - ip
    - address string
  - mac
    - address string
- spb

```

## debug service vpls spb events

```

- events
  - adjacency
    - sap string
    - sdp-bind-id string
    - system-id string
  - l2db boolean
  - lsdb
    - hostname (lsp-id | system-id)
  - spf
    - system-id string
- interface
  - sap string
  - sdp-bind-id string
- packet
  - detail boolean
  - sap string
  - sdp-bind-id string
  - type keyword
- stp
  - events
    - all-events
    - event-types
      - bpdu boolean
      - core-connectivity boolean
      - exception boolean
      - fsm-state-changes boolean
      - fsm-timers boolean
      - port-role boolean
      - port-state boolean
    - sap string
    - sdp-bind string
- vprn string
  - ppp
    - circuit-id string
    - events
      - all
      - dhcp-client
        - terminate-only boolean
      - l2tp
        - terminate-only boolean
      - local-address-assignment
        - terminate-only boolean
      - ppp
        - terminate-only boolean
    - mac string
  - packets
    - all
    - detail-level keyword
    - dhcp-client boolean
    - discovery
      - all
      - padi boolean
      - pado boolean
      - padr boolean
      - pads boolean
      - padt boolean
    - mode keyword
  - ppp-session
    - all
    - chap boolean
    - ipcp boolean
    - ipv6cp boolean
    - lcp boolean
    - pap boolean

```



debug service vprn ppp remote-id

```

    - remote-id string
    - sap string
    - user-name string
- subscriber-mgmt
- gtp
  - events boolean
  - imsi string
  - packets
    - detail-level keyword
    - mode keyword
  - peer (ipv4-address-no-zone | ipv6-address-no-zone) router string
  - udp-port number
- system
- grpc
  - client
    - all
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - type keyword
  - grpc-tunnel
    - tunnel
      - all
      - name string
  - http-connections
    - client-ip-prefix (ipv4-prefix | ipv6-prefix | keyword)
- management-interface
  - netconf keyword
  - remote-management
    - manager
      - all
      - manager-name string
    - service boolean
- wlan-gw
- group number
  - learn-ap-mac
    - tunnel-remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - statistic keyword name string
  - capture-packet boolean
  - ue
    - bridge-domain number
    - mac-address string
    - protocols
      - arp boolean
      - dhcp4 boolean
      - dhcp6 boolean
      - icmp4 boolean
      - icmp6 boolean
      - radius boolean

```

### 3.13.1 debug command descriptions

#### debug

Synopsis	Configure application or protocol tracing
Context	<a href="#">debug</a>
Tree	<a href="#">debug</a>
Description	Commands in this context enable detailed debugging information for various protocols and router functions.
Introduced	21.5.R1
Platforms	All

#### aaa

Synopsis	Enter the <b>aaa</b> context
Context	<a href="#">debug aaa</a>
Tree	<a href="#">aaa</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### diameter

Synopsis	Enter the <b>diameter</b> context
Context	<a href="#">debug aaa diameter</a>
Tree	<a href="#">diameter</a>
Description	Commands in this context configure Diameter Base parameters.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### application

Synopsis	Enter the <b>application</b> context
Context	<a href="#">debug aaa diameter application</a>
Tree	<a href="#">application</a>

Description	Commands in this context configure debugging for Diameter session-aware application messages and application message processing failures, for example, in the case of an unknown Diameter session ID.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failures** *boolean*

Synopsis	Debug Diameter application failures
Context	<a href="#">debug aaa diameter application failures</a> <i>boolean</i>
Tree	<a href="#">failures</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** [[name](#)] *string*

Synopsis	Enter the <b>policy</b> list instance
Context	<a href="#">debug aaa diameter application policy</a> <i>string</i>
Tree	<a href="#">policy</a>
Max. Instances	32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Diameter application policy name
Context	<a href="#">debug aaa diameter application policy</a> <i>string</i>
Tree	<a href="#">policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failures** *boolean*

Synopsis	Debug Diameter application failures
Context	<a href="#">debug aaa diameter application policy</a> <i>string</i> <b>failures</b> <i>boolean</i>
Tree	<a href="#">failures</a>
Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**messages** *boolean*

Synopsis	Debug Diameter application messages
Context	<a href="#">debug aaa diameter application policy</a> <i>string</i> <b>messages</b> <i>boolean</i>
Tree	<a href="#">messages</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**node** [[origin-host](#)] *string*

Synopsis	Enter the <b>node</b> list instance
Context	<a href="#">debug aaa diameter node</a> <i>string</i>
Tree	<a href="#">node</a>
Max. Instances	32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[origin-host]** *string*

Synopsis	Origin host of the Diameter node
Context	<a href="#">debug aaa diameter node</a> <i>string</i>
Tree	<a href="#">node</a>
String Length	1 to 80
Notes	This element is part of a list key.
Introduced	23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failures** *boolean*

Synopsis Debug Diameter node failures

Context [debug aaa diameter node](#) *string failures boolean*

Tree [failures](#)

Description When configured to **true**, the system debugs Diameter node-level failures that occur before the peer is determined. For example, when no route for a message is found in the realm routing table.

Default true

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[index](#)] *number*

Synopsis Enter the **peer** list instance

Context [debug aaa diameter node](#) *string peer number*

Tree [peer](#)

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[index]** *number*

Synopsis Index of the peer in the Diameter node

Context [debug aaa diameter node](#) *string peer number*

Tree [peer](#)

Range 1 to 5

Notes This element is part of a list key.

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failures** *boolean*

Synopsis Debug Diameter peer failures

Context [debug aaa diameter node](#) *string peer number failures boolean*

Tree	<a href="#">failures</a>
Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **messages** *boolean*

Synopsis	Debug Diameter peer messages
Context	<a href="#">debug aaa diameter node</a> <i>string</i> <a href="#">peer number</a> <a href="#">messages</a> <i>boolean</i>
Tree	<a href="#">messages</a>
Description	When configured to <b>true</b> , the system debugs peer-level messages that are required to bring up, maintain, and tear down a peering connection, for example, Capabilities Exchange and Device Watchdog messages.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **relayed-messages** *boolean*

Synopsis	Debug relayed Diameter messages
Context	<a href="#">debug aaa diameter node</a> <i>string</i> <a href="#">relayed-messages</a> <i>boolean</i>
Tree	<a href="#">relayed-messages</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **call-trace**

Synopsis	Enter the <b>call-trace</b> context
Context	<a href="#">debug call-trace</a>
Tree	<a href="#">call-trace</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe**

Synopsis	Enter the <b>ipoe</b> context
Context	<a href="#">debug call-trace ipoe</a>
Tree	<a href="#">ipoe</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**trace [name] string**

Synopsis	Enter the <b>trace</b> list instance
Context	<a href="#">debug call-trace ipoe trace string</a>
Tree	<a href="#">trace</a>
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name] string**

Synopsis	Unique trace name
Context	<a href="#">debug call-trace ipoe trace string</a>
Tree	<a href="#">trace</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**circuit-id string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit ID of the sessions to trace
Context	<a href="#">debug call-trace ipoe trace string circuit-id string</a>
Tree	<a href="#">circuit-id</a>

Description	This command configures the circuit ID of the sessions to trace. The circuit ID filter is ignored if it is not part of the IPoE session key.
String Length	1 to 255
Notes	The following elements are part of a choice: <b>circuit-id</b> or <b>remote-id</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### mac string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	<a href="#">debug call-trace ipoe trace string mac string</a>
Tree	<a href="#">mac</a>
String Length	1 to 17
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### max-jobs number



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of trace jobs
Context	<a href="#">debug call-trace ipoe trace string max-jobs number</a>
Tree	<a href="#">max-jobs</a>
Range	1 to 50
Default	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**profile string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	<code>debug call-trace ipoe trace string profile string</code>
Tree	<code>profile</code>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-id string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Remote ID of the sessions to trace
Context	<code>debug call-trace ipoe trace string remote-id string</code>
Tree	<code>remote-id</code>
Description	This command configures the remote ID of the sessions to trace. The remote ID filter is ignored if it is not part of the IPoE session key.
String Length	1 to 255
Notes	The following elements are part of a choice: <b>circuit-id</b> or <b>remote-id</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID of the sessions to trace
Context	<code>debug call-trace ipoe trace string sap string</code>

Tree	<a href="#">sap</a>
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **trace-existing-sessions** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable call trace for existing sessions
Context	<a href="#">debug call-trace ipoe trace</a> <i>string</i> <a href="#">trace-existing-sessions</a> <i>boolean</i>
Tree	<a href="#">trace-existing-sessions</a>
Description	When configured to <b>true</b> , the system traces existing sessions. When configured to <b>false</b> , only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe**

Synopsis	Enter the <b>pppoe</b> context
Context	<a href="#">debug call-trace pppoe</a>
Tree	<a href="#">pppoe</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **trace** [[name](#)] *string*

Synopsis	Enter the <b>trace</b> list instance
Context	<a href="#">debug call-trace pppoe trace</a> <i>string</i>
Tree	<a href="#">trace</a>
Max. Instances	50
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [name] *string*

Synopsis Unique trace name  
 Context [debug call-trace pppoe trace string](#)  
 Tree [trace](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### circuit-id *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Circuit ID of the sessions to trace  
 Context [debug call-trace pppoe trace string circuit-id string](#)  
 Tree [circuit-id](#)  
 String Length 1 to 255  
 Introduced 22.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### mac *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MAC address of the sessions to trace  
 Context [debug call-trace pppoe trace string mac string](#)  
 Tree [mac](#)  
 String Length 1 to 17  
 Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### max-jobs *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Maximum number of trace jobs

Context [debug call-trace pppoe trace](#) *string max-jobs number*

Tree [max-jobs](#)

Range 1 to 50

Default 1

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### profile *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Call trace profile applied for the trace

Context [debug call-trace pppoe trace](#) *string profile string*

Tree [profile](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### remote-id *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Remote ID of the sessions to trace

Context	<code>debug call-trace pppoe trace string remote-id string</code>
Tree	<code>remote-id</code>
String Length	1 to 255
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID of the sessions to trace
Context	<code>debug call-trace pppoe trace string sap string</code>
Tree	<code>sap</code>
String Length	1 to 45
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**trace-existing-sessions boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable call trace for existing sessions
Context	<code>debug call-trace pppoe trace string trace-existing-sessions boolean</code>
Tree	<code>trace-existing-sessions</code>
Description	When configured to <b>true</b> , the system traces existing sessions. When configured to <b>false</b> , only new sessions are traced.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-name *string*****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PPPoE username of the sessions to trace
Context	<a href="#">debug call-trace pppoe trace</a> <i>string</i> <a href="#">user-name</a> <i>string</i>
Tree	<a href="#">user-name</a>
String Length	1 to 253
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**wlan-gw**

Synopsis	Enter the <b>wlan-gw</b> context
Context	<a href="#">debug call-trace wlan-gw</a>
Tree	<a href="#">wlan-gw</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ue [*name*] *string***

Synopsis	Enter the <b>ue</b> list instance
Context	<a href="#">debug call-trace wlan-gw ue</a> <i>string</i>
Tree	<a href="#">ue</a>
Max. Instances	50
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[*name*] *string***

Synopsis	Unique trace name
Context	<a href="#">debug call-trace wlan-gw ue</a> <i>string</i>
Tree	<a href="#">ue</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### mac string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC address of the sessions to trace
Context	<a href="#">debug call-trace wlan-gw ue string mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### profile string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Call trace profile applied for the trace
Context	<a href="#">debug call-trace wlan-gw ue string profile string</a>
Tree	<a href="#">profile</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### l2tp

Synopsis	Enter the <b>l2tp</b> context
Context	<a href="#">debug l2tp</a>
Tree	<a href="#">l2tp</a>

Introduced	23.7.R1
Platforms	All

### **predictable-id-assignment** *boolean*

Synopsis	Enable predictable tunnel and session ID assignment
Context	<a href="#">debug l2tp predictable-id-assignment</a> <i>boolean</i>
Tree	<a href="#">predictable-id-assignment</a>
Default	false
Introduced	23.7.R1
Platforms	All

### **lag** [[lag-name](#)] *string*

Synopsis	Enter the <b>lag</b> list instance
Context	<a href="#">debug lag</a> <i>string</i>
Tree	<a href="#">lag</a>
Description	Commands in this context configure debugging for Link Aggregation Group (LAG).
Introduced	22.7.R1
Platforms	All

### **[lag-name]** *string*

Synopsis	LAG name
Context	<a href="#">debug lag</a> <i>string</i>
Tree	<a href="#">lag</a>
Description	This command specifies the LAG name.  In model-driven interfaces, the LAG name is used for configuration references and <b>show</b> commands. A service provider or administrator can use the defined LAG name to identify and manage LAGs within the SR OS platforms.  The LAG name must always start with "lag-".
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All



**bfd** *boolean*

Synopsis	Enable debugging for BFD
Context	<a href="#">debug lag string bfd boolean</a>
Tree	<a href="#">bfd</a>
Default	false
Introduced	22.7.R1
Platforms	All

**config** *boolean*

Synopsis	Enable debugging for configuration changes
Context	<a href="#">debug lag string config boolean</a>
Tree	<a href="#">config</a>
Default	false
Introduced	22.7.R1
Platforms	All

**iom-updates** *boolean*

Synopsis	Enable debugging for IOM updates
Context	<a href="#">debug lag string iom-updates boolean</a>
Tree	<a href="#">iom-updates</a>
Default	false
Introduced	22.7.R1
Platforms	All

**lACP-packets** *boolean*

Synopsis	Enable debugging for LACP packets
Context	<a href="#">debug lag string lacp-packets boolean</a>
Tree	<a href="#">lacp-packets</a>
Default	false
Introduced	22.7.R1
Platforms	All

**multi-chassis** *boolean*

Synopsis	Enable debugging for multi-chassis LAG
Context	<a href="#">debug lag string multi-chassis boolean</a>
Tree	<a href="#">multi-chassis</a>
Default	false
Introduced	22.7.R1
Platforms	All

**multi-chassis-packets** *boolean*

Synopsis	Enable debugging for multi-chassis packets
Context	<a href="#">debug lag string multi-chassis-packets boolean</a>
Tree	<a href="#">multi-chassis-packets</a>
Default	false
Introduced	22.7.R1
Platforms	All

**port** [[port-id](#)] *string*

Synopsis	Enter the <b>port</b> list instance
Context	<a href="#">debug lag string port string</a>
Tree	<a href="#">port</a>
Introduced	22.7.R1
Platforms	All

**[port-id]** *string*

Synopsis	Unique identifier for the port in the LAG
Context	<a href="#">debug lag string port string</a>
Tree	<a href="#">port</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**bfd** *boolean*

Synopsis	Enable debugging for BFD
Context	<a href="#">debug lag</a> <i>string port string bfd boolean</i>
Tree	<a href="#">bfd</a>
Default	false
Introduced	22.7.R1
Platforms	All

**config** *boolean*

Synopsis	Enable debugging for configuration changes
Context	<a href="#">debug lag</a> <i>string port string config boolean</i>
Tree	<a href="#">config</a>
Default	false
Introduced	22.7.R1
Platforms	All

**lACP-packets** *boolean*

Synopsis	Enable debugging for LACP packets
Context	<a href="#">debug lag</a> <i>string port string lACP-packets boolean</i>
Tree	<a href="#">lACP-packets</a>
Default	false
Introduced	22.7.R1
Platforms	All

**multi-chassis** *boolean*

Synopsis	Enable debugging for multi-chassis LAG
Context	<a href="#">debug lag</a> <i>string port string multi-chassis boolean</i>
Tree	<a href="#">multi-chassis</a>
Default	false
Introduced	22.7.R1
Platforms	All

**port-states** *boolean*

Synopsis	Enable debugging for port-state changes
Context	<a href="#">debug lag string port string port-states boolean</a>
Tree	<a href="#">port-states</a>
Default	false
Introduced	22.7.R1
Platforms	All

**redundancy** *boolean*

Synopsis	Enable debugging for redundancy
Context	<a href="#">debug lag string port string redundancy boolean</a>
Tree	<a href="#">redundancy</a>
Default	false
Introduced	22.7.R1
Platforms	All

**selection-logic** *boolean*

Synopsis	Enable debugging for selection logic
Context	<a href="#">debug lag string port string selection-logic boolean</a>
Tree	<a href="#">selection-logic</a>
Default	false
Introduced	22.7.R1
Platforms	All

**state-machine** *boolean*

Synopsis	Enable debugging for state-machine changes
Context	<a href="#">debug lag string port string state-machine boolean</a>
Tree	<a href="#">state-machine</a>
Default	false
Introduced	22.7.R1
Platforms	All

**timers** *boolean*

Synopsis	Enable debugging for timers
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">timers</a> <i>boolean</i>
Tree	<a href="#">timers</a>
Default	false
Introduced	22.7.R1
Platforms	All

**port-states** *boolean*

Synopsis	Enable debugging for port-state changes
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">port-states</a> <i>boolean</i>
Tree	<a href="#">port-states</a>
Default	false
Introduced	22.7.R1
Platforms	All

**redundancy** *boolean*

Synopsis	Enable debugging for redundancy
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">redundancy</a> <i>boolean</i>
Tree	<a href="#">redundancy</a>
Default	false
Introduced	22.7.R1
Platforms	All

**selection-logic** *boolean*

Synopsis	Enable debugging for selection logic
Context	<a href="#">debug lag</a> <i>string</i> <a href="#">selection-logic</a> <i>boolean</i>
Tree	<a href="#">selection-logic</a>
Default	false
Introduced	22.7.R1
Platforms	All

**state-machine** *boolean*

Synopsis	Enable debugging for state-machine changes
Context	<a href="#">debug lag</a> <i>string state-machine boolean</i>
Tree	<a href="#">state-machine</a>
Default	false
Introduced	22.7.R1
Platforms	All

**timers** *boolean*

Synopsis	Enable debugging for timers
Context	<a href="#">debug lag</a> <i>string timers boolean</i>
Tree	<a href="#">timers</a>
Default	false
Introduced	22.7.R1
Platforms	All

**nat**

Synopsis	Enter the <b>nat</b> context
Context	<a href="#">debug nat</a>
Tree	<a href="#">nat</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**I2-aware**

Synopsis	Enter the <b>I2-aware</b> context
Context	<a href="#">debug nat I2-aware</a>
Tree	<a href="#">I2-aware</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber** [[subscriber-id](#)] *string*

Synopsis	Add a list entry for <b>subscriber</b>
Context	<a href="#">debug nat l2-aware subscriber</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[subscriber-id]** *string*

Synopsis	L2-aware subscriber ID
Context	<a href="#">debug nat l2-aware subscriber</a> <i>string</i>
Tree	<a href="#">subscriber</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**upnp**

Synopsis	Enter the <b>upnp</b> context
Context	<a href="#">debug nat l2-aware upnp</a>
Tree	<a href="#">upnp</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber** [[subscriber-id](#)] *string*

Synopsis	Enter the <b>subscriber</b> list instance
Context	<a href="#">debug nat l2-aware upnp subscriber</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Max. Instances	10
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[subscriber-id]** *string*

Synopsis L2-aware subscriber ID  
Context [debug nat l2-aware upnp subscriber string](#)  
Tree [subscriber](#)  
String Length 1 to 64  
Notes This element is part of a list key.  
Introduced 22.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **events** *boolean*

Synopsis Enable UPnP event debugging  
Context [debug nat l2-aware upnp subscriber string events boolean](#)  
Tree [events](#)  
Default true  
Introduced 22.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packets**

Synopsis Enable the **packets** context  
Context [debug nat l2-aware upnp subscriber string packets](#)  
Tree [packets](#)  
Introduced 22.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **detail** *boolean*

Synopsis Include IP, UDP, and TCP headers in UPnP packet debug  
Context [debug nat l2-aware upnp subscriber string packets detail boolean](#)  
Tree [detail](#)  
Default false



Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## large-scale

Synopsis	Enter the <b>large-scale</b> context
Context	<a href="#">debug nat large-scale</a>
Tree	<a href="#">large-scale</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dual-stack-lite

Synopsis	Enter the <b>dual-stack-lite</b> context
Context	<a href="#">debug nat large-scale dual-stack-lite</a>
Tree	<a href="#">dual-stack-lite</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscriber [inside-router string b4-address string](#)

Synopsis	Add a list entry for <b>subscriber</b>
Context	<a href="#">debug nat large-scale dual-stack-lite subscriber inside-router string b4-address string</a>
Tree	<a href="#">subscriber</a>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inside-router [string](#)

Synopsis	Inside router instance name
Context	<a href="#">debug nat large-scale dual-stack-lite subscriber inside-router string b4-address string</a>
Tree	<a href="#">subscriber</a>
MD-CLI Default	Base

Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **b4-address** *string*

Synopsis	IPv6 B4 address of the DS-Lite subscriber
Context	<a href="#">debug nat large-scale dual-stack-lite subscriber inside-router</a> <i>string</i> <b>b4-address</b> <i>string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat44**

Synopsis	Enter the <b>nat44</b> context
Context	<a href="#">debug nat large-scale nat44</a>
Tree	<a href="#">nat44</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber** [inside-router](#) *string* [ip-address](#) *string*

Synopsis	Add a list entry for <b>subscriber</b>
Context	<a href="#">debug nat large-scale nat44 subscriber inside-router</a> <i>string</i> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inside-router** *string*

Synopsis	Inside router instance name
Context	<a href="#">debug nat large-scale nat44 subscriber inside-router</a> <i>string</i> <a href="#">ip-address</a> <i>string</i>

Tree	<a href="#">subscriber</a>
MD-CLI Default	Base
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis	Inside IPv4 address of the NAT44 subscriber
Context	<a href="#">debug nat large-scale nat44 subscriber inside-router</a> <i>string ip-address string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat64**

Synopsis	Enter the <b>nat64</b> context
Context	<a href="#">debug nat large-scale nat64</a>
Tree	<a href="#">nat64</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber** [inside-router](#) *string ipv6-prefix string*

Synopsis	Add a list entry for <b>subscriber</b>
Context	<a href="#">debug nat large-scale nat64 subscriber inside-router</a> <i>string ipv6-prefix string</i>
Tree	<a href="#">subscriber</a>
Max. Instances	16
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inside-router** *string*

Synopsis	Inside router instance name
Context	<a href="#">debug nat large-scale nat64 subscriber inside-router</a> <i>string</i> <a href="#">ipv6-prefix</a> <i>string</i>
Tree	<a href="#">subscriber</a>
MD-CLI Default	Base
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6-prefix** *string*

Synopsis	NAT64 IPv6 prefix of the subscriber
Context	<a href="#">debug nat large-scale nat64 subscriber inside-router</a> <i>string</i> <a href="#">ipv6-prefix</a> <i>string</i>
Tree	<a href="#">subscriber</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-import**

Synopsis	Enter the <b>nat-import</b> context
Context	<a href="#">debug nat nat-import</a>
Tree	<a href="#">nat-import</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**route** [[ip-address](#)] ([ipv4-unicast-address](#) | *keyword*) [inside-router](#) *string*

Synopsis	Add a list entry for <b>route</b>
Context	<a href="#">debug nat nat-import route</a> ( <a href="#">ipv4-unicast-address</a>   <i>keyword</i> ) <a href="#">inside-router</a> <i>string</i>
Tree	<a href="#">route</a>
Max. Instances	32
Introduced	22.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-address]** (*ipv4-unicast-address* | *keyword*)

Synopsis IPv4 address of imported route, or any  
 Context [debug nat nat-import route](#) (*ipv4-unicast-address* | *keyword*) [inside-router](#) *string*  
 Tree [route](#)  
 Options any  
 Notes This element is part of a list key.  
 Introduced 22.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inside-router** *string*

Synopsis Router name or VPRN service name, or any  
 Context [debug nat nat-import route](#) (*ipv4-unicast-address* | *keyword*) [inside-router](#) *string*  
 Tree [route](#)  
 Notes This element is part of a list key.  
 Introduced 22.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pcp**

Synopsis Enter the **pcp** context  
 Context [debug nat pcp](#)  
 Tree [pcp](#)  
 Introduced 22.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router** [[router-instance](#)] *string*

Synopsis Enter the **router** list instance  
 Context [debug nat pcp router](#) *string*  
 Tree [router](#)

Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[router-instance] string**

Synopsis	Inside router instance name
Context	<a href="#">debug nat pcp router string</a>
Tree	<a href="#">router</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server [name] string**

Synopsis	Enter the <b>server</b> list instance
Context	<a href="#">debug nat pcp router string server string</a>
Tree	<a href="#">server</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name] string**

Synopsis	PCP server name
Context	<a href="#">debug nat pcp router string server string</a>
Tree	<a href="#">server</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## packets

Synopsis	Enter the <b>packets</b> context
Context	<a href="#">debug nat pcp router</a> <i>string</i> <a href="#">server</a> <i>string</i> <b>packets</b>
Tree	<a href="#">packets</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## detail *boolean*

Synopsis	Enable the detailed PCP packet debug output
Context	<a href="#">debug nat pcp router</a> <i>string</i> <a href="#">server</a> <i>string</i> <a href="#">packets</a> <b>detail</b> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## direction *keyword*

Synopsis	Direction of the PCP packet debugging
Context	<a href="#">debug nat pcp router</a> <i>string</i> <a href="#">server</a> <i>string</i> <a href="#">packets</a> <b>direction</b> <i>keyword</i>
Tree	<a href="#">direction</a>
Options	ingress, egress, both
Default	ingress
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router [[router-instance](#)] *string*

Synopsis	Enter the <b>router</b> list instance
Context	<a href="#">debug router</a> <i>string</i>
Tree	<a href="#">router</a>
Introduced	22.5.R1
Platforms	All

**[router-instance] string**

Synopsis	Router name or VPRN service name
Context	<a href="#">debug router string</a>
Tree	<a href="#">router</a>
MD-CLI Default	Base
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**dhcp**

Synopsis	Enter the <b>dhcp</b> context
Context	<a href="#">debug router string dhcp</a>
Tree	<a href="#">dhcp</a>
Description	<p>Commands in this context enable DHCP debug for all packets in the specified routing instance or VPRN service, or for specific packets matching the specific MAC addresses, SAP identifiers, or interface names.</p> <p>When a DHCP packet matches a specified filter and is conforming the configured debug mode for that filter, the packet debug is available in the specified detail level. DHCP debug filter criteria are applied in the following order:</p> <ol style="list-style-type: none"> <li>1. MAC address</li> <li>2. SAP identifier</li> <li>3. interface names</li> <li>4. all packets</li> </ol> <p>Up to 8 MAC address filters, 8 SAP identifier filters, 4 interface name filters, and 4 all-packet filters can be specified simultaneously across all routing instances and VPRN services.</p>
Introduced	22.10.R1
Platforms	All

**all-packets**

Synopsis	Enable the <b>all-packets</b> context
Context	<a href="#">debug router string dhcp all-packets</a>
Tree	<a href="#">all-packets</a>
Introduced	22.10.R1



Platforms All

### **detail-level** *keyword*

Synopsis Detail level of the DHCP debug output  
 Context [debug router](#) *string dhcp all-packets detail-level keyword*  
 Tree [detail-level](#)  
 Options high, medium, low  
 Default high  
 Introduced 22.10.R1  
 Platforms All

### **mode** *keyword*

Synopsis DHCP packets present in the debug output  
 Context [debug router](#) *string dhcp all-packets mode keyword*  
 Tree [mode](#)  
 Options egress-ingress-and-dropped, dropped-only, ingress-and-dropped  
 Default egress-ingress-and-dropped  
 Introduced 22.10.R1  
 Platforms All

### **interface** [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance  
 Context [debug router](#) *string dhcp interface string*  
 Tree [interface](#)  
 Introduced 22.10.R1  
 Platforms All

### **[interface-name]** *string*

Synopsis Interface name  
 Context [debug router](#) *string dhcp interface string*  
 Tree [interface](#)

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

### **detail-level** *keyword*

Synopsis	Detail level of the DHCP debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">dhcp interface</a> <i>string</i> <b>detail-level</b> <i>keyword</i>
Tree	<a href="#">detail-level</a>
Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

### **mode** *keyword*

Synopsis	DHCP packets present in the debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">dhcp interface</a> <i>string</i> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

### **mac** [[address](#)] *string*

Synopsis	Enter the <b>mac</b> list instance
Context	<a href="#">debug router</a> <i>string</i> <a href="#">dhcp mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Introduced	22.10.R1
Platforms	All

**[address] string**

Synopsis	MAC address matching the client hardware address field
Context	<a href="#">debug router string dhcp mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**detail-level keyword**

Synopsis	Detail level of the DHCP debug output
Context	<a href="#">debug router string dhcp mac string detail-level keyword</a>
Tree	<a href="#">detail-level</a>
Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

**mode keyword**

Synopsis	DHCP packets present in the debug output
Context	<a href="#">debug router string dhcp mac string mode keyword</a>
Tree	<a href="#">mode</a>
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

**sap [sap-id] string**

Synopsis	Enter the <b>sap</b> list instance
Context	<a href="#">debug router string dhcp sap string</a>
Tree	<a href="#">sap</a>
Introduced	22.10.R1
Platforms	All

**[sap-id] string**

Synopsis	SAP ID
Context	<a href="#">debug router string dhcp sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**detail-level keyword**

Synopsis	Detail level of the DHCP debug output
Context	<a href="#">debug router string dhcp sap string detail-level keyword</a>
Tree	<a href="#">detail-level</a>
Options	high, medium, low
Default	high
Introduced	22.10.R1
Platforms	All

**mode keyword**

Synopsis	DHCP packets present in the debug output
Context	<a href="#">debug router string dhcp sap string mode keyword</a>
Tree	<a href="#">mode</a>
Options	egress-ingress-and-dropped, dropped-only, ingress-and-dropped
Default	egress-ingress-and-dropped
Introduced	22.10.R1
Platforms	All

**igmp**

Synopsis	Enter the <b>igmp</b> context
Context	<a href="#">debug router string igmp</a>
Tree	<a href="#">igmp</a>

Introduced	22.10.R1
Platforms	All

## group-interface

Synopsis	Enable the <b>group-interface</b> context
Context	<a href="#">debug router string igmp group-interface</a>
Tree	<a href="#">group-interface</a>
Introduced	22.10.R1
Platforms	All

## all-group-interfaces

Synopsis	Trace all interfaces
Context	<a href="#">debug router string igmp group-interface all-group-interfaces</a>
Tree	<a href="#">all-group-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

## forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	<a href="#">debug router string igmp group-interface forwarding-service string</a>
Tree	<a href="#">forwarding-service</a>
String Length	1 to 64
Default	<code>.././router-instance</code>
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

## group-interface-name *string*

Synopsis	Interface name
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Context	<code>debug router <i>string</i> igmp group-interface group-interface-name <i>string</i></code>
Tree	<code>group-interface-name</code>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

## host

Synopsis	Enable the <b>host</b> context
Context	<code>debug router <i>string</i> igmp host</code>
Tree	<code>host</code>
Introduced	22.10.R1
Platforms	All

## group-interface

Synopsis	Enter the <b>group-interface</b> context
Context	<code>debug router <i>string</i> igmp host group-interface</code>
Tree	<code>group-interface</code>
Introduced	22.10.R1
Platforms	All

## forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	<code>debug router <i>string</i> igmp host group-interface forwarding-service <i>string</i></code>
Tree	<code>forwarding-service</code>
String Length	1 to 64
Default	<code>.././router-instance</code>
Introduced	22.10.R1
Platforms	All

### **group-interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp host group-interface</a> <a href="#">group-interface-name</a> <i>string</i>
Tree	<a href="#">group-interface-name</a>
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

### **ip-address** *string*

Synopsis	IP address of the host to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp host ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **interface**

Synopsis	Enable the <b>interface</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp interface</a>
Tree	<a href="#">interface</a>
Introduced	22.10.R1
Platforms	All

### **all-interfaces**

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp interface all-interfaces</a>
Tree	<a href="#">all-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp interface interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **mcs**

Synopsis	Enable the <b>mcs</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp mcs</a>
Tree	<a href="#">mcs</a>
Description	Commands in this context enable debugging for IGMP multicast servers.
Introduced	22.10.R1
Platforms	All

### **all-interfaces**

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp mcs all-interfaces</a>
Tree	<a href="#">all-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp mcs interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32



Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **miscellaneous** *boolean*

Synopsis	Enable tracing of miscellaneous events
Context	<a href="#">debug router</a> <i>string igmp miscellaneous boolean</i>
Tree	<a href="#">miscellaneous</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string igmp packet</i>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

### **all-origins**

Synopsis	Trace all origins
Context	<a href="#">debug router</a> <i>string igmp packet all-origins</i>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **dropped** *boolean*

Synopsis	Enable tracing for dropped packets
Context	<a href="#">debug router</a> <i>string igmp packet dropped boolean</i>

Tree	<a href="#">dropped</a>
Default	true
Introduced	22.10.R1
Platforms	All

### **egress** *boolean*

Synopsis	Enable tracing for transmitted packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp packet</a> <a href="#">egress</a> <i>boolean</i>
Tree	<a href="#">egress</a>
Default	true
Introduced	22.10.R1
Platforms	All

### **group-interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp packet</a> <a href="#">group-interface-name</a> <i>string</i>
Tree	<a href="#">group-interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **host-ip-address** *string*

Synopsis	Address of the host to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp packet</a> <a href="#">host-ip-address</a> <i>string</i>
Tree	<a href="#">host-ip-address</a>
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R2
Platforms	All

**ingress** *boolean*

Synopsis	Enable tracing for received packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp packet ingress</a> <i>boolean</i>
Tree	<a href="#">ingress</a>
Default	true
Introduced	22.10.R1
Platforms	All

**interface-ip-address** *string*

Synopsis	Source address of the packet to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp packet interface-ip-address</a> <i>string</i>
Tree	<a href="#">interface-ip-address</a>
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R2
Platforms	All

**interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp packet interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

**type** *keyword*

Synopsis	Packet type to trace
Context	<a href="#">debug router</a> <i>string</i> <a href="#">igmp packet type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	all – All IGMP packets query – IGMP Query packets

	v1-report – IGMP version 1 Report packets
	v2-report – IGMP version 2 Report packets
	v2-leave – IGMP version 2 Leave packets
	v3-report – IGMP version 3 Report packets
Default	all
Introduced	22.10.R1
Platforms	All

**ip**

Synopsis	Enter the <b>ip</b> context
Context	<a href="#">debug router string ip</a>
Tree	<a href="#">ip</a>
Introduced	23.3.R1
Platforms	All

**icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<a href="#">debug router string ip icmp</a>
Tree	<a href="#">icmp</a>
Introduced	23.3.R1
Platforms	All

**all-packets**

Synopsis	Enable the <b>all-packets</b> context
Context	<a href="#">debug router string ip icmp all-packets</a>
Tree	<a href="#">all-packets</a>
Introduced	23.3.R1
Platforms	All

**interface** [[interface-name](#)] *string*

Synopsis	Add a list entry for <b>interface</b>
Context	<a href="#">debug router string ip icmp interface string</a>

Tree	<a href="#">interface</a>
Introduced	23.3.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ip icmp interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

**icmp6**

Synopsis	Enter the <b>icmp6</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ip icmp6</a>
Tree	<a href="#">icmp6</a>
Introduced	23.3.R1
Platforms	All

**all-packets**

Synopsis	Enable the <b>all-packets</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ip icmp6 all-packets</a>
Tree	<a href="#">all-packets</a>
Introduced	23.3.R1
Platforms	All

**interface** [[interface-name](#)] *string*

Synopsis	Add a list entry for <b>interface</b>
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ip icmp6 interface</a> <i>string</i>
Tree	<a href="#">interface</a>

Introduced 23.3.R1  
Platforms All

### **[interface-name]** *string*

Synopsis Interface name  
Context [debug router string ip icmp6 interface string](#)  
Tree [interface](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 23.3.R1  
Platforms All

### **interface-events**

Synopsis Enter the **interface-events** context  
Context [debug router string ip interface-events](#)  
Tree [interface-events](#)  
Introduced 23.3.R1  
Platforms All

### **all-events**

Synopsis Enable the **all-events** context  
Context [debug router string ip interface-events all-events](#)  
Tree [all-events](#)  
Introduced 23.3.R1  
Platforms All

### **interface** [\[interface-name\]](#) *string*

Synopsis Add a list entry for **interface**  
Context [debug router string ip interface-events interface string](#)  
Tree [interface](#)  
Introduced 23.3.R1

Platforms All

### **[interface-name]** *string*

Synopsis Interface name  
Context [debug router](#) *string* [ip interface-events interface](#) *string*  
Tree [interface](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 23.3.R1  
Platforms All

### **neighbor**

Synopsis Enter the **neighbor** context  
Context [debug router](#) *string* [ip neighbor](#)  
Tree [neighbor](#)  
Introduced 23.3.R1  
Platforms All

### **all-events**

Synopsis Enable the **all-events** context  
Context [debug router](#) *string* [ip neighbor all-events](#)  
Tree [all-events](#)  
Introduced 23.3.R1  
Platforms All

### **address-family** *keyword*

Synopsis Debug the specified address family  
Context [debug router](#) *string* [ip neighbor all-events address-family](#) *keyword*  
Tree [address-family](#)  
Options ipv4, ipv6  
Introduced 23.3.R1

Platforms All

### **interface** [interface-name] *string*

Synopsis Enter the **interface** list instance  
 Context [debug router](#) *string* [ip neighbor interface](#) *string*  
 Tree [interface](#)  
 Introduced 23.3.R1  
 Platforms All

### **[interface-name]** *string*

Synopsis Interface name  
 Context [debug router](#) *string* [ip neighbor interface](#) *string*  
 Tree [interface](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 23.3.R1  
 Platforms All

### **address-family** *keyword*

Synopsis Debug the specified address family  
 Context [debug router](#) *string* [ip neighbor interface](#) *string* [address-family](#) *keyword*  
 Tree [address-family](#)  
 Options ipv4, ipv6  
 Introduced 23.3.R1  
 Platforms All

### **packet**

Synopsis Enter the **packet** context  
 Context [debug router](#) *string* [ip packet](#)  
 Tree [packet](#)  
 Introduced 23.3.R1



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Platforms All

### **all-packets**

Synopsis Enable the **all-packets** context

Context [debug router string ip packet all-packets](#)

Tree [all-packets](#)

Introduced 23.3.R1

Platforms All

### **address-family** *keyword*

Synopsis Debug the specified address family

Context [debug router string ip packet all-packets address-family keyword](#)

Tree [address-family](#)

Options ipv4, ipv6

Introduced 23.3.R1

Platforms All

### **headers** *boolean*

Synopsis Display information associated with packet header only

Context [debug router string ip packet all-packets headers boolean](#)

Tree [headers](#)

Default false

Introduced 23.3.R1

Platforms All

### **protocol-id** *number*

Synopsis IP protocol ID to trace

Context [debug router string ip packet all-packets protocol-id number](#)

Tree [protocol-id](#)

Range 0 to 255

Introduced 23.3.R1

Platforms All

### **interface** *[interface-name] string*

Synopsis Enter the **interface** list instance  
 Context [debug router string ip packet interface string](#)  
 Tree [interface](#)  
 Introduced 23.3.R1  
 Platforms All

### **[interface-name] string**

Synopsis Interface name  
 Context [debug router string ip packet interface string](#)  
 Tree [interface](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 23.3.R1  
 Platforms All

### **address-family keyword**

Synopsis Debug the specified address family  
 Context [debug router string ip packet interface string address-family keyword](#)  
 Tree [address-family](#)  
 Options ipv4, ipv6  
 Introduced 23.3.R1  
 Platforms All

### **headers boolean**

Synopsis Display information associated with packet header only  
 Context [debug router string ip packet interface string headers boolean](#)  
 Tree [headers](#)  
 Default false

Introduced	23.3.R1
Platforms	All

### **protocol-id** *number*

Synopsis	IP protocol ID to trace
Context	<a href="#">debug router</a> <i>string ip packet interface string protocol-id number</i>
Tree	<a href="#">protocol-id</a>
Range	0 to 255
Introduced	23.3.R1
Platforms	All

### **route-table**

Synopsis	Enable the <b>route-table</b> context
Context	<a href="#">debug router</a> <i>string ip route-table</i>
Tree	<a href="#">route-table</a>
Introduced	23.3.R1
Platforms	All

### **all**

Synopsis	Allow trace for all route updates
Context	<a href="#">debug router</a> <i>string ip route-table all</i>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or <b>filter</b> .
Introduced	23.3.R1
Platforms	All

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<a href="#">debug router</a> <i>string ip route-table filter</i>
Tree	<a href="#">filter</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or <b>filter</b> .

Introduced	23.3.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">debug router string ip route-table filter ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	23.3.R1
Platforms	All

## prefix [[prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<a href="#">debug router string ip route-table filter ipv4 prefix string</a>
Tree	<a href="#">prefix</a>
Max. Instances	1
Introduced	23.3.R1
Platforms	All

## [[prefix](#)] *string*

Synopsis	IPv4 prefix
Context	<a href="#">debug router string ip route-table filter ipv4 prefix string</a>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

## longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
Context	<a href="#">debug router string ip route-table filter ipv4 prefix string longest-prefix-match boolean</a>
Tree	<a href="#">longest-prefix-match</a>

Default	false
Introduced	23.3.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<a href="#">debug router string ip route-table filter ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	23.3.R1
Platforms	All

## prefix [[prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<a href="#">debug router string ip route-table filter ipv6 prefix string</a>
Tree	<a href="#">prefix</a>
Max. Instances	1
Introduced	23.3.R1
Platforms	All

## [[prefix](#)] *string*

Synopsis	IPv6 prefix
Context	<a href="#">debug router string ip route-table filter ipv6 prefix string</a>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

## longest-prefix-match *boolean*

Synopsis	Allow match for greatest prefix values
Context	<a href="#">debug router string ip route-table filter ipv6 prefix string longest-prefix-match boolean</a>

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Tree	<a href="#">longest-prefix-match</a>
Default	false
Introduced	23.3.R1
Platforms	All

## tunnel-table

Synopsis	Enable the <b>tunnel-table</b> context
Context	<a href="#">debug router string ip tunnel-table</a>
Tree	<a href="#">tunnel-table</a>
Introduced	23.3.R1
Platforms	All

## all

Synopsis	Allow trace for all tunnel updates
Context	<a href="#">debug router string ip tunnel-table all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or <b>filter</b> .
Introduced	23.3.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<a href="#">debug router string ip tunnel-table filter</a>
Tree	<a href="#">filter</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or <b>filter</b> .
Introduced	23.3.R1
Platforms	All

## id

Synopsis	Enter the <b>id</b> context
Context	<a href="#">debug router string ip tunnel-table filter id</a>

Tree	<a href="#">id</a>
Introduced	23.3.R1
Platforms	All

**sdp-id** *number*

Synopsis	SDP ID for tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ip tunnel-table filter id</a> <a href="#">sdp-id</a> <i>number</i>
Tree	<a href="#">sdp-id</a>
Range	1 to 32767
Notes	The following elements are part of a choice: <b>sdp-id</b> or <b>tunnel-id</b> .
Introduced	23.3.R1
Platforms	All

**tunnel-id** *number*

Synopsis	Tunnel ID for tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ip tunnel-table filter id</a> <a href="#">tunnel-id</a> <i>number</i>
Tree	<a href="#">tunnel-id</a>
Max. Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>sdp-id</b> or <b>tunnel-id</b> .
Introduced	23.3.R1
Platforms	All

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ip tunnel-table filter</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	23.3.R1
Platforms	All

**prefix** [[prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
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Context	<a href="#">debug router string ip tunnel-table filter ipv4 prefix string</a>
Tree	<a href="#">prefix</a>
Max. Instances	1
Introduced	23.3.R1
Platforms	All

**[prefix] string**

Synopsis	IPv4 prefix
Context	<a href="#">debug router string ip tunnel-table filter ipv4 prefix string</a>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

**longest-prefix-match boolean**

Synopsis	Allow match for greatest prefix values
Context	<a href="#">debug router string ip tunnel-table filter ipv4 prefix string longest-prefix-match boolean</a>
Tree	<a href="#">longest-prefix-match</a>
Default	false
Introduced	23.3.R1
Platforms	All

**tunnel-type (keyword | keyword)**

Synopsis	Tunnel type
Context	<a href="#">debug router string ip tunnel-table filter ipv4 prefix string tunnel-type (keyword   keyword)</a>
Tree	<a href="#">tunnel-type</a>
Options	none, invalid, sdp, rsvp, ldp, ospf, isis, bypass, gre, bgp, sr-te, fpe, udp, ospfv3, mpls-fwd-policy, sr-policy, rib-api, bgp-epe, srv6-isis, srv6-policy
Options	all
Default	all
Introduced	23.3.R1



Platforms All

## ipv6

Synopsis Enter the **ipv6** context  
 Context [debug router string ip tunnel-table filter ipv6](#)  
 Tree [ipv6](#)  
 Introduced 23.3.R1  
 Platforms All

## prefix [[prefix](#)] *string*

Synopsis Enter the **prefix** list instance  
 Context [debug router string ip tunnel-table filter ipv6 prefix string](#)  
 Tree [prefix](#)  
 Max. Instances 1  
 Introduced 23.3.R1  
 Platforms All

## [[prefix](#)] *string*

Synopsis IPv6 prefix  
 Context [debug router string ip tunnel-table filter ipv6 prefix string](#)  
 Tree [prefix](#)  
 Notes This element is part of a list key.  
 Introduced 23.3.R1  
 Platforms All

## longest-prefix-match *boolean*

Synopsis Allow match for greatest prefix values  
 Context [debug router string ip tunnel-table filter ipv6 prefix string longest-prefix-match boolean](#)  
 Tree [longest-prefix-match](#)  
 Default false

Introduced	23.3.R1
Platforms	All

### **tunnel-type** (*keyword* | *keyword*)

Synopsis	Tunnel type
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ip tunnel-table filter ipv6 prefix</a> <i>string</i> <b>tunnel-type</b> ( <i>keyword</i>   <i>keyword</i> )
Tree	<a href="#">tunnel-type</a>
Options	none, invalid, sdp, rsvp, ldp, ospf, isis, bypass, gre, bgp, sr-te, fpe, udp, ospfv3, mpls-fwd-policy, sr-policy, rib-api, bgp-epe, srv6-isis, srv6-policy
Options	all
Default	all
Introduced	23.3.R1
Platforms	All

### **l2tp**

Synopsis	Enter the <b>l2tp</b> context
Context	<a href="#">debug router</a> <i>string</i> <b>l2tp</b>
Tree	<a href="#">l2tp</a>
Introduced	23.7.R1
Platforms	All

### **assignment-id** [[assignment-id](#)] *string*

Synopsis	Enter the <b>assignment-id</b> list instance
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp</a> <b>assignment-id</b> <i>string</i>
Tree	<a href="#">assignment-id</a>
Max. Instances	8
Introduced	23.7.R1
Platforms	All

### **[assignment-id]** *string*

Synopsis	Assignment ID of the L2TP tunnel to debug
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Context	<code>debug router string l2tp assignment-id string</code>
Tree	<code>assignment-id</code>
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

## events

Synopsis	Enable the <b>events</b> context
Context	<code>debug router string l2tp assignment-id string events</code>
Tree	<code>events</code>
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Enable debugging for all events
Context	<code>debug router string l2tp assignment-id string events all</code>
Tree	<code>all</code>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## call-disconnect-notification *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	<code>debug router string l2tp assignment-id string events call-disconnect-notification boolean</code>
Tree	<code>call-disconnect-notification</code>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1

Platforms All

### **finite-state-machine** *boolean*

Synopsis Enable L2TP FSM event debugging

Context [debug router](#) *string* [l2tp assignment-id](#) *string* [events finite-state-machine](#) *boolean*

Tree [finite-state-machine](#)

Default false

Notes The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).

Introduced 23.7.R1

Platforms All

### **lac**

Synopsis Enter the **lac** context

Context [debug router](#) *string* [l2tp assignment-id](#) *string* [events lac](#)

Tree [lac](#)

Notes The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).

Introduced 23.7.R1

Platforms All

### **state-recovery** *boolean*

Synopsis Enable L2TP LAC state recovery event debugging

Context [debug router](#) *string* [l2tp assignment-id](#) *string* [events lac state-recovery](#) *boolean*

Tree [state-recovery](#)

Default false

Introduced 23.7.R1

Platforms All

**state-recovery-failed** *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">events lac state-recovery-failed</a> <i>boolean</i>
Tree	<a href="#">state-recovery-failed</a>
Default	false
Introduced	23.7.R1
Platforms	All

**Ins**

Synopsis	Enter the <b>Ins</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">events Ins</a>
Tree	<a href="#">Ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

**ppp**

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">events Ins ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

**terminate-only** *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">events Ins ppp terminate-only</a> <i>boolean</i>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.7.R1
Platforms	All

**stop-control-connection-notification** *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">events stop-control-connection-notification</a> <i>boolean</i>
Tree	<a href="#">stop-control-connection-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

**packets**

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a>
Tree	<a href="#">packets</a>
Introduced	23.7.R1
Platforms	All

**all**

Synopsis	Enable debugging for all session packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>lns</b> ).
Introduced	23.7.R1
Platforms	All

**detail-level** *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets detail-level</a> <i>keyword</i>
Tree	<a href="#">detail-level</a>
Options	low, high

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Default	low
Introduced	23.7.R1
Platforms	All

### **direction** *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

### **l2tp** *boolean*

Synopsis	Enable L2TP packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">l2tp</a> <i>boolean</i>
Tree	<a href="#">l2tp</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>lns</b> ).
Introduced	23.7.R1
Platforms	All

### **lns**

Synopsis	Enter the <b>lns</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">lns</a>
Tree	<a href="#">lns</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>lns</b> ).
Introduced	23.7.R1
Platforms	All

### **dhcp-client *boolean***

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">Ins</a> <a href="#">dhcp-client</a> <i>boolean</i>
Tree	<a href="#">dhcp-client</a>
Default	false
Introduced	23.7.R1
Platforms	All

### **ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">Ins</a> <a href="#">ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

### **all**

Synopsis	Enable PPP debugging for all PPP session packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">Ins</a> <a href="#">ppp</a> <a href="#">all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **chap *boolean***

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">Ins</a> <a href="#">ppp</a> <a href="#">chap</a> <i>boolean</i>
Tree	<a href="#">chap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1



Platforms All

### **ipcp** *boolean*

Synopsis Enable PPP debugging for IPCP NCP packets

Context [debug router](#) *string* [l2tp assignment-id](#) *string* [packets](#) [ins ppp ipcp](#) *boolean*

Tree [ipcp](#)

Default false

Notes The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).

Introduced 23.7.R1

Platforms All

### **ipv6cp** *boolean*

Synopsis Enable PPP debugging for IPv6CP NCP packets

Context [debug router](#) *string* [l2tp assignment-id](#) *string* [packets](#) [ins ppp ipv6cp](#) *boolean*

Tree [ipv6cp](#)

Default false

Notes The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).

Introduced 23.7.R1

Platforms All

### **lcp** *boolean*

Synopsis Enable PPP debugging for LCP link establishment packets

Context [debug router](#) *string* [l2tp assignment-id](#) *string* [packets](#) [ins ppp lcp](#) *boolean*

Tree [lcp](#)

Default false

Notes The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).

Introduced 23.7.R1

Platforms All

**other** *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">other</a> <i>boolean</i>
Tree	<a href="#">other</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

**pap** *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp assignment-id</a> <i>string</i> <a href="#">packets</a> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">pap</a> <i>boolean</i>
Tree	<a href="#">pap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

**events**

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">events</a>
Tree	<a href="#">events</a>
Introduced	23.7.R1
Platforms	All

**all**

Synopsis	Enable debugging for all events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">events</a> <a href="#">all</a>
Tree	<a href="#">all</a>

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Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **call-disconnect-notification** *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events</a> <a href="#">call-disconnect-notification</a> <i>boolean</i>
Tree	<a href="#">call-disconnect-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **finite-state-machine** *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events</a> <a href="#">finite-state-machine</a> <i>boolean</i>
Tree	<a href="#">finite-state-machine</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **lac**

Synopsis	Enter the <b>lac</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events</a> <a href="#">lac</a>
Tree	<a href="#">lac</a>

Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **state-recovery** *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events lac state-recovery</a> <i>boolean</i>
Tree	<a href="#">state-recovery</a>
Default	false
Introduced	23.7.R1
Platforms	All

### **state-recovery-failed** *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events lac state-recovery-failed</a> <i>boolean</i>
Tree	<a href="#">state-recovery-failed</a>
Default	false
Introduced	23.7.R1
Platforms	All

## **Ins**

Synopsis	Enter the <b>Ins</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events Ins</a>
Tree	<a href="#">Ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## ppp

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events</a> <a href="#">lns</a> <a href="#">ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

## terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events</a> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">terminate-only</a> <i>boolean</i>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.7.R1
Platforms	All

## session-setup

Synopsis	Enter the <b>session-setup</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events</a> <a href="#">session-setup</a>
Tree	<a href="#">session-setup</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## attempted-tunnels *boolean*

Synopsis	Enable debugging for attempted LNS tunnels
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events</a> <a href="#">session-setup</a> <a href="#">attempted-tunnels</a> <i>boolean</i>
Tree	<a href="#">attempted-tunnels</a>
Default	false
Introduced	23.7.R1
Platforms	All

**skipped-tunnels** *boolean*

Synopsis	Enable debugging for skipped LNS tunnels
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events session-setup</a> <a href="#">skipped-tunnels</a> <i>boolean</i>
Tree	<a href="#">skipped-tunnels</a>
Default	false
Introduced	23.7.R1
Platforms	All

**stop-control-connection-notification** *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp events stop-control-connection-notification</a> <i>boolean</i>
Tree	<a href="#">stop-control-connection-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

**group** [[tunnel-group-name](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i>
Tree	<a href="#">group</a>
Max. Instances	8
Introduced	23.7.R1
Platforms	All

**[tunnel-group-name]** *string*

Synopsis	Tunnel group name of the L2TP tunnel to debug
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i>
Tree	<a href="#">group</a>

String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

## events

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>events</b>
Tree	<a href="#">events</a>
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Enable debugging for all events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>events all</b>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lms</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## call-disconnect-notification *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>events call-disconnect-notification</b> <i>boolean</i>
Tree	<a href="#">call-disconnect-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lms</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **finite-state-machine** *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">events finite-state-machine</a> <i>boolean</i>
Tree	<a href="#">finite-state-machine</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **lac**

Synopsis	Enter the <b>lac</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">events lac</a>
Tree	<a href="#">lac</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **state-recovery** *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">events lac state-recovery</a> <i>boolean</i>
Tree	<a href="#">state-recovery</a>
Default	false
Introduced	23.7.R1
Platforms	All

### **state-recovery-failed** *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">events lac state-recovery-failed</a> <i>boolean</i>



Tree	<a href="#">state-recovery-failed</a>
Default	false
Introduced	23.7.R1
Platforms	All

## Ins

Synopsis	Enter the <b>Ins</b> context
Context	<a href="#">debug router string l2tp group string events Ins</a>
Tree	<a href="#">Ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## ppp

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug router string l2tp group string events Ins ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

## terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	<a href="#">debug router string l2tp group string events Ins ppp terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.7.R1
Platforms	All

## session-setup

Synopsis	Enter the <b>session-setup</b> context
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Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">events</a> <a href="#">session-setup</a>
Tree	<a href="#">session-setup</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **attempted-tunnels** *boolean*

Synopsis	Enable debugging for attempted LNS tunnels
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">events</a> <a href="#">session-setup</a> <a href="#">attempted-tunnels</a> <i>boolean</i>
Tree	<a href="#">attempted-tunnels</a>
Default	false
Introduced	23.7.R1
Platforms	All

### **skipped-tunnels** *boolean*

Synopsis	Enable debugging for skipped LNS tunnels
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">events</a> <a href="#">session-setup</a> <a href="#">skipped-tunnels</a> <i>boolean</i>
Tree	<a href="#">skipped-tunnels</a>
Default	false
Introduced	23.7.R1
Platforms	All

### **stop-control-connection-notification** *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">events</a> <a href="#">stop-control-connection-notification</a> <i>boolean</i>
Tree	<a href="#">stop-control-connection-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , <b>session-setup</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1

Platforms All

## packets

Synopsis Enable the **packets** context  
 Context [debug router string l2tp group string packets](#)  
 Tree [packets](#)  
 Introduced 23.7.R1  
 Platforms All

## all

Synopsis Enable debugging for all session packets  
 Context [debug router string l2tp group string packets all](#)  
 Tree [all](#)  
 Notes The following elements are part of a mandatory choice: **all** or (**l2tp** and **ins**).  
 Introduced 23.7.R1  
 Platforms All

## detail-level *keyword*

Synopsis Detail level of the L2TP packet debug output  
 Context [debug router string l2tp group string packets detail-level keyword](#)  
 Tree [detail-level](#)  
 Options low, high  
 Default low  
 Introduced 23.7.R1  
 Platforms All

## direction *keyword*

Synopsis Direction of the L2TP packet debugging  
 Context [debug router string l2tp group string packets direction keyword](#)  
 Tree [direction](#)  
 Options ingress, egress, both

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Default	both
Introduced	23.7.R1
Platforms	All

### **I2tp** *boolean*

Synopsis	Enable L2TP packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">I2tp group</a> <i>string</i> <a href="#">packets I2tp</a> <i>boolean</i>
Tree	<a href="#">I2tp</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>I2tp</b> and <b>Ins</b> ).
Introduced	23.7.R1
Platforms	All

### **Ins**

Synopsis	Enter the <b>Ins</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">I2tp group</a> <i>string</i> <a href="#">packets Ins</a>
Tree	<a href="#">Ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>I2tp</b> and <b>Ins</b> ).
Introduced	23.7.R1
Platforms	All

### **dhcp-client** *boolean*

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">I2tp group</a> <i>string</i> <a href="#">packets Ins dhcp-client</a> <i>boolean</i>
Tree	<a href="#">dhcp-client</a>
Default	false
Introduced	23.7.R1
Platforms	All

### **ppp**

Synopsis	Enter the <b>ppp</b> context
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Context	<a href="#">debug router string l2tp group string packets lns ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

## **all**

Synopsis	Enable PPP debugging for all PPP session packets
Context	<a href="#">debug router string l2tp group string packets lns ppp all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

## **chap boolean**

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<a href="#">debug router string l2tp group string packets lns ppp chap boolean</a>
Tree	<a href="#">chap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

## **ipcp boolean**

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	<a href="#">debug router string l2tp group string packets lns ppp ipcp boolean</a>
Tree	<a href="#">ipcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1

Platforms All

### **ipv6cp** *boolean*

Synopsis Enable PPP debugging for IPv6CP NCP packets

Context [debug router](#) *string* [l2tp group](#) *string* [packets](#) [ins ppp](#) [ipv6cp](#) *boolean*

Tree [ipv6cp](#)

Default false

Notes The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).

Introduced 23.7.R1

Platforms All

### **lcp** *boolean*

Synopsis Enable PPP debugging for LCP link establishment packets

Context [debug router](#) *string* [l2tp group](#) *string* [packets](#) [ins ppp](#) [lcp](#) *boolean*

Tree [lcp](#)

Default false

Notes The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).

Introduced 23.7.R1

Platforms All

### **other** *boolean*

Synopsis Enable other PPP protocol packet debugging

Context [debug router](#) *string* [l2tp group](#) *string* [packets](#) [ins ppp](#) [other](#) *boolean*

Tree [other](#)

Default false

Notes The following elements are part of a choice: **all** or (**chap**, **ipcp**, **ipv6cp**, **lcp**, **other**, and **pap**).

Introduced 23.7.R1

Platforms All

**pap boolean**

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<a href="#">debug router string l2tp group string packets lns ppp pap boolean</a>
Tree	<a href="#">pap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

**ip-peer [ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	Enter the <b>ip-peer</b> list instance
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">ip-peer</a>
Max. Instances	8
Introduced	23.7.R1
Platforms	All

**[ip-address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	IP address of the L2TP peer to debug
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">ip-peer</a>
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

**events**

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) events</a>
Tree	<a href="#">events</a>
Introduced	23.7.R1

Platforms All

## all

Synopsis Enable debugging for all events

Context [debug router string l2tp ip-peer \(ipv4-address-no-zone | ipv6-address-no-zone\) events all](#)

Tree [all](#)

Notes The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).

Introduced 23.7.R1

Platforms All

## call-disconnect-notification *boolean*

Synopsis Enable L2TP CDN event debugging

Context [debug router string l2tp ip-peer \(ipv4-address-no-zone | ipv6-address-no-zone\) events call-disconnect-notification boolean](#)

Tree [call-disconnect-notification](#)

Default false

Notes The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).

Introduced 23.7.R1

Platforms All

## finite-state-machine *boolean*

Synopsis Enable L2TP FSM event debugging

Context [debug router string l2tp ip-peer \(ipv4-address-no-zone | ipv6-address-no-zone\) events finite-state-machine boolean](#)

Tree [finite-state-machine](#)

Default false

Notes The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lns**, and **stop-control-connection-notification**).

Introduced 23.7.R1



Platforms All

## lac

Synopsis Enter the **lac** context

Context [debug router string l2tp ip-peer \(ipv4-address-no-zone | ipv6-address-no-zone\) events lac](#)

Tree [lac](#)

Notes The following elements are part of a mandatory choice: **all** or (**call-disconnect-notification**, **finite-state-machine**, **lac**, **lms**, and **stop-control-connection-notification**).

Introduced 23.7.R1

Platforms All

## state-recovery *boolean*

Synopsis Enable L2TP LAC state recovery event debugging

Context [debug router string l2tp ip-peer \(ipv4-address-no-zone | ipv6-address-no-zone\) events lac state-recovery boolean](#)

Tree [state-recovery](#)

Default false

Introduced 23.7.R1

Platforms All

## state-recovery-failed *boolean*

Synopsis Enable L2TP LAC state recovery failed event debugging

Context [debug router string l2tp ip-peer \(ipv4-address-no-zone | ipv6-address-no-zone\) events lac state-recovery-failed boolean](#)

Tree [state-recovery-failed](#)

Default false

Introduced 23.7.R1

Platforms All

## lms

Synopsis Enter the **lms** context

Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) events</a> <a href="#">lns</a>
Tree	<a href="#">lns</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## ppp

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) events</a> <a href="#">lns ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

## terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) events</a> <a href="#">lns ppp terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.7.R1
Platforms	All

## stop-control-connection-notification *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) events</a> <a href="#">stop-control-connection-notification boolean</a>
Tree	<a href="#">stop-control-connection-notification</a>
Default	false

Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## packets

Synopsis	Enable the <b>packets</b> context
Context	<code>debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) packets</code>
Tree	<code>packets</code>
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Enable debugging for all session packets
Context	<code>debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) packets all</code>
Tree	<code>all</code>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>Ins</b> ).
Introduced	23.7.R1
Platforms	All

## detail-level *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	<code>debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) packets detail-level keyword</code>
Tree	<code>detail-level</code>
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

**direction** *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">packets</a> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

**l2tp** *boolean*

Synopsis	Enable L2TP packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">packets</a> <a href="#">l2tp</a> <i>boolean</i>
Tree	<a href="#">l2tp</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>ins</b> ).
Introduced	23.7.R1
Platforms	All

**ins**

Synopsis	Enter the <b>ins</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">packets</a> <a href="#">ins</a>
Tree	<a href="#">ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>ins</b> ).
Introduced	23.7.R1
Platforms	All

**dhcp-client** *boolean*

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">packets</a> <a href="#">ins</a> <a href="#">dhcp-client</a> <i>boolean</i>

Tree	<a href="#">dhcp-client</a>
Default	false
Introduced	23.7.R1
Platforms	All

## ppp

Synopsis	Enter the <b>ppp</b> context
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) packets</a> <a href="#">Ins ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Enable PPP debugging for all PPP session packets
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) packets</a> <a href="#">Ins ppp all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

## chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<a href="#">debug router string l2tp ip-peer (ipv4-address-no-zone   ipv6-address-no-zone) packets</a> <a href="#">Ins ppp chap <i>boolean</i></a>
Tree	<a href="#">chap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **ipcp** *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">packets</a> <a href="#">lns ppp ipcp</a> <i>boolean</i>
Tree	<a href="#">ipcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **ipv6cp** *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">packets</a> <a href="#">lns ppp ipv6cp</a> <i>boolean</i>
Tree	<a href="#">ipv6cp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **lcp** *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">packets</a> <a href="#">lns ppp lcp</a> <i>boolean</i>
Tree	<a href="#">lcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

**other boolean**

Synopsis	Enable other PPP protocol packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">packets</a> <a href="#">Ins</a> <a href="#">ppp other</a> <i>boolean</i>
Tree	<a href="#">other</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

**pap boolean**

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp ip-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">packets</a> <a href="#">Ins</a> <a href="#">ppp pap</a> <i>boolean</i>
Tree	<a href="#">pap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

**packets**

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">packets</a>
Tree	<a href="#">packets</a>
Introduced	23.7.R1
Platforms	All

**all**

Synopsis	Enable debugging for all session packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">packets</a> <a href="#">all</a>
Tree	<a href="#">all</a>

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Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>lns</b> ).
Introduced	23.7.R1
Platforms	All

### **detail-level** *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	<a href="#">debug router</a> <i>string l2tp packets detail-level keyword</i>
Tree	<a href="#">detail-level</a>
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

### **direction** *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	<a href="#">debug router</a> <i>string l2tp packets direction keyword</i>
Tree	<a href="#">direction</a>
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

### **l2tp** *boolean*

Synopsis	Enable L2TP packet debugging
Context	<a href="#">debug router</a> <i>string l2tp packets l2tp boolean</i>
Tree	<a href="#">l2tp</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>lns</b> ).
Introduced	23.7.R1
Platforms	All



## Ins

Synopsis	Enter the <b>Ins</b> context
Context	<a href="#">debug router string l2tp packets Ins</a>
Tree	<a href="#">Ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>Ins</b> ).
Introduced	23.7.R1
Platforms	All

## dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug router string l2tp packets Ins dhcp-client boolean</a>
Tree	<a href="#">dhcp-client</a>
Default	false
Introduced	23.7.R1
Platforms	All

## ppp

Synopsis	Enter the <b>ppp</b> context
Context	<a href="#">debug router string l2tp packets Ins ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Enable PPP debugging for all PPP session packets
Context	<a href="#">debug router string l2tp packets Ins ppp all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **chap** *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp packets</a> <a href="#">ins ppp chap</a> <i>boolean</i>
Tree	<a href="#">chap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **ipcp** *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp packets</a> <a href="#">ins ppp ipcp</a> <i>boolean</i>
Tree	<a href="#">ipcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **ipv6cp** *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp packets</a> <a href="#">ins ppp ipv6cp</a> <i>boolean</i>
Tree	<a href="#">ipv6cp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **lcp** *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
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Context	<code>debug router string l2tp packets lns ppp lcp boolean</code>
Tree	<code>lcp</code>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **other** *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	<code>debug router string l2tp packets lns ppp other boolean</code>
Tree	<code>other</code>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **pap** *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<code>debug router string l2tp packets lns ppp pap boolean</code>
Tree	<code>pap</code>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **tunnel** [`connection-id`] *number*

Synopsis	Enter the <b>tunnel</b> list instance
Context	<code>debug router string l2tp tunnel number</code>
Tree	<code>tunnel</code>

Max. Instances	8
Introduced	23.7.R1
Platforms	All

### [**connection-id**] *number*

Synopsis	Local control connection ID of the L2TP tunnel to debug
Context	<a href="#">debug router</a> <i>string l2tp tunnel number</i>
Tree	<a href="#">tunnel</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

### **events**

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug router</a> <i>string l2tp tunnel number events</i>
Tree	<a href="#">events</a>
Introduced	23.7.R1
Platforms	All

### **all**

Synopsis	Enable debugging for all events
Context	<a href="#">debug router</a> <i>string l2tp tunnel number events all</i>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **call-disconnect-notification** *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events call-disconnect-notification</a> <i>boolean</i>
Tree	<a href="#">call-disconnect-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **finite-state-machine** *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events finite-state-machine</a> <i>boolean</i>
Tree	<a href="#">finite-state-machine</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

### **lac**

Synopsis	Enter the <b>lac</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events lac</a>
Tree	<a href="#">lac</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

**state-recovery *boolean***

Synopsis	Enable L2TP LAC state recovery event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events lac state-recovery</a> <i>boolean</i>
Tree	<a href="#">state-recovery</a>
Default	false
Introduced	23.7.R1
Platforms	All

**state-recovery-failed *boolean***

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events lac state-recovery-failed</a> <i>boolean</i>
Tree	<a href="#">state-recovery-failed</a>
Default	false
Introduced	23.7.R1
Platforms	All

**Ins**

Synopsis	Enter the <b>Ins</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events Ins</a>
Tree	<a href="#">Ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

**ppp**

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events Ins ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

**terminate-only** *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events</a> <a href="#">lns</a> <a href="#">ppp</a> <b>terminate-only</b> <i>boolean</i>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.7.R1
Platforms	All

**stop-control-connection-notification** *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">events</a> <a href="#">stop-control-connection-notification</a> <i>boolean</i>
Tree	<a href="#">stop-control-connection-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

**packets**

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <b>packets</b>
Tree	<a href="#">packets</a>
Introduced	23.7.R1
Platforms	All

**all**

Synopsis	Enable debugging for all session packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">packets</a> <b>all</b>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>lns</b> ).

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Introduced	23.7.R1
Platforms	All

### **detail-level** *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">packets</a> <a href="#">detail-level</a> <i>keyword</i>
Tree	<a href="#">detail-level</a>
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

### **direction** *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">packets</a> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

### **l2tp** *boolean*

Synopsis	Enable L2TP packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp tunnel</a> <i>number</i> <a href="#">packets</a> <a href="#">l2tp</a> <i>boolean</i>
Tree	<a href="#">l2tp</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>ins</b> ).
Introduced	23.7.R1
Platforms	All



## Ins

Synopsis	Enter the <b>Ins</b> context
Context	<a href="#">debug router string l2tp tunnel number packets Ins</a>
Tree	<a href="#">Ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>Ins</b> ).
Introduced	23.7.R1
Platforms	All

## dhcp-client *boolean*

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug router string l2tp tunnel number packets Ins dhcp-client boolean</a>
Tree	<a href="#">dhcp-client</a>
Default	false
Introduced	23.7.R1
Platforms	All

## ppp

Synopsis	Enter the <b>ppp</b> context
Context	<a href="#">debug router string l2tp tunnel number packets Ins ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Enable PPP debugging for all PPP session packets
Context	<a href="#">debug router string l2tp tunnel number packets Ins ppp all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **chap** *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<a href="#">debug router</a> <i>string l2tp tunnel number packets lns ppp chap boolean</i>
Tree	<a href="#">chap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **ipcp** *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	<a href="#">debug router</a> <i>string l2tp tunnel number packets lns ppp ipcp boolean</i>
Tree	<a href="#">ipcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **ipv6cp** *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	<a href="#">debug router</a> <i>string l2tp tunnel number packets lns ppp ipv6cp boolean</i>
Tree	<a href="#">ipv6cp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **lcp** *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
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Context	<a href="#">debug router</a> <i>string l2tp tunnel number packets</i> <a href="#">lcp</a> <i>boolean</i>
Tree	<a href="#">lcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **other** *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	<a href="#">debug router</a> <i>string l2tp tunnel number packets</i> <a href="#">lcp</a> <i>boolean</i>
Tree	<a href="#">other</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **pap** *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<a href="#">debug router</a> <i>string l2tp tunnel number packets</i> <a href="#">lcp</a> <i>boolean</i>
Tree	<a href="#">pap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **udp-peer** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [udp-port](#) *number*

Synopsis	Enter the <b>udp-peer</b> list instance
Context	<a href="#">debug router</a> <i>string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number</i>
Tree	<a href="#">udp-peer</a>

Max. Instances	8
Introduced	23.7.R1
Platforms	All

### [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the L2TP peer to debug
Context	<a href="#">debug router string l2tp udp-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">udp-port number</a>
Tree	<a href="#">udp-peer</a>
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

### **udp-port number**

Synopsis	UDP port of the L2TP peer to debug
Context	<a href="#">debug router string l2tp udp-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">udp-port number</a>
Tree	<a href="#">udp-peer</a>
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

### **events**

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug router string l2tp udp-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">udp-port number events</a>
Tree	<a href="#">events</a>
Introduced	23.7.R1
Platforms	All

**all**

Synopsis	Enable debugging for all events
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

**call-disconnect-notification** *boolean*

Synopsis	Enable L2TP CDN event debugging
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events call-disconnect-notification boolean</a>
Tree	<a href="#">call-disconnect-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

**finite-state-machine** *boolean*

Synopsis	Enable L2TP FSM event debugging
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events finite-state-machine boolean</a>
Tree	<a href="#">finite-state-machine</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## lac

Synopsis	Enter the <b>lac</b> context
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events lac</a>
Tree	<a href="#">lac</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>lns</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## state-recovery *boolean*

Synopsis	Enable L2TP LAC state recovery event debugging
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events lac state-recovery boolean</a>
Tree	<a href="#">state-recovery</a>
Default	false
Introduced	23.7.R1
Platforms	All

## state-recovery-failed *boolean*

Synopsis	Enable L2TP LAC state recovery failed event debugging
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events lac state-recovery-failed boolean</a>
Tree	<a href="#">state-recovery-failed</a>
Default	false
Introduced	23.7.R1
Platforms	All

## lns

Synopsis	Enter the <b>lns</b> context
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events lns</a>
Tree	<a href="#">lns</a>

Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## ppp

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events Ins ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.7.R1
Platforms	All

## terminate-only *boolean*

Synopsis	Debug events for ungracefully terminated sessions only
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events Ins ppp terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.7.R1
Platforms	All

## stop-control-connection-notification *boolean*

Synopsis	Enable L2TP StopCCN event debugging
Context	<a href="#">debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number events stop-control-connection-notification boolean</a>
Tree	<a href="#">stop-control-connection-notification</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>call-disconnect-notification</b> , <b>finite-state-machine</b> , <b>lac</b> , <b>Ins</b> , and <b>stop-control-connection-notification</b> ).
Introduced	23.7.R1
Platforms	All

## packets

Synopsis	Enable the <b>packets</b> context
Context	<code>debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number packets</code>
Tree	<code>packets</code>
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Enable debugging for all session packets
Context	<code>debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number packets all</code>
Tree	<code>all</code>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>l2tp</b> and <b>Ins</b> ).
Introduced	23.7.R1
Platforms	All

## detail-level *keyword*

Synopsis	Detail level of the L2TP packet debug output
Context	<code>debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number packets detail-level keyword</code>
Tree	<code>detail-level</code>
Options	low, high
Default	low
Introduced	23.7.R1
Platforms	All

## direction *keyword*

Synopsis	Direction of the L2TP packet debugging
Context	<code>debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number packets direction keyword</code>
Tree	<code>direction</code>



Options	ingress, egress, both
Default	both
Introduced	23.7.R1
Platforms	All

### **I2tp** *boolean*

Synopsis	Enable L2TP packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">I2tp</a> <a href="#">udp-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">udp-port</a> <i>number</i> <a href="#">packets</a> <a href="#">I2tp</a> <i>boolean</i>
Tree	<a href="#">I2tp</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>I2tp</b> and <b>Ins</b> ).
Introduced	23.7.R1
Platforms	All

### **Ins**

Synopsis	Enter the <b>Ins</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">I2tp</a> <a href="#">udp-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">udp-port</a> <i>number</i> <a href="#">packets</a> <a href="#">Ins</a>
Tree	<a href="#">Ins</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>I2tp</b> and <b>Ins</b> ).
Introduced	23.7.R1
Platforms	All

### **dhcp-client** *boolean*

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">I2tp</a> <a href="#">udp-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">udp-port</a> <i>number</i> <a href="#">packets</a> <a href="#">Ins</a> <a href="#">dhcp-client</a> <i>boolean</i>
Tree	<a href="#">dhcp-client</a>
Default	false
Introduced	23.7.R1
Platforms	All

## ppp

Synopsis	Enter the <b>ppp</b> context
Context	<code>debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number packets</code> Ins <b>ppp</b>
Tree	<b>ppp</b>
Introduced	23.7.R1
Platforms	All

## all

Synopsis	Enable PPP debugging for all PPP session packets
Context	<code>debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number packets</code> Ins <b>ppp all</b>
Tree	<b>all</b>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

## chap *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<code>debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number packets</code> Ins <b>ppp chap boolean</b>
Tree	<b>chap</b>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

## ipcp *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	<code>debug router string l2tp udp-peer (ipv4-address-no-zone   ipv6-address-no-zone) udp-port number packets</code> Ins <b>ppp ipcp boolean</b>

Tree	<a href="#">ipcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **ipv6cp** *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">udp-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">udp-port</a> <i>number</i> <a href="#">packets</a> <a href="#">ins</a> <a href="#">ppp</a> <b>ipv6cp</b> <i>boolean</i>
Tree	<a href="#">ipv6cp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **lcp** *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">udp-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">udp-port</a> <i>number</i> <a href="#">packets</a> <a href="#">ins</a> <a href="#">ppp</a> <b>lcp</b> <i>boolean</i>
Tree	<a href="#">lcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **other** *boolean*

Synopsis	Enable other PPP protocol packet debugging
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">udp-peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">udp-port</a> <i>number</i> <a href="#">packets</a> <a href="#">ins</a> <a href="#">ppp</a> <b>other</b> <i>boolean</i>
Tree	<a href="#">other</a>

Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **pap** *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">l2tp udp-peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">udp-port number</a> <a href="#">packets</a> <a href="#">lns ppp pap</a> <i>boolean</i>
Tree	<a href="#">pap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , <b>other</b> , and <b>pap</b> ).
Introduced	23.7.R1
Platforms	All

### **ldp**

Synopsis	Enter the <b>ldp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ldp</a>
Tree	<a href="#">ldp</a>
Introduced	23.3.R1
Platforms	All

### **interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ldp interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	23.3.R1
Platforms	All

**[interface-name] string**

Synopsis	Interface name
Context	<a href="#">debug router string ldp interface string</a>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

**ipv4**

Synopsis	Enable the <b>ipv4</b> context
Context	<a href="#">debug router string ldp interface string ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	23.3.R1
Platforms	All

**event**

Synopsis	Enter the <b>event</b> context
Context	<a href="#">debug router string ldp interface string ipv4 event</a>
Tree	<a href="#">event</a>
Introduced	23.3.R1
Platforms	All

**messages**

Synopsis	Enable the <b>messages</b> context
Context	<a href="#">debug router string ldp interface string ipv4 event messages</a>
Tree	<a href="#">messages</a>
Introduced	23.3.R1
Platforms	All

## packet

Synopsis	Enter the <b>packet</b> context
Context	<a href="#">debug router string ldp interface string ipv4 packet</a>
Tree	<a href="#">packet</a>
Introduced	23.3.R1
Platforms	All

## hello

Synopsis	Enable the <b>hello</b> context
Context	<a href="#">debug router string ldp interface string ipv4 packet hello</a>
Tree	<a href="#">hello</a>
Introduced	23.3.R1
Platforms	All

## detail *boolean*

Synopsis	Display detailed information
Context	<a href="#">debug router string ldp interface string ipv4 packet hello detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	23.3.R1
Platforms	All

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<a href="#">debug router string ldp interface string ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	23.3.R1
Platforms	All

## event

Synopsis	Enter the <b>event</b> context
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Context	<code>debug router string ldp interface string ipv6 event</code>
Tree	<code>event</code>
Introduced	23.3.R1
Platforms	All

## messages

Synopsis	Enable the <b>messages</b> context
Context	<code>debug router string ldp interface string ipv6 event messages</code>
Tree	<code>messages</code>
Introduced	23.3.R1
Platforms	All

## packet

Synopsis	Enter the <b>packet</b> context
Context	<code>debug router string ldp interface string ipv6 packet</code>
Tree	<code>packet</code>
Introduced	23.3.R1
Platforms	All

## hello

Synopsis	Enable the <b>hello</b> context
Context	<code>debug router string ldp interface string ipv6 packet hello</code>
Tree	<code>hello</code>
Introduced	23.3.R1
Platforms	All

## detail *boolean*

Synopsis	Display detailed information
Context	<code>debug router string ldp interface string ipv6 packet hello detail boolean</code>
Tree	<code>detail</code>
Default	false

Introduced 23.3.R1  
 Platforms All

### **peer** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **peer** list instance  
 Context [debug router string ldp peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [peer](#)  
 Introduced 23.3.R1  
 Platforms All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Peer IP address  
 Context [debug router string ldp peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [peer](#)  
 Notes This element is part of a list key.  
 Introduced 23.3.R1  
 Platforms All

### **event**

Synopsis Enter the **event** context  
 Context [debug router string ldp peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [event](#)  
 Tree [event](#)  
 Introduced 23.3.R1  
 Platforms All

### **bindings**

Synopsis Enable the **bindings** context  
 Context [debug router string ldp peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [event](#) [bindings](#)  
 Tree [bindings](#)  
 Introduced 23.3.R1



Platforms All

## messages

Synopsis Enable the **messages** context

Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\) event messages](#)

Tree [messages](#)

Introduced 23.3.R1

Platforms All

## packet

Synopsis Enter the **packet** context

Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\) packet](#)

Tree [packet](#)

Introduced 23.3.R1

Platforms All

## hello

Synopsis Enable the **hello** context

Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\) packet hello](#)

Tree [hello](#)

Introduced 23.3.R1

Platforms All

## detail *boolean*

Synopsis Display detailed information

Context [debug router string ldp peer \(ipv4-address-no-zone | ipv6-address-no-zone\) packet hello detail \*boolean\*](#)

Tree [detail](#)

Default false

Introduced 23.3.R1

Platforms All

## init

Synopsis	Enable the <b>init</b> context
Context	<a href="#">debug router string ldp peer (ipv4-address-no-zone   ipv6-address-no-zone) packet init</a>
Tree	<a href="#">init</a>
Introduced	23.3.R1
Platforms	All

## detail *boolean*

Synopsis	Display detailed information
Context	<a href="#">debug router string ldp peer (ipv4-address-no-zone   ipv6-address-no-zone) packet init detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	23.3.R1
Platforms	All

## keepalive

Synopsis	Enable the <b>keepalive</b> context
Context	<a href="#">debug router string ldp peer (ipv4-address-no-zone   ipv6-address-no-zone) packet keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	23.3.R1
Platforms	All

## label

Synopsis	Enable the <b>label</b> context
Context	<a href="#">debug router string ldp peer (ipv4-address-no-zone   ipv6-address-no-zone) packet label</a>
Tree	<a href="#">label</a>
Introduced	23.3.R1
Platforms	All

## detail *boolean*

Synopsis	Display detailed information
Context	<a href="#">debug router</a> <i>string</i> <a href="#">ldp peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">packet label</a> <a href="#">detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	23.3.R1
Platforms	All

## mld

Synopsis	Enter the <b>mld</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld</a>
Tree	<a href="#">mld</a>
Introduced	22.10.R1
Platforms	All

## group-interface

Synopsis	Enable the <b>group-interface</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a>
Tree	<a href="#">group-interface</a>
Introduced	22.10.R1
Platforms	All

## all-group-interfaces

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <a href="#">all-group-interfaces</a>
Tree	<a href="#">all-group-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

### forwarding-service *string*

Synopsis	ID of the forwarding service to trace
Context	<code>debug router <i>string</i> mld group-interface forwarding-service <i>string</i></code>
Tree	<code>forwarding-service</code>
String Length	1 to 64
Default	<code>../router-instance</code>
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

### group-interface-name *string*

Synopsis	Interface name
Context	<code>debug router <i>string</i> mld group-interface group-interface-name <i>string</i></code>
Tree	<code>group-interface-name</code>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-group-interfaces</b> or ( <b>forwarding-service</b> and <b>group-interface-name</b> ).
Introduced	22.10.R1
Platforms	All

### host

Synopsis	Enable the <b>host</b> context
Context	<code>debug router <i>string</i> mld host</code>
Tree	<code>host</code>
Introduced	22.10.R1
Platforms	All

### group-interface

Synopsis	Enter the <b>group-interface</b> context
Context	<code>debug router <i>string</i> mld host group-interface</code>
Tree	<code>group-interface</code>

Introduced 22.10.R1  
Platforms All

### **forwarding-service** *string*

Synopsis ID of the forwarding service to trace  
Context [debug router](#) *string* [mld host group-interface forwarding-service](#) *string*  
Tree [forwarding-service](#)  
String Length 1 to 64  
Default [../router-instance](#)  
Introduced 22.10.R1  
Platforms All

### **group-interface-name** *string*

Synopsis Interface name  
Context [debug router](#) *string* [mld host group-interface group-interface-name](#) *string*  
Tree [group-interface-name](#)  
String Length 1 to 32  
Introduced 22.10.R1  
Platforms All

### **ip-address** *string*

Synopsis IP address of the host to trace  
Context [debug router](#) *string* [mld host ip-address](#) *string*  
Tree [ip-address](#)  
Introduced 22.10.R1  
Platforms All

### **interface**

Synopsis Enable the **interface** context  
Context [debug router](#) *string* [mld interface](#)  
Tree [interface](#)

Introduced	22.10.R1
Platforms	All

## all-interfaces

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld interface all-interfaces</a>
Tree	<a href="#">all-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld interface interface-name string</a>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## mcs

Synopsis	Enable the <b>mcs</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld mcs</a>
Tree	<a href="#">mcs</a>
Introduced	22.10.R1
Platforms	All

## all-interfaces

Synopsis	Trace all interfaces
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld mcs all-interfaces</a>

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Tree	<a href="#">all-interfaces</a>
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld mcs</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>all-interfaces</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **miscellaneous** *boolean*

Synopsis	Enable the tracing of miscellaneous events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld miscellaneous</a> <i>boolean</i>
Tree	<a href="#">miscellaneous</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Allow trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## dropped *boolean*

Synopsis	Enable tracing for dropped packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet dropped</a> <i>boolean</i>
Tree	<a href="#">dropped</a>
Default	true
Introduced	22.10.R1
Platforms	All

## egress *boolean*

Synopsis	Enable tracing for transmitted packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet egress</a> <i>boolean</i>
Tree	<a href="#">egress</a>
Default	true
Introduced	22.10.R1
Platforms	All

## group-interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet group-interface-name</a> <i>string</i>
Tree	<a href="#">group-interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .



Introduced 22.10.R1  
Platforms All

### **host-ip-address** *string*

Synopsis Address of the host to trace  
Context [debug router](#) *string* [mld packet](#) [host-ip-address](#) *string*  
Tree [host-ip-address](#)  
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.  
Introduced 22.10.R2  
Platforms All

### **ingress** *boolean*

Synopsis Enable tracing for received packets  
Context [debug router](#) *string* [mld packet](#) [ingress](#) *boolean*  
Tree [ingress](#)  
Default true  
Introduced 22.10.R1  
Platforms All

### **interface-ip-address** *string*

Synopsis Source address of the packet to trace  
Context [debug router](#) *string* [mld packet](#) [interface-ip-address](#) *string*  
Tree [interface-ip-address](#)  
Notes The following elements are part of a choice: **all-origins**, **group-interface-name**, **host-ip-address**, **interface-ip-address**, or **interface-name**.  
Introduced 22.10.R2  
Platforms All

### **interface-name** *string*

Synopsis Interface name  
Context [debug router](#) *string* [mld packet](#) [interface-name](#) *string*

Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> , <b>group-interface-name</b> , <b>host-ip-address</b> , <b>interface-ip-address</b> , or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **type** *keyword*

Synopsis	Packet type
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mld packet type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	all – All MLD packets query – MLD Query packets v1-report – MLD version 1 Report packets v2-report – MLD version 2 Report packets
Default	all
Introduced	22.10.R1
Platforms	All

### **msdp**

Synopsis	Enter the <b>msdp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">msdp</a>
Tree	<a href="#">msdp</a>
Description	Commands in this context configure debugging for the Multicast Source Discovery Protocol (MSDP).
Introduced	22.10.R1
Platforms	All

### **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">msdp packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1

Platforms All

### all-packet-types

Synopsis Enable MSDP debugging for all packets  
 Context [debug router string msdp packet all-packet-types](#)  
 Tree [all-packet-types](#)  
 Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.  
 Introduced 22.10.R1  
 Platforms All

### packet-types

Synopsis Enter the **packet-types** context  
 Context [debug router string msdp packet packet-types](#)  
 Tree [packet-types](#)  
 Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.  
 Introduced 22.10.R1  
 Platforms All

### keep-alive

Synopsis Enable the **keep-alive** context  
 Context [debug router string msdp packet packet-types keep-alive](#)  
 Tree [keep-alive](#)  
 Introduced 22.10.R1  
 Platforms All

### peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Peer address used to trace packets  
 Context [debug router string msdp packet packet-types keep-alive peer-address \(\*ipv4-address-no-zone\* | \*ipv6-address-no-zone\*\)](#)  
 Tree [peer-address](#)  
 Introduced 22.10.R1

Platforms All

### sa-request

Synopsis Enable the **sa-request** context  
Context [debug router string msdp packet packet-types sa-request](#)  
Tree [sa-request](#)  
Introduced 22.10.R1  
Platforms All

### peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Peer address used to trace packets  
Context [debug router string msdp packet packet-types sa-request peer-address \(\*ipv4-address-no-zone\* | \*ipv6-address-no-zone\*\)](#)  
Tree [peer-address](#)  
Introduced 22.10.R1  
Platforms All

### sa-response

Synopsis Enable the **sa-response** context  
Context [debug router string msdp packet packet-types sa-response](#)  
Tree [sa-response](#)  
Introduced 22.10.R1  
Platforms All

### peer-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Peer address used to trace packets  
Context [debug router string msdp packet packet-types sa-response peer-address \(\*ipv4-address-no-zone\* | \*ipv6-address-no-zone\*\)](#)  
Tree [peer-address](#)  
Introduced 22.10.R1  
Platforms All

## source-active

Synopsis	Enable the <b>source-active</b> context
Context	<a href="#">debug router string msdp packet packet-types source-active</a>
Tree	<a href="#">source-active</a>
Introduced	22.10.R1
Platforms	All

## peer-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Peer address used to trace packets
Context	<a href="#">debug router string msdp packet packet-types source-active peer-address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</a>
Tree	<a href="#">peer-address</a>
Introduced	22.10.R1
Platforms	All

## pim

Synopsis	Enable the <b>pim</b> context
Context	<a href="#">debug router string msdp pim</a>
Tree	<a href="#">pim</a>
Description	Commands in this context enable MSDP PIM debugging.
Introduced	22.10.R1
Platforms	All

## group-address *string*

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string msdp pim group-address string</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

## rtm

Synopsis	Enable the <b>rtm</b> context
Context	<a href="#">debug router string msdp rtm</a>
Tree	<a href="#">rtm</a>
Description	Commands in this context enable MSDP route table manager (RTM) debugging.
Introduced	22.10.R1
Platforms	All

## rp-address *string*

Synopsis	IP multicast RP address used to trace events
Context	<a href="#">debug router string msdp rtm rp-address string</a>
Tree	<a href="#">rp-address</a>
Introduced	22.10.R1
Platforms	All

## sa-db

Synopsis	Enable the <b>sa-db</b> context
Context	<a href="#">debug router string msdp sa-db</a>
Tree	<a href="#">sa-db</a>
Description	Commands in this context enable MSDP source-active database debugging.
Introduced	22.10.R1
Platforms	All

## group-address *string*

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string msdp sa-db group-address string</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

### **rp-address** *string*

Synopsis	IP multicast RP address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">msdp sa-db rp-address</a> <i>string</i>
Tree	<a href="#">rp-address</a>
Introduced	22.10.R1
Platforms	All

### **source-address** *string*

Synopsis	Source address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">msdp sa-db source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

### **mtrace**

Synopsis	Enter the <b>mtrace</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace</a>
Tree	<a href="#">mtrace</a>
Introduced	22.10.R1
Platforms	All

### **miscellaneous**

Synopsis	Enable the <b>miscellaneous</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace miscellaneous</a>
Tree	<a href="#">miscellaneous</a>
Introduced	22.10.R1
Platforms	All

### **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace packet</a>

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Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

### **all-packet-types**

Synopsis	Enable debugging for all packets
Context	<a href="#">debug router string mtrace packet all-packet-types</a>
Tree	<a href="#">all-packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

### **packet-types**

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug router string mtrace packet packet-types</a>
Tree	<a href="#">packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

### **query *boolean***

Synopsis	Debug query packets
Context	<a href="#">debug router string mtrace packet packet-types query boolean</a>
Tree	<a href="#">query</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **request *boolean***

Synopsis	Debug request packets
Context	<a href="#">debug router string mtrace packet packet-types request boolean</a>



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Tree	<a href="#">request</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **response** *boolean*

Synopsis	Debug response packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace</a> <a href="#">packet</a> <a href="#">packet-types</a> <a href="#">response</a> <i>boolean</i>
Tree	<a href="#">response</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **mtrace2**

Synopsis	Enter the <b>mtrace2</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace2</a>
Tree	<a href="#">mtrace2</a>
Introduced	22.10.R1
Platforms	All

### **miscellaneous**

Synopsis	Enable the <b>miscellaneous</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">miscellaneous</a>
Tree	<a href="#">miscellaneous</a>
Introduced	22.10.R1
Platforms	All

### **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">packet</a>
Tree	<a href="#">packet</a>

Introduced	22.10.R1
Platforms	All

## **all-packet-types**

Synopsis	Enable debugging for all packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">packet</a> <a href="#">all-packet-types</a>
Tree	<a href="#">all-packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

## **packet-types**

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">packet</a> <a href="#">packet-types</a>
Tree	<a href="#">packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

## **query** *boolean*

Synopsis	Debug query packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">packet</a> <a href="#">packet-types</a> <a href="#">query</a> <i>boolean</i>
Tree	<a href="#">query</a>
Default	false
Introduced	22.10.R1
Platforms	All

## **request** *boolean*

Synopsis	Debug request packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">packet</a> <a href="#">packet-types</a> <a href="#">request</a> <i>boolean</i>
Tree	<a href="#">request</a>

---

Default	false
Introduced	22.10.R1
Platforms	All

### **response** *boolean*

Synopsis	Debug response packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">mtrace2 packet packet-types response</a> <i>boolean</i>
Tree	<a href="#">response</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **pim**

Synopsis	Enter the <b>pim</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim</a>
Tree	<a href="#">pim</a>
Introduced	22.10.R1
Platforms	All

### **events**

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a>
Tree	<a href="#">events</a>
Introduced	22.10.R1
Platforms	All

### **adjacency**

Synopsis	Enable the <b>adjacency</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events adjacency</a>
Tree	<a href="#">adjacency</a>

Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach e</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**all**

Synopsis	Enable the <b>all</b> context
Context	<a href="#">debug router string pim events all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach e</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail *boolean***

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events all detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string pim events all group-address (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router string pim events all source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

**assert**

Synopsis	Enable the <b>assert</b> context
Context	<a href="#">debug router string pim events assert</a>
Tree	<a href="#">assert</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events assert detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string pim events assert group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug router string pim events assert source-address</code> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

**auto-rp**

Synopsis	Enable the <b>auto-rp</b> context
Context	<code>debug router string pim events auto-rp</code>
Tree	<code>auto-rp</code>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach e</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**bgp**

Synopsis	Enable the <b>bgp</b> context
Context	<code>debug router string pim events bgp</code>
Tree	<code>bgp</code>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach e</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<code>debug router string pim events bgp group-address</code> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<code>group-address</code>

Introduced 22.10.R1  
 Platforms All

### **peer-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis BGP peer address used to trace events  
 Context [debug router string pim events bgp peer-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [peer-address](#)  
 Introduced 22.10.R1  
 Platforms All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address used to trace events  
 Context [debug router string pim events bgp source-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [source-address](#)  
 Introduced 22.10.R1  
 Platforms All

### **bier-inband**

Synopsis Enable the **bier-inband** context  
 Context [debug router string pim events bier-inband](#)  
 Tree [bier-inband](#)  
 Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmlp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcach**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.  
 Introduced 22.10.R1  
 Platforms All

### **detail** *boolean*

Synopsis Enable detail tracing  
 Context [debug router string pim events bier-inband detail boolean](#)

Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

## bsr

Synopsis	Enable the <b>bsr</b> context
Context	<a href="#">debug router string pim events bsr</a>
Tree	<a href="#">bsr</a>
Description	Commands in this context enable debugging for the PIM bootstrap mechanism.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events bsr detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

## data

Synopsis	Enable the <b>data</b> context
Context	<a href="#">debug router string pim events data</a>
Tree	<a href="#">data</a>
Description	Commands in this context enable PIM data exception debugging.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1



Platforms All

### **detail** *boolean*

Synopsis Enable detail tracing  
Context [debug router string pim events data detail boolean](#)  
Tree [detail](#)  
Default false  
Introduced 22.10.R1  
Platforms All

### **group-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis IP multicast group address used to trace events  
Context [debug router string pim events data group-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)  
Tree [group-address](#)  
Introduced 22.10.R1  
Platforms All

### **source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Source address used to trace events  
Context [debug router string pim events data source-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)  
Tree [source-address](#)  
Introduced 22.10.R1  
Platforms All

### **db**

Synopsis Enable the **db** context  
Context [debug router string pim events db](#)  
Tree [db](#)  
Description Commands in this context enable PIM database debugging.

Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events db detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events db group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events db source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

### **dynml dp**

Synopsis	Enable the <b>dynml dp</b> context
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Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">dynmldp</a>
Tree	<a href="#">dynmldp</a>
Description	Commands in this context enable dynamic MLDP debugging.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">dynmldp</a> <b>detail</b> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**extranet**

Synopsis	Enable the <b>extranet</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <b>extranet</b>
Tree	<a href="#">extranet</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">extranet</a> <b>detail</b> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1

Platforms All

## graft

Synopsis Enable the **graft** context

Context [debug router string pim events graft](#)

Tree [graft](#)

Notes The following elements are part of a choice: (**adjacency**, **assert**, **auto-rp**, **bgp**, **bier-inband**, **bsr**, **data**, **db**, **dynmldp**, **extranet**, **graft**, **interface**, **jp**, **mofrr**, **mrrib**, **msg**, **mvpn-rtcache**, **red**, **register**, **rpfv**, **rtm**, **s-pmsi**, and **tunnel-interface**) or **all**.

Introduced 22.10.R1

Platforms All

## detail *boolean*

Synopsis Enable detail tracing

Context [debug router string pim events graft detail boolean](#)

Tree [detail](#)

Default false

Introduced 22.10.R1

Platforms All

## group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP multicast group address used to trace events

Context [debug router string pim events graft group-address \(\*ipv4-address-no-zone\* | \*ipv6-address-no-zone\*\)](#)

Tree [group-address](#)

Introduced 22.10.R1

Platforms All

## source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address used to trace events

Context [debug router string pim events graft source-address \(\*ipv4-address-no-zone\* | \*ipv6-address-no-zone\*\)](#)

Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

## interface

Synopsis	Enable the <b>interface</b> context
Context	<a href="#">debug router string pim events interface</a>
Tree	<a href="#">interface</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router string pim events interface interface-name string</a>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

## jp

Synopsis	Enable the <b>jp</b> context
Context	<a href="#">debug router string pim events jp</a>
Tree	<a href="#">jp</a>
Description	Commands in this context enable debugging for PIM join and prune mechanisms.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events jp detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router string pim events jp group-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router string pim events jp source-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

**mofrr**

Synopsis	Enable the <b>mofrr</b> context
Context	<a href="#">debug router string pim events mofrr</a>
Tree	<a href="#">mofrr</a>
Description	Commands in this context enable debugging for PIM Multicast-only Fast Reroute (MoFRR).

Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## mrrib

Synopsis	Enable the <b>mrrib</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">mrrib</a>
Tree	<a href="#">mrrib</a>
Description	Commands in this context enable Multicast Routing Information Base (MRIB) debugging.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">mrrib</a> <a href="#">detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

## group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">mrrib</a> <a href="#">group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<code>debug router string pim events mrrib source-address</code> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<code>source-address</code>
Introduced	22.10.R1
Platforms	All

**msg**

Synopsis	Enable the <b>msg</b> context
Context	<code>debug router string pim events msg</code>
Tree	<code>msg</code>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**mvpn-rtcache**

Synopsis	Enable the <b>mvpn-rtcache</b> context
Context	<code>debug router string pim events mvpn-rtcache</code>
Tree	<code>mvpn-rtcache</code>
Description	Commands in this context enable debugging for the PIM MVPN route cache.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Group address used to trace events
Context	<code>debug router string pim events mvpn-rtcache group-address</code> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )



Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

### **peer-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer address used to trace events
Context	<a href="#">debug router string pim events mvpn-rtcache peer-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer-address</a>
Introduced	22.10.R1
Platforms	All

### **red**

Synopsis	Enable the <b>red</b> context
Context	<a href="#">debug router string pim events red</a>
Tree	<a href="#">red</a>
Description	Commands in this context enable debugging for PIM redundancy messages to the standby CPM.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynml dp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events red detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

## register

Synopsis	Enable the <b>register</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">register</a>
Tree	<a href="#">register</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcach</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">register detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

## group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">register group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

## source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim events</a> <a href="#">register source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

## rpfv

Synopsis	Enable the <b>rpfv</b> context
Context	<code>debug router <i>string</i> pim events rpfv</code>
Tree	<code>rpfv</code>
Description	Commands in this context enable PIM RPF vector debugging.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router <i>string</i> pim events rpfv detail <i>boolean</i></code>
Tree	<code>detail</code>
Default	false
Introduced	22.10.R1
Platforms	All

## rtm

Synopsis	Enable the <b>rtm</b> context
Context	<code>debug router <i>string</i> pim events rtm</code>
Tree	<code>rtm</code>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<code>debug router <i>string</i> pim events rtm detail <i>boolean</i></code>

Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

## s-pmsi

Synopsis	Enable the <b>s-pmsi</b> context
Context	<a href="#">debug router string pim events s-pmsi</a>
Tree	<a href="#">s-pmsi</a>
Description	Commands in this context enable debugging for the PIM selective provider multicast service interface.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>assert</b> , <b>auto-rp</b> , <b>bgp</b> , <b>bier-inband</b> , <b>bsr</b> , <b>data</b> , <b>db</b> , <b>dynmldp</b> , <b>extranet</b> , <b>graft</b> , <b>interface</b> , <b>jp</b> , <b>mofrr</b> , <b>mrrib</b> , <b>msg</b> , <b>mvpn-rtcache</b> , <b>red</b> , <b>register</b> , <b>rpfv</b> , <b>rtm</b> , <b>s-pmsi</b> , and <b>tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## detail *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug router string pim events s-pmsi detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

## vpn-source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	VPN source address used to trace events
Context	<a href="#">debug router string pim events s-pmsi vpn-source-address (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">vpn-source-address</a>
Introduced	22.10.R1
Platforms	All

## tunnel-interface

Synopsis	Enable the <b>tunnel-interface</b> context
Context	<a href="#">debug router string pim events tunnel-interface</a>
Tree	<a href="#">tunnel-interface</a>
Notes	The following elements are part of a choice: ( <b>adjacency, assert, auto-rp, bgp, bier-inband, bsr, data, db, dynlisp, extranet, graft, interface, jp, mofrr, mrrib, msg, mvpn-rtcach, red, register, rpfv, rtm, s-pmsi, and tunnel-interface</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## ldp-p2mp-id *number*

Synopsis	LDP P2MP ID
Context	<a href="#">debug router string pim events tunnel-interface ldp-p2mp-id number</a>
Tree	<a href="#">ldp-p2mp-id</a>
Range	1 to 8192
Introduced	22.10.R1
Platforms	All

## rsvp-p2mp *string*

Synopsis	RSVP P2MP LSP name
Context	<a href="#">debug router string pim events tunnel-interface rsvp-p2mp string</a>
Tree	<a href="#">rsvp-p2mp</a>
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

## sender-address *string*

Synopsis	IP address of the sender
Context	<a href="#">debug router string pim events tunnel-interface sender-address string</a>
Tree	<a href="#">sender-address</a>
Introduced	22.10.R1

Platforms All

## packet

Synopsis Enable the **packet** context  
Context [debug router string pim packet](#)  
Tree [packet](#)  
Introduced 22.10.R1  
Platforms All

## all-origins

Synopsis Enable trace for all origins  
Context [debug router string pim packet all-origins](#)  
Tree [all-origins](#)  
Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
Introduced 22.10.R1  
Platforms All

## all-packet-types

Synopsis Enable PIM debugging for all packets  
Context [debug router string pim packet all-packet-types](#)  
Tree [all-packet-types](#)  
Notes The following elements are part of a choice: **all-packet-types** or **packet-types**.  
Introduced 22.10.R1  
Platforms All

## egress *boolean*

Synopsis Enable tracing for transmitted packets  
Context [debug router string pim packet egress boolean](#)  
Tree [egress](#)  
Default true  
Introduced 22.10.R1

Platforms All

### **ingress** *boolean*

Synopsis Enable tracing for received packets  
 Context [debug router](#) *string* [pim packet ingress](#) *boolean*  
 Tree [ingress](#)  
 Default true  
 Introduced 22.10.R1  
 Platforms All

### **interface-name** *string*

Synopsis Interface name  
 Context [debug router](#) *string* [pim packet interface-name](#) *string*  
 Tree [interface-name](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

### **ipv4** *boolean*

Synopsis Enable tracing for PIM IPv4 packets  
 Context [debug router](#) *string* [pim packet ipv4](#) *boolean*  
 Tree [ipv4](#)  
 Default true  
 Introduced 22.10.R1  
 Platforms All

### **ipv6** *boolean*

Synopsis Enable tracing for PIM IPv6 packets  
 Context [debug router](#) *string* [pim packet ipv6](#) *boolean*  
 Tree [ipv6](#)

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Default	true
Introduced	22.10.R1
Platforms	All

## packet-types

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a>
Tree	<a href="#">packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

## assert

Synopsis	Enable the <b>assert</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types assert</a>
Tree	<a href="#">assert</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types assert all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types assert interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>



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String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **auto-rp-announcement**

Synopsis	Enable the <b>auto-rp-announcement</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet</a> <a href="#">packet-types</a> <a href="#">auto-rp-announcement</a>
Tree	<a href="#">auto-rp-announcement</a>
Introduced	22.10.R1
Platforms	All

### **all-origins**

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet</a> <a href="#">packet-types</a> <a href="#">auto-rp-announcement</a> <a href="#">all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet</a> <a href="#">packet-types</a> <a href="#">auto-rp-announcement</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## auto-rp-mapping

Synopsis	Enable the <b>auto-rp-mapping</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">auto-rp-mapping</a>
Tree	<a href="#">auto-rp-mapping</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">auto-rp-mapping</a> <a href="#">all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">auto-rp-mapping</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## bsr

Synopsis	Enable the <b>bsr</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">bsr</a>
Tree	<a href="#">bsr</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">bsr all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">bsr interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## crp

Synopsis	Enable the <b>crp</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">crp</a>
Tree	<a href="#">crp</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">crp all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types crp</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **graft**

Synopsis	Enable the <b>graft</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">graft</a>
Tree	<a href="#">graft</a>
Introduced	22.10.R1
Platforms	All

### **all-origins**

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">graft</a> <a href="#">all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types</a> <a href="#">graft</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1

Platforms All

## graft-ack

Synopsis Enable the **graft-ack** context  
Context [debug router string pim packet packet-types graft-ack](#)  
Tree [graft-ack](#)  
Introduced 22.10.R1  
Platforms All

## all-origins

Synopsis Enable trace for all origins  
Context [debug router string pim packet packet-types graft-ack all-origins](#)  
Tree [all-origins](#)  
Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
Introduced 22.10.R1  
Platforms All

## interface-name *string*

Synopsis Interface name  
Context [debug router string pim packet packet-types graft-ack interface-name string](#)  
Tree [interface-name](#)  
String Length 1 to 32  
Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
Introduced 22.10.R1  
Platforms All

## hello

Synopsis Enable the **hello** context  
Context [debug router string pim packet packet-types hello](#)  
Tree [hello](#)  
Introduced 22.10.R1

Platforms All

## all-origins

Synopsis Enable trace for all origins  
 Context [debug router string pim packet packet-types hello all-origins](#)  
 Tree [all-origins](#)  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

## interface-name *string*

Synopsis Interface name  
 Context [debug router string pim packet packet-types hello interface-name string](#)  
 Tree [interface-name](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
 Introduced 22.10.R1  
 Platforms All

## jp

Synopsis Enable the **jp** context  
 Context [debug router string pim packet packet-types jp](#)  
 Tree [jp](#)  
 Introduced 22.10.R1  
 Platforms All

## all-origins

Synopsis Enable trace for all origins  
 Context [debug router string pim packet packet-types jp all-origins](#)  
 Tree [all-origins](#)  
 Notes The following elements are part of a choice: **all-origins** or **interface-name**.

Introduced 22.10.R1  
Platforms All

### **interface-name** *string*

Synopsis Interface name  
Context [debug router](#) *string* [pim packet packet-types jp](#) [interface-name](#) *string*  
Tree [interface-name](#)  
String Length 1 to 32  
Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
Introduced 22.10.R1  
Platforms All

### **mdt-tlv**

Synopsis Enable the **mdt-tlv** context  
Context [debug router](#) *string* [pim packet packet-types](#) [mdt-tlv](#)  
Tree [mdt-tlv](#)  
Introduced 22.10.R1  
Platforms All

### **all-origins**

Synopsis Enable trace for all origins  
Context [debug router](#) *string* [pim packet packet-types](#) [mdt-tlv](#) [all-origins](#)  
Tree [all-origins](#)  
Notes The following elements are part of a choice: **all-origins** or **interface-name**.  
Introduced 22.10.R1  
Platforms All

### **interface-name** *string*

Synopsis Interface name  
Context [debug router](#) *string* [pim packet packet-types](#) [mdt-tlv](#) [interface-name](#) *string*  
Tree [interface-name](#)

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String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## register

Synopsis	Enable the <b>register</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types register</a>
Tree	<a href="#">register</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types register all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types register interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## register-stop

Synopsis	Enable the <b>register-stop</b> context
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Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types register-stop</a>
Tree	<a href="#">register-stop</a>
Introduced	22.10.R1
Platforms	All

## all-origins

Synopsis	Enable trace for all origins
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types register-stop all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## interface-name *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">pim packet packet-types register-stop interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>interface-name</b> .
Introduced	22.10.R1
Platforms	All

## radius

Synopsis	Enter the <b>radius</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius</a>
Tree	<a href="#">radius</a>
Introduced	22.5.R1
Platforms	All

## proxy [[name](#)] *string*

Synopsis	Enter the <b>proxy</b> list instance
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Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i>
Tree	<a href="#">proxy</a>
Max. Instances	8
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	RADIUS proxy server name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i>
Tree	<a href="#">proxy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all-packet-types**

Synopsis	Enable RADIUS proxy debugging for all packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>all-packet-types</b>
Tree	<a href="#">all-packet-types</a>
Notes	The following elements are part of a mandatory choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-address** [\[address\]](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>client-address</b>
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>client-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">client-address</a>
Max. Instances	10
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the RADIUS client

Context [debug router](#) *string* [radius proxy](#) *string* [client-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [client-address](#)

Notes This element is part of a list key.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **detail-level** *keyword*

Synopsis Detail level of the RADIUS proxy debug output

Context [debug router](#) *string* [radius proxy](#) *string* [detail-level](#) *keyword*

Tree [detail-level](#)

Options low, high

Default low

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis Direction of the RADIUS proxy packet debugging

Context [debug router](#) *string* [radius proxy](#) *string* [direction](#) *keyword*

Tree [direction](#)

Options ingress, egress, both

Default both

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dropped-only** *boolean*

Synopsis Show dropped packets only

Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">dropped-only</a> <i>boolean</i>
Tree	<a href="#">dropped-only</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## packet-types

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a>
Tree	<a href="#">packet-types</a>
Notes	The following elements are part of a mandatory choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## access-accept *boolean*

Synopsis	Debug Access-Accept packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">access-accept</a> <i>boolean</i>
Tree	<a href="#">access-accept</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## access-challenge *boolean*

Synopsis	Debug Access-Challenge packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">access-challenge</a> <i>boolean</i>
Tree	<a href="#">access-challenge</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**access-reject *boolean***

Synopsis	Debug Access-Reject packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">access-reject</a> <i>boolean</i>
Tree	<a href="#">access-reject</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**access-request *boolean***

Synopsis	Debug Access-Request packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">access-request</a> <i>boolean</i>
Tree	<a href="#">access-request</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-request *boolean***

Synopsis	Debug Accounting-Request packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">accounting-request</a> <i>boolean</i>
Tree	<a href="#">accounting-request</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-response *boolean***

Synopsis	Debug Accounting-Response packets
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <a href="#">accounting-response</a> <i>boolean</i>
Tree	<a href="#">accounting-response</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**other** *boolean*

Synopsis	Debug other packet types
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">packet-types</a> <i>other</i> <i>boolean</i>
Tree	<a href="#">other</a>
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**servers**

Synopsis	Enable the <b>servers</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius</a> <i>servers</i>
Tree	<a href="#">servers</a>
Introduced	22.5.R1
Platforms	All

**attribute** [*name*] *string*

Synopsis	Enter the <b>attribute</b> list instance
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius</a> <i>servers</i> <a href="#">attribute</a> <i>string</i>
Tree	<a href="#">attribute</a>
Max. Instances	10
Introduced	22.5.R1
Platforms	All

**[name]** *string*

Synopsis	Attribute filter name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius</a> <i>servers</i> <a href="#">attribute</a> <i>string</i>
Tree	<a href="#">attribute</a>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**extended-type** *number*

Synopsis	RADIUS attribute extended type
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <b>extended-type</b> <i>number</i>
Tree	<a href="#">extended-type</a>
Range	1 to 255
Introduced	22.5.R1
Platforms	All

**transaction** *boolean*

Synopsis	Debug request and response transaction
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <b>transaction</b> <i>boolean</i>
Tree	<a href="#">transaction</a>
Default	false
Introduced	22.5.R1
Platforms	All

**type** *number*

Synopsis	RADIUS attribute type
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <b>type</b> <i>number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	All

**value**

Synopsis	Enter the <b>value</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">radius servers attribute</a> <i>string</i> <b>value</b>
Tree	<a href="#">value</a>
Introduced	22.5.R1
Platforms	All

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Attribute value specified as an IP address
Context	<a href="#">debug router string radius servers attribute string value address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: <b>address</b> , <b>hex</b> , <b>integer</b> , <b>prefix</b> , or <b>string</b> .
Introduced	22.5.R1
Platforms	All

**hex string**

Synopsis	Attribute value specified as a hexadecimal string
Context	<a href="#">debug router string radius servers attribute string value hex string</a>
Tree	<a href="#">hex</a>
String Length	1 to 253
Notes	The following elements are part of a choice: <b>address</b> , <b>hex</b> , <b>integer</b> , <b>prefix</b> , or <b>string</b> .
Introduced	22.5.R1
Platforms	All

**integer number**

Synopsis	Attribute value specified as an integer
Context	<a href="#">debug router string radius servers attribute string value integer number</a>
Tree	<a href="#">integer</a>
Max. Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>address</b> , <b>hex</b> , <b>integer</b> , <b>prefix</b> , or <b>string</b> .
Introduced	22.5.R1
Platforms	All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Attribute value specified as an IP prefix
Context	<a href="#">debug router string radius servers attribute string value prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>



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Notes	The following elements are part of a choice: <b>address</b> , <b>hex</b> , <b>integer</b> , <b>prefix</b> , or <b>string</b> .
Introduced	22.5.R1
Platforms	All

### **string** *string*

Synopsis	Attribute value specified as a string
Context	<a href="#">debug router</a> <a href="#">string</a> <a href="#">radius servers</a> <a href="#">attribute</a> <a href="#">string</a> <a href="#">value</a> <a href="#">string</a> <a href="#">string</a>
Tree	<a href="#">string</a>
String Length	1 to 253
Notes	The following elements are part of a choice: <b>address</b> , <b>hex</b> , <b>integer</b> , <b>prefix</b> , or <b>string</b> .
Introduced	22.5.R1
Platforms	All

### **vendor-specific**

Synopsis	Enter the <b>vendor-specific</b> context
Context	<a href="#">debug router</a> <a href="#">string</a> <a href="#">radius servers</a> <a href="#">attribute</a> <a href="#">string</a> <a href="#">vendor-specific</a>
Tree	<a href="#">vendor-specific</a>
Introduced	22.5.R1
Platforms	All

### **encoding**

Synopsis	Enter the <b>encoding</b> context
Context	<a href="#">debug router</a> <a href="#">string</a> <a href="#">radius servers</a> <a href="#">attribute</a> <a href="#">string</a> <a href="#">vendor-specific</a> <a href="#">encoding</a>
Tree	<a href="#">encoding</a>
Introduced	22.5.R1
Platforms	All

### **length-size** *number*

Synopsis	Size of the vendor-length field
Context	<a href="#">debug router</a> <a href="#">string</a> <a href="#">radius servers</a> <a href="#">attribute</a> <a href="#">string</a> <a href="#">vendor-specific</a> <a href="#">encoding</a> <a href="#">length-size</a> <a href="#">number</a>

Tree	<a href="#">length-size</a>
Range	0 to 2
Default	1
Introduced	22.5.R1
Platforms	All

### **type-size** *number*

Synopsis	Size of the vendor-type field
Context	<a href="#">debug router string radius servers attribute string vendor-specific encoding type-size number</a>
Tree	<a href="#">type-size</a>
Range	1 to 4
Default	1
Introduced	22.5.R1
Platforms	All

### **vendor** (*number* | *keyword*)

Synopsis	RADIUS vendor ID
Context	<a href="#">debug router string radius servers attribute string vendor-specific vendor (number   keyword)</a>
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	22.5.R1
Platforms	All

### **vendor-type** *number*

Synopsis	RADIUS vendor specific type
Context	<a href="#">debug router string radius servers attribute string vendor-specific vendor-type number</a>
Tree	<a href="#">vendor-type</a>
Max. Range	0 to 4294967295
Introduced	22.5.R1

Platforms All

### **detail-level** *keyword*

Synopsis Detail level of the RADIUS debug output  
Context [debug router](#) *string* [radius servers](#) **detail-level** *keyword*  
Tree [detail-level](#)  
Options low, medium, high  
Default medium  
Introduced 22.5.R1  
Platforms All

### **packet-types**

Synopsis Enter the **packet-types** context  
Context [debug router](#) *string* [radius servers](#) **packet-types**  
Tree [packet-types](#)  
Introduced 22.7.R1  
Platforms All

### **accounting** *boolean*

Synopsis Debug accounting packets  
Context [debug router](#) *string* [radius servers](#) **packet-types** **accounting** *boolean*  
Tree [accounting](#)  
Default true  
Introduced 22.7.R1  
Platforms All

### **authentication** *boolean*

Synopsis Debug authentication packets  
Context [debug router](#) *string* [radius servers](#) **packet-types** **authentication** *boolean*  
Tree [authentication](#)  
Default true

Introduced 22.7.R1  
 Platforms All

### **coa boolean**

Synopsis Debug CoA and DM packets  
 Context [debug router string radius servers packet-types coa boolean](#)  
 Tree [coa](#)  
 Default true  
 Introduced 22.7.R1  
 Platforms All

### **server-address [address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis Add a list entry for **server-address**  
 Context [debug router string radius servers server-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)  
 Tree [server-address](#)  
 Max. 10  
 Instances  
 Introduced 22.5.R1  
 Platforms All

### **[address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis IP address of the RADIUS server  
 Context [debug router string radius servers server-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)  
 Tree [server-address](#)  
 Notes This element is part of a list key.  
 Introduced 22.5.R1  
 Platforms All

### **vrrp**

Synopsis Enter the **vrrp** context

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Context	<a href="#">debug router string vrrp</a>
Tree	<a href="#">vrrp</a>
Introduced	22.10.R1
Platforms	All

## events

Synopsis	Enter the <b>events</b> context
Context	<a href="#">debug router string vrrp events</a>
Tree	<a href="#">events</a>
Description	Commands in this context enable debugging for VRRP events and state changes.
Introduced	22.10.R1
Platforms	All

## all-events

Synopsis	Enable the <b>all-events</b> context
Context	<a href="#">debug router string vrrp events all-events</a>
Tree	<a href="#">all-events</a>
Introduced	22.10.R1
Platforms	All

## interface [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<a href="#">debug router string vrrp events interface string</a>
Tree	<a href="#">interface</a>
Introduced	22.10.R1
Platforms	All

## [\[interface-name\]](#) *string*

Synopsis	Interface name
Context	<a href="#">debug router string vrrp events interface string</a>
Tree	<a href="#">interface</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## all-vrids

Synopsis	Enable the <b>all-vrids</b> context
Context	<a href="#">debug router string vrrp events interface string all-vrids</a>
Tree	<a href="#">all-vrids</a>
Introduced	23.3.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">debug router string vrrp events interface string ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	22.10.R1
Platforms	All

## vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for <b>vrid</b>
Context	<a href="#">debug router string vrrp events interface string ipv4 vrid number</a>
Tree	<a href="#">vrid</a>
Max. Instances	4
Introduced	22.10.R1
Platforms	All

## [\[virtual-router-id\]](#) *number*

Synopsis	Virtual router ID to debug
Context	<a href="#">debug router string vrrp events interface string ipv4 vrid number</a>

Tree	<a href="#">vrid</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp events interface</a> <i>string</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	22.10.R1
Platforms	All

## **vrid** [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for <b>vrid</b>
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp events interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">vrid</a> <i>number</i>
Tree	<a href="#">vrid</a>
Max. Instances	4
Introduced	22.10.R1
Platforms	All

## [\[virtual-router-id\]](#) *number*

Synopsis	Virtual router ID to debug
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp events interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">vrid</a> <i>number</i>
Tree	<a href="#">vrid</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## packet

Synopsis	Enter the <b>packet</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp packet</a>
Tree	<a href="#">packet</a>
Description	Commands in this context enable debugging for VRRP packet exchanges.
Introduced	22.10.R1
Platforms	All

## all-packets

Synopsis	Enable the <b>all-packets</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp packet all-packets</a>
Tree	<a href="#">all-packets</a>
Introduced	22.10.R1
Platforms	All

## interface [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp packet interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	22.10.R1
Platforms	All

## [[interface-name](#)] *string*

Synopsis	Interface name
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp packet interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All



## all-vrids

Synopsis	Enable the <b>all-vrids</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp packet interface</a> <i>string</i> <b>all-vrids</b>
Tree	<a href="#">all-vrids</a>
Introduced	23.3.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp packet interface</a> <i>string</i> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	22.10.R1
Platforms	All

## vrid [[virtual-router-id](#)] *number*

Synopsis	Add a list entry for <b>vrid</b>
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp packet interface</a> <i>string</i> <b>ipv4 vrid</b> <i>number</i>
Tree	<a href="#">vrid</a>
Max. Instances	4
Introduced	22.10.R1
Platforms	All

## [\[virtual-router-id\]](#) *number*

Synopsis	Virtual router ID to debug
Context	<a href="#">debug router</a> <i>string</i> <a href="#">vrrp packet interface</a> <i>string</i> <b>ipv4 vrid</b> <i>number</i>
Tree	<a href="#">vrid</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<code>debug router string vrrp packet interface string ipv6</code>
Tree	<code>ipv6</code>
Introduced	22.10.R1
Platforms	All

## vrid [*virtual-router-id*] *number*

Synopsis	Add a list entry for <b>vrid</b>
Context	<code>debug router string vrrp packet interface string ipv6 vrid number</code>
Tree	<code>vrid</code>
Max. Instances	4
Introduced	22.10.R1
Platforms	All

## [*virtual-router-id*] *number*

Synopsis	Virtual router ID to debug
Context	<code>debug router string vrrp packet interface string ipv6 vrid number</code>
Tree	<code>vrid</code>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## wpp

Synopsis	Enter the <b>wpp</b> context
Context	<code>debug router string wpp</code>
Tree	<code>wpp</code>
Introduced	22.7.R1
Platforms	All

## packets

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug router string wpp packets</a>
Tree	<a href="#">packets</a>
Introduced	22.7.R1
Platforms	All

## detail-level *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	<a href="#">debug router string wpp packets detail-level keyword</a>
Tree	<a href="#">detail-level</a>
Options	low, high
Default	low
Introduced	22.7.R1
Platforms	All

## portal [[name](#)] *string*

Synopsis	Enter the <b>portal</b> list instance
Context	<a href="#">debug router string wpp portal string</a>
Tree	<a href="#">portal</a>
Introduced	22.7.R1
Platforms	All

## [\[name\]](#) *string*

Synopsis	WPP portal name
Context	<a href="#">debug router string wpp portal string</a>
Tree	<a href="#">portal</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

## packets

Synopsis	Enter the <b>packets</b> context
Context	<a href="#">debug router</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i> <a href="#">packets</a>
Tree	<a href="#">packets</a>
Introduced	22.7.R1
Platforms	All

## detail-level *keyword*

Synopsis	Detail level of the WPP packet debug output
Context	<a href="#">debug router</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i> <a href="#">packets detail-level</a> <i>keyword</i>
Tree	<a href="#">detail-level</a>
Options	low, high
Default	low
Introduced	22.7.R1
Platforms	All

## service

Synopsis	Enter the <b>service</b> context
Context	<a href="#">debug service</a>
Tree	<a href="#">service</a>
Introduced	22.10.R1
Platforms	All

## ies [[service-name](#)] *string*

Synopsis	Enter the <b>ies</b> list instance
Context	<a href="#">debug service ies</a> <i>string</i>
Tree	<a href="#">ies</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[service-name] string**

Synopsis	Administrative service name
Context	<a href="#">debug service ies string</a>
Tree	<a href="#">ies</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<a href="#">debug service ies string ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**circuit-id [id] string**

Synopsis	Add a list entry for <b>circuit-id</b>
Context	<a href="#">debug service ies string ppp circuit-id string</a>
Tree	<a href="#">circuit-id</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id] string**

Synopsis	Circuit ID of the PPPoE session to debug
Context	<a href="#">debug service ies string ppp circuit-id string</a>
Tree	<a href="#">circuit-id</a>
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## events

Synopsis Enable the **events** context

Context [debug service ies string ppp events](#)

Tree [events](#)

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis Enable PPP debugging for all events

Context [debug service ies string ppp events all](#)

Tree [all](#)

Notes The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp-client

Synopsis Enable the **dhcp-client** context

Context [debug service ies string ppp events dhcp-client](#)

Tree [dhcp-client](#)

Notes The following elements are part of a mandatory choice: **all** or (**dhcp-client**, **l2tp**, **local-address-assignment**, and **ppp**).

Introduced 23.3.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## terminate-only *boolean*

Synopsis Debug events for ungraceful terminated sessions only

Context [debug service ies string ppp events dhcp-client terminate-only boolean](#)

Tree [terminate-only](#)

Default false

Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## I2tp

Synopsis	Enable the <b>I2tp</b> context
Context	<a href="#">debug service ies string ppp events I2tp</a>
Tree	<a href="#">I2tp</a>
Description	Commands in this context configure debugging events for L2TP sessions.
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>I2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service ies string ppp events I2tp terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-address-assignment

Synopsis	Enable the <b>local-address-assignment</b> context
Context	<a href="#">debug service ies string ppp events local-address-assignment</a>
Tree	<a href="#">local-address-assignment</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>I2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
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Context	<a href="#">debug service ies string ppp events local-address-assignment terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug service ies string ppp events ppp</a>
Tree	<a href="#">ppp</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## terminate-only boolean

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service ies string ppp events ppp terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac [address] string

Synopsis	Add a list entry for <b>mac</b>
Context	<a href="#">debug service ies string ppp mac string</a>
Tree	<a href="#">mac</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**[address] string**

Synopsis	MAC address of the PPPoE session to debug
Context	<a href="#">debug service ies string ppp mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**packets**

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug service ies string ppp packets</a>
Tree	<a href="#">packets</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Enable PPP debugging for all packets
Context	<a href="#">debug service ies string ppp packets all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**detail-level keyword**

Synopsis	Detail level of the PPP packet debug output
Context	<a href="#">debug service ies string ppp packets detail-level keyword</a>
Tree	<a href="#">detail-level</a>
Options	low, medium, high
Default	high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp-client *boolean***

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug service ies string ppp packets dhcp-client boolean</a>
Tree	<a href="#">dhcp-client</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**discovery**

Synopsis	Enter the <b>discovery</b> context
Context	<a href="#">debug service ies string ppp packets discovery</a>
Tree	<a href="#">discovery</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Enable PPP debugging for all discovery packets
Context	<a href="#">debug service ies string ppp packets discovery all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**padi *boolean***

Synopsis	Enable PPP debugging for PADI discovery packets
Context	<a href="#">debug service ies string ppp packets discovery padi boolean</a>
Tree	<a href="#">padi</a>

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Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pado** *boolean*

Synopsis	Enable PPP debugging for PADO discovery packets
Context	<a href="#">debug service ies string ppp packets discovery pado</a> <i>boolean</i>
Tree	<a href="#">pado</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padr** *boolean*

Synopsis	Enable PPP debugging for PADR discovery packets
Context	<a href="#">debug service ies string ppp packets discovery padr</a> <i>boolean</i>
Tree	<a href="#">padr</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pads** *boolean*

Synopsis	Enable PPP debugging for PADS discovery packets
Context	<a href="#">debug service ies string ppp packets discovery pads</a> <i>boolean</i>
Tree	<a href="#">pads</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padt** *boolean*

Synopsis	Enable PPP debugging for PADT discovery packets
Context	<a href="#">debug service ies</a> <i>string</i> <a href="#">ppp packets discovery</a> <b>padt</b> <i>boolean</i>
Tree	<a href="#">padt</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mode** *keyword*

Synopsis	PPP packets present in the debug output
Context	<a href="#">debug service ies</a> <i>string</i> <a href="#">ppp packets</a> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Default	dropped-only
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-session**

Synopsis	Enter the <b>ppp-session</b> context
Context	<a href="#">debug service ies</a> <i>string</i> <a href="#">ppp packets</a> <b>ppp-session</b>
Tree	<a href="#">ppp-session</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all**

Synopsis	Enable PPP debugging for all PPP session packets
Context	<a href="#">debug service ies</a> <i>string</i> <a href="#">ppp packets</a> <b>ppp-session</b> <b>all</b>
Tree	<a href="#">all</a>

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Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **chap** *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<a href="#">debug service ies string ppp packets ppp-session chap</a> <i>boolean</i>
Tree	<a href="#">chap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipcp** *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	<a href="#">debug service ies string ppp packets ppp-session ipcp</a> <i>boolean</i>
Tree	<a href="#">ipcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6cp** *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	<a href="#">debug service ies string ppp packets ppp-session ipv6cp</a> <i>boolean</i>
Tree	<a href="#">ipv6cp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lcp boolean**

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	<a href="#">debug service ies string ppp packets ppp-session lcp boolean</a>
Tree	<a href="#">lcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pap boolean**

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<a href="#">debug service ies string ppp packets ppp-session pap boolean</a>
Tree	<a href="#">pap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-id [id] string**

Synopsis	Add a list entry for <b>remote-id</b>
Context	<a href="#">debug service ies string ppp remote-id string</a>
Tree	<a href="#">remote-id</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id] string**

Synopsis	Remote ID of the PPPoE session to debug
Context	<a href="#">debug service ies string ppp remote-id string</a>
Tree	<a href="#">remote-id</a>
String Length	1 to 255

Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap** [[sap-id](#)] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<a href="#">debug service ies string ppp sap string</a>
Tree	<a href="#">sap</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[sap-id]** *string*

Synopsis	SAP ID of the PPPoE session to debug
Context	<a href="#">debug service ies string ppp sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-name** [[name](#)] *string*

Synopsis	Add a list entry for <b>user-name</b>
Context	<a href="#">debug service ies string ppp user-name string</a>
Tree	<a href="#">user-name</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name] string**

Synopsis	Username of the PPPoE session to debug
Context	<a href="#">debug service ies string ppp user-name string</a>
Tree	<a href="#">user-name</a>
Description	This command configures the username of the PPPoE session to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vpls [service-name] string**

Synopsis	Enter the <b>vpls</b> list instance
Context	<a href="#">debug service vpls string</a>
Tree	<a href="#">vpls</a>
Introduced	22.10.R1
Platforms	All

**[service-name] string**

Synopsis	Administrative service name
Context	<a href="#">debug service vpls string</a>
Tree	<a href="#">vpls</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<a href="#">debug service vpls string igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>



Introduced 22.10.R1  
Platforms All

## **packet**

Synopsis Enable the **packet** context  
Context [debug service vpls string igmp-snooping packet](#)  
Tree [packet](#)  
Introduced 22.10.R1  
Platforms All

## **detail keyword**

Synopsis Detail level of the debug output  
Context [debug service vpls string igmp-snooping packet detail keyword](#)  
Tree [detail](#)  
Options low, medium, high  
Default medium  
Introduced 22.10.R1  
Platforms All

## **dropped boolean**

Synopsis Enable tracing for dropped packets  
Context [debug service vpls string igmp-snooping packet dropped boolean](#)  
Tree [dropped](#)  
Default true  
Introduced 22.10.R1  
Platforms All

## **egress boolean**

Synopsis Enable tracing for transmitted packets  
Context [debug service vpls string igmp-snooping packet egress boolean](#)  
Tree [egress](#)

Default	true
Introduced	22.10.R1
Platforms	All

**evpn-mpls** *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">igmp-snooping packet evpn-mpls</a> <i>boolean</i>
Tree	<a href="#">evpn-mpls</a>
Default	false
Introduced	22.10.R1
Platforms	All

**evpn-vxlan** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *vni number*

Synopsis	Add a list entry for <b>evpn-vxlan</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">igmp-snooping packet evpn-vxlan</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>vni number</i>
Tree	<a href="#">evpn-vxlan</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the VXLAN Tunnel Endpoint
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">igmp-snooping packet evpn-vxlan</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>vni number</i>
Tree	<a href="#">evpn-vxlan</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**vni number**

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<a href="#">debug service vpls string igmp-snooping packet evpn-vxlan</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">vni number</a>
Tree	<a href="#">evpn-vxlan</a>
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**ingress boolean**

Synopsis	Enable tracing for received packets
Context	<a href="#">debug service vpls string igmp-snooping packet ingress boolean</a>
Tree	<a href="#">ingress</a>
Default	true
Introduced	22.10.R1
Platforms	All

**mac [mac-address] string**

Synopsis	Add a list entry for <b>mac</b>
Context	<a href="#">debug service vpls string igmp-snooping packet mac string</a>
Tree	<a href="#">mac</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[mac-address] string**

Synopsis	MAC address
Context	<a href="#">debug service vpls string igmp-snooping packet mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.

Introduced 22.10.R1  
 Platforms All

### **sap** [[sap-id](#)] *string*

Synopsis Add a list entry for **sap**  
 Context [debug service vpls string igmp-snooping packet sap string](#)  
 Tree [sap](#)  
 Max. Instances 8  
 Introduced 22.10.R1  
 Platforms All

### **[sap-id]** *string*

Synopsis SAP ID  
 Context [debug service vpls string igmp-snooping packet sap string](#)  
 Tree [sap](#)  
 String Length 1 to 45  
 Notes This element is part of a list key.  
 Introduced 22.10.R1  
 Platforms All

### **sdp-bind** [[sdp-bind-id](#)] *string*

Synopsis Add a list entry for **sdp-bind**  
 Context [debug service vpls string igmp-snooping packet sdp-bind string](#)  
 Tree [sdp-bind](#)  
 Max. Instances 8  
 Introduced 22.10.R1  
 Platforms All

### **[sdp-bind-id]** *string*

Synopsis SDP bind ID

Context	<a href="#">debug service vpls string igmp-snooping packet sdp-bind string</a>
Tree	<a href="#">sdp-bind</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

## mld-snooping

Synopsis	Enter the <b>mld-snooping</b> context
Context	<a href="#">debug service vpls string mld-snooping</a>
Tree	<a href="#">mld-snooping</a>
Introduced	22.10.R1
Platforms	All

## packet

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug service vpls string mld-snooping packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

## detail *keyword*

Synopsis	Detail level of the debug output
Context	<a href="#">debug service vpls string mld-snooping packet detail keyword</a>
Tree	<a href="#">detail</a>
Options	low, medium, high
Default	medium
Introduced	22.10.R1
Platforms	All

**dropped** *boolean*

Synopsis	Enable tracing for dropped packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet dropped</a> <i>boolean</i>
Tree	<a href="#">dropped</a>
Default	true
Introduced	22.10.R1
Platforms	All

**egress** *boolean*

Synopsis	Enable tracing for transmitted packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet egress</a> <i>boolean</i>
Tree	<a href="#">egress</a>
Default	true
Introduced	22.10.R1
Platforms	All

**evpn-mpls** *boolean*

Synopsis	Allow debugging for EVPN-MPLS destinations
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet evpn-mpls</a> <i>boolean</i>
Tree	<a href="#">evpn-mpls</a>
Default	false
Introduced	22.10.R1
Platforms	All

**evpn-vxlan** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [vni](#) *number*

Synopsis	Add a list entry for <b>evpn-vxlan</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet evpn-vxlan</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">vni</a> <i>number</i>
Tree	<a href="#">evpn-vxlan</a>
Max. Instances	8
Introduced	22.10.R1

Platforms All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the VXLAN Tunnel Endpoint

Context [debug service vpls string mld-snooping packet evpn-vxlan](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [vni number](#)

Tree [evpn-vxlan](#)

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

### **vni number**

Synopsis VXLAN Network Identifier of the VXLAN binding

Context [debug service vpls string mld-snooping packet evpn-vxlan](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [vni number](#)

Tree [evpn-vxlan](#)

Range 1 to 16777215

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

### **ingress boolean**

Synopsis Enable tracing for received packets

Context [debug service vpls string mld-snooping packet ingress boolean](#)

Tree [ingress](#)

Default true

Introduced 22.10.R1

Platforms All

### **mac** [[mac-address](#)] *string*

Synopsis Add a list entry for **mac**

Context [debug service vpls string mld-snooping packet mac string](#)

Tree	<a href="#">mac</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[mac-address]** *string*

Synopsis	MAC address
Context	<a href="#">debug service vpls string mld-snooping packet mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**sap** [[sap-id](#)] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<a href="#">debug service vpls string mld-snooping packet sap string</a>
Tree	<a href="#">sap</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<a href="#">debug service vpls string mld-snooping packet sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All



**sdp-bind** [**sdp-bind-id**] *string*

Synopsis	Add a list entry for <b>sdp-bind</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet sdp-bind</a> <i>string</i>
Tree	<a href="#">sdp-bind</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mld-snooping packet sdp-bind</a> <i>string</i>
Tree	<a href="#">sdp-bind</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**mrp**

Synopsis	Enter the <b>mrp</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp</a>
Tree	<a href="#">mrp</a>
Introduced	23.10.R1
Platforms	All

**events**

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp events</a>
Tree	<a href="#">events</a>
Introduced	23.10.R1
Platforms	All

## all-events

Synopsis	Trace all MRP events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp events all-events</a>
Tree	<a href="#">all-events</a>
Description	When specified, the system traces all MRP events, including applicant, leave all, periodic and registrant state machines, and received and transmitted MRP PDUs.
Notes	The following elements are part of a choice: <b>all-events</b> or <b>event-types</b> .
Introduced	23.10.R1
Platforms	All

## event-types

Synopsis	Enter the <b>event-types</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp events event-types</a>
Tree	<a href="#">event-types</a>
Notes	The following elements are part of a choice: <b>all-events</b> or <b>event-types</b> .
Introduced	23.10.R1
Platforms	All

## applicant-sm *boolean*

Synopsis	Trace the applicant state machine
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp events event-types applicant-sm</a> <i>boolean</i>
Tree	<a href="#">applicant-sm</a>
Default	false
Introduced	23.10.R1
Platforms	All

## leave-all-sm *boolean*

Synopsis	Trace leave all state machine changes
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp events event-types leave-all-sm</a> <i>boolean</i>
Tree	<a href="#">leave-all-sm</a>
Default	false

Introduced 23.10.R1  
Platforms All

### **mrpdu** *boolean*

Synopsis Trace received and transmitted PDUs  
Context [debug service vpls](#) *string* [mrp events event-types](#) [mrpdu](#) *boolean*  
Tree [mrpdu](#)  
Default false  
Introduced 23.10.R1  
Platforms All

### **periodic-sm** *boolean*

Synopsis Trace periodic state machine changes  
Context [debug service vpls](#) *string* [mrp events event-types](#) [periodic-sm](#) *boolean*  
Tree [periodic-sm](#)  
Default false  
Introduced 23.10.R1  
Platforms All

### **registrant-sm** *boolean*

Synopsis Trace registrant state machine changes  
Context [debug service vpls](#) *string* [mrp events event-types](#) [registrant-sm](#) *boolean*  
Tree [registrant-sm](#)  
Default false  
Introduced 23.10.R1  
Platforms All

### **mmp-mac** [[mac](#)] *string*

Synopsis Add a list entry for **mmp-mac**  
Context [debug service vpls](#) *string* [mrp mmp-mac](#) *string*  
Tree [mmp-mac](#)

Max. Instances	256
Introduced	23.10.R1
Platforms	All

**[mac]** *string*

Synopsis	MAC address to trace
Context	<a href="#">debug service vpls string mrrp mrrp-mac string</a>
Tree	<a href="#">mrrp-mac</a>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

**mvrp-vlan** [[vlan](#)] *number*

Synopsis	Add a list entry for <b>mvrp-vlan</b>
Context	<a href="#">debug service vpls string mrrp mvrp-vlan number</a>
Tree	<a href="#">mvrp-vlan</a>
Max. Instances	256
Introduced	23.10.R1
Platforms	All

**[vlan]** *number*

Synopsis	VLAN ID to trace
Context	<a href="#">debug service vpls string mrrp mvrp-vlan number</a>
Tree	<a href="#">mvrp-vlan</a>
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

**sap** [[sap-id](#)] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Max. Instances	256
Introduced	23.10.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID to trace
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp sap</a> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

**sdp-bind** [[sdp-bind-id](#)] *string*

Synopsis	Add a list entry for <b>sdp-bind</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp sdp-bind</a> <i>string</i>
Tree	<a href="#">sdp-bind</a>
Max. Instances	256
Introduced	23.10.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP ID to trace
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">mrp sdp-bind</a> <i>string</i>
Tree	<a href="#">sdp-bind</a>
String Length	3 to 16

Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

## pim-snooping

Synopsis	Enter the <b>pim-snooping</b> context
Context	<a href="#">debug service vpls string pim-snooping</a>
Tree	<a href="#">pim-snooping</a>
Introduced	22.10.R1
Platforms	All

## events

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug service vpls string pim-snooping events</a>
Tree	<a href="#">events</a>
Introduced	22.10.R1
Platforms	All

## adjacency

Synopsis	Enable the <b>adjacency</b> context
Context	<a href="#">debug service vpls string pim-snooping events adjacency</a>
Tree	<a href="#">adjacency</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

## all

Synopsis	Enable the <b>all</b> context
Context	<a href="#">debug service vpls string pim-snooping events all</a>
Tree	<a href="#">all</a>

Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events all detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events all group-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events all source-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

**db**

Synopsis	Enable the <b>db</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events db</a>

Tree	<a href="#">db</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail *boolean***

Synopsis	Enable detail tracing
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events db detail <i>boolean</i></a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events db group-address (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**

Synopsis	Source address used to trace events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events db source-address (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

**jp**

Synopsis	Enable the <b>jp</b> context
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Context	<a href="#">debug service vpls string pim-snooping events jp</a>
Tree	<a href="#">jp</a>
Description	Commands in this context enable debugging for PIM join and prune mechanisms.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug service vpls string pim-snooping events jp detail boolean</a>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**group-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP multicast group address used to trace events
Context	<a href="#">debug service vpls string pim-snooping events jp group-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">group-address</a>
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source address used to trace events
Context	<a href="#">debug service vpls string pim-snooping events jp source-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">source-address</a>
Introduced	22.10.R1
Platforms	All

**mcs**

Synopsis	Enable the <b>mcs</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events mcs</a>
Tree	<a href="#">mcs</a>
Description	Commands in this context enable debugging for PIM snooping multi-chassis synchronization.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events mcs detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

**port**

Synopsis	Enable the <b>port</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events port</a>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

**detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events port detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>

Default	false
Introduced	22.10.R1
Platforms	All

### evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	<a href="#">debug service vpls string pim-snooping events port evpn-mpls</a>
Tree	<a href="#">evpn-mpls</a>
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

### sap-id string

Synopsis	SAP ID
Context	<a href="#">debug service vpls string pim-snooping events port sap-id string</a>
Tree	<a href="#">sap-id</a>
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

### sdp-bind-id string

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls string pim-snooping events port sdp-bind-id string</a>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

**vni number**

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<code>debug service vpls string pim-snooping events port vni number</code>
Tree	<code>vni</code>
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

**vtep (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	IP address of the tunnel endpoint
Context	<code>debug service vpls string pim-snooping events port vtep (ipv4-address-no-zone   ipv6-address-no-zone)</code>
Tree	<code>vtep</code>
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

**red**

Synopsis	Enable the <b>red</b> context
Context	<code>debug service vpls string pim-snooping events red</code>
Tree	<code>red</code>
Description	Commands in this context enable debugging for PIM messages sent to the standby CPM.
Notes	The following elements are part of a choice: ( <b>adjacency</b> , <b>db</b> , <b>jp</b> , <b>mcs</b> , <b>port</b> , and <b>red</b> ) or <b>all</b> .
Introduced	22.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detail tracing
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping events red detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet</a>
Tree	<a href="#">packet</a>
Introduced	22.10.R1
Platforms	All

### **all-origins**

Synopsis	Allow tracing on all ports
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet all-origins</a>
Tree	<a href="#">all-origins</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>port</b> .
Introduced	22.10.R1
Platforms	All

### **all-packet-types**

Synopsis	Enable PIM debugging for all packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet all-packet-types</a>
Tree	<a href="#">all-packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

## packet-types

Synopsis	Enter the <b>packet-types</b> context
Context	<a href="#">debug service vpls string pim-snooping packet packet-types</a>
Tree	<a href="#">packet-types</a>
Notes	The following elements are part of a choice: <b>all-packet-types</b> or <b>packet-types</b> .
Introduced	22.10.R1
Platforms	All

## hello *boolean*

Synopsis	Debug Hello packets
Context	<a href="#">debug service vpls string pim-snooping packet packet-types hello boolean</a>
Tree	<a href="#">hello</a>
Default	false
Introduced	22.10.R1
Platforms	All

## jp *boolean*

Synopsis	Debug join and prune packets
Context	<a href="#">debug service vpls string pim-snooping packet packet-types jp boolean</a>
Tree	<a href="#">jp</a>
Default	false
Introduced	22.10.R1
Platforms	All

## port

Synopsis	Enable the <b>port</b> context
Context	<a href="#">debug service vpls string pim-snooping packet port</a>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: <b>all-origins</b> or <b>port</b> .
Introduced	22.10.R1
Platforms	All

## evpn-mpls

Synopsis	Enable tracing for EVPN-MPLS ports
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet port evpn-mpls</a>
Tree	<a href="#">evpn-mpls</a>
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

## sap-id *string*

Synopsis	SAP ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet port sap-id</a> <i>string</i>
Tree	<a href="#">sap-id</a>
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

## sdp-bind-id *string*

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet port sdp-bind-id</a> <i>string</i>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

## vni *number*

Synopsis	VXLAN Network Identifier of the VXLAN binding
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">pim-snooping packet port vni</a> <i>number</i>

Tree	<a href="#">vni</a>
Range	1 to 16777215
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

### **vtep** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the tunnel endpoint
Context	<a href="#">debug service vpls string pim-snooping packet port vtep</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">vtep</a>
Notes	The following elements are part of a mandatory choice: <b>evpn-mpls</b> , <b>sap-id</b> , <b>sdp-bind-id</b> , or ( <b>vni</b> and <b>vtep</b> ).
Introduced	22.10.R1
Platforms	All

### **ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<a href="#">debug service vpls string ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id** [*id*] *string*

Synopsis	Add a list entry for <b>circuit-id</b>
Context	<a href="#">debug service vpls string ppp circuit-id string</a>
Tree	<a href="#">circuit-id</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**[id]** *string*

Synopsis	Circuit ID of the PPPoE session to debug
Context	<a href="#">debug service vpls string ppp circuit-id string</a>
Tree	<a href="#">circuit-id</a>
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**events**

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug service vpls string ppp events</a>
Tree	<a href="#">events</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Enable PPP debugging for all events
Context	<a href="#">debug service vpls string ppp events all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp-client**

Synopsis	Enable the <b>dhcp-client</b> context
Context	<a href="#">debug service vpls string ppp events dhcp-client</a>
Tree	<a href="#">dhcp-client</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).

Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **terminate-only** *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp events dhcp-client terminate-only</a> <i>boolean</i>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **l2tp**

Synopsis	Enable the <b>l2tp</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp events l2tp</a>
Tree	<a href="#">l2tp</a>
Description	Commands in this context configure debugging events for L2TP sessions.
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **terminate-only** *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp events l2tp terminate-only</a> <i>boolean</i>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-address-assignment**

Synopsis	Enable the <b>local-address-assignment</b> context
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Context	<a href="#">debug service vpls string ppp events local-address-assignment</a>
Tree	<a href="#">local-address-assignment</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **terminate-only** *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service vpls string ppp events local-address-assignment terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp**

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug service vpls string ppp events ppp</a>
Tree	<a href="#">ppp</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **terminate-only** *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service vpls string ppp events ppp terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac** [address] *string*

Synopsis	Add a list entry for <b>mac</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[address]** *string*

Synopsis	MAC address of the PPPoE session to debug
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**packets**

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets</a>
Tree	<a href="#">packets</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Enable PPP debugging for all packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**detail-level** *keyword*

Synopsis	Detail level of the PPP packet debug output
Context	<a href="#">debug service vpls string ppp packets detail-level keyword</a>
Tree	<a href="#">detail-level</a>
Options	low, medium, high
Default	high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp-client** *boolean*

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug service vpls string ppp packets dhcp-client boolean</a>
Tree	<a href="#">dhcp-client</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**discovery**

Synopsis	Enter the <b>discovery</b> context
Context	<a href="#">debug service vpls string ppp packets discovery</a>
Tree	<a href="#">discovery</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Enable PPP debugging for all discovery packets
Context	<a href="#">debug service vpls string ppp packets discovery all</a>

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Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padi** *boolean*

Synopsis	Enable PPP debugging for PADI discovery packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets discovery padi</a> <i>boolean</i>
Tree	<a href="#">padi</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pado** *boolean*

Synopsis	Enable PPP debugging for PADO discovery packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets discovery pado</a> <i>boolean</i>
Tree	<a href="#">pado</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padr** *boolean*

Synopsis	Enable PPP debugging for PADR discovery packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets discovery padr</a> <i>boolean</i>
Tree	<a href="#">padr</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pads** *boolean*

Synopsis	Enable PPP debugging for PADS discovery packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets discovery pads</a> <i>boolean</i>
Tree	<a href="#">pads</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padt** *boolean*

Synopsis	Enable PPP debugging for PADT discovery packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets discovery padt</a> <i>boolean</i>
Tree	<a href="#">padt</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mode** *keyword*

Synopsis	PPP packets present in the debug output
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Default	dropped-only
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-session**

Synopsis	Enter the <b>ppp-session</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets ppp-session</a>
Tree	<a href="#">ppp-session</a>

Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Enable PPP debugging for all PPP session packets
Context	<a href="#">debug service vpls string ppp packets ppp-session all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**chap *boolean***

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<a href="#">debug service vpls string ppp packets ppp-session chap boolean</a>
Tree	<a href="#">chap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipcp *boolean***

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	<a href="#">debug service vpls string ppp packets ppp-session ipcp boolean</a>
Tree	<a href="#">ipcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



### **ipv6cp** *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets</a> <a href="#">ppp-session</a> <a href="#">ipv6cp</a> <i>boolean</i>
Tree	<a href="#">ipv6cp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lcp** *boolean*

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets</a> <a href="#">ppp-session</a> <a href="#">lcp</a> <i>boolean</i>
Tree	<a href="#">lcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pap** *boolean*

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp packets</a> <a href="#">ppp-session</a> <a href="#">pap</a> <i>boolean</i>
Tree	<a href="#">pap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-id** [*id*] *string*

Synopsis	Add a list entry for <b>remote-id</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp</a> <a href="#">remote-id</a> <i>string</i>
Tree	<a href="#">remote-id</a>

Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id] string**

Synopsis	Remote ID of the PPPoE session to debug
Context	<a href="#">debug service vpls string ppp remote-id string</a>
Tree	<a href="#">remote-id</a>
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap [sap-id] string**

Synopsis	Add a list entry for <b>sap</b>
Context	<a href="#">debug service vpls string ppp sap string</a>
Tree	<a href="#">sap</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[sap-id] string**

Synopsis	SAP ID of the PPPoE session to debug
Context	<a href="#">debug service vpls string ppp sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-name** [*name*] *string*

Synopsis	Add a list entry for <b>user-name</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp user-name</a> <i>string</i>
Tree	<a href="#">user-name</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Username of the PPPoE session to debug
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">ppp user-name</a> <i>string</i>
Tree	<a href="#">user-name</a>
Description	This command configures the username of the PPPoE session to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**proxy-arp**

Synopsis	Enter the <b>proxy-arp</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">proxy-arp</a>
Tree	<a href="#">proxy-arp</a>
Introduced	23.10.R1
Platforms	All

**all**

Synopsis	Debug the proxy ARP function for all addresses
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">proxy-arp</a> <a href="#">all</a>
Tree	<a href="#">all</a>

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Notes	The following elements are part of a choice: <b>all</b> , <b>ip</b> , or <b>mac</b> .
Introduced	23.10.R1
Platforms	All

## ip

Synopsis	Enter the <b>ip</b> context
Context	<a href="#">debug service vpls string proxy-arp ip</a>
Tree	<a href="#">ip</a>
Notes	The following elements are part of a choice: <b>all</b> , <b>ip</b> , or <b>mac</b> .
Introduced	23.10.R1
Platforms	All

## address [ipv4-address] string

Synopsis	Add a list entry for <b>address</b>
Context	<a href="#">debug service vpls string proxy-arp ip address string</a>
Tree	<a href="#">address</a>
Max. Instances	256
Introduced	23.10.R1
Platforms	All

## [ipv4-address] string

Synopsis	IPv4 address of the proxy ARP session to debug
Context	<a href="#">debug service vpls string proxy-arp ip address string</a>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

## mac

Synopsis	Enter the <b>mac</b> context
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Context	<code>debug service vpls string proxy-arp mac</code>
Tree	<code>mac</code>
Notes	The following elements are part of a choice: <b>all</b> , <b>ip</b> , or <b>mac</b> .
Introduced	23.10.R1
Platforms	All

### **address** [`address`] *string*

Synopsis	Add a list entry for <b>address</b>
Context	<code>debug service vpls string proxy-arp mac address string</code>
Tree	<code>address</code>
Max. Instances	256
Introduced	23.10.R1
Platforms	All

### **[address]** *string*

Synopsis	MAC address of the proxy ARP session to debug
Context	<code>debug service vpls string proxy-arp mac address string</code>
Tree	<code>address</code>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

### **proxy-nd**

Synopsis	Enter the <b>proxy-nd</b> context
Context	<code>debug service vpls string proxy-nd</code>
Tree	<code>proxy-nd</code>
Introduced	23.10.R1
Platforms	All

## all

Synopsis	Debug the proxy ND function for all addresses
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">proxy-nd all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> , <b>ip</b> , or <b>mac</b> .
Introduced	23.10.R1
Platforms	All

## ip

Synopsis	Enter the <b>ip</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">proxy-nd ip</a>
Tree	<a href="#">ip</a>
Notes	The following elements are part of a choice: <b>all</b> , <b>ip</b> , or <b>mac</b> .
Introduced	23.10.R1
Platforms	All

## address [[ipv6-address](#)] *string*

Synopsis	Add a list entry for <b>address</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">proxy-nd ip address</a> <i>string</i>
Tree	<a href="#">address</a>
Max. Instances	256
Introduced	23.10.R1
Platforms	All

## [\[ipv6-address\]](#) *string*

Synopsis	IPv6 address of the proxy ND session to debug
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">proxy-nd ip address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

## mac

Synopsis	Enter the <b>mac</b> context
Context	<a href="#">debug service vpls string proxy-nd mac</a>
Tree	<a href="#">mac</a>
Notes	The following elements are part of a choice: <b>all</b> , <b>ip</b> , or <b>mac</b> .
Introduced	23.10.R1
Platforms	All

## address [[address](#)] *string*

Synopsis	Add a list entry for <b>address</b>
Context	<a href="#">debug service vpls string proxy-nd mac address string</a>
Tree	<a href="#">address</a>
Max. Instances	256
Introduced	23.10.R1
Platforms	All

## [[address](#)] *string*

Synopsis	MAC address of the proxy ND session to debug
Context	<a href="#">debug service vpls string proxy-nd mac address string</a>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

## spb

Synopsis	Enable the <b>spb</b> context
Context	<a href="#">debug service vpls string spb</a>
Tree	<a href="#">spb</a>
Introduced	23.10.R1
Platforms	All

## events

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug service vpls string spb events</a>
Tree	<a href="#">events</a>
Introduced	23.10.R1
Platforms	All

## adjacency

Synopsis	Enable the <b>adjacency</b> context
Context	<a href="#">debug service vpls string spb events adjacency</a>
Tree	<a href="#">adjacency</a>
Introduced	23.10.R1
Platforms	All

## sap string

Synopsis	SAP ID
Context	<a href="#">debug service vpls string spb events adjacency sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	The following elements are part of a choice: <b>sap</b> , <b>sdp-bind-id</b> , or <b>system-id</b> .
Introduced	23.10.R1
Platforms	All

## sdp-bind-id string

Synopsis	SAP bind ID
Context	<a href="#">debug service vpls string spb events adjacency sdp-bind-id string</a>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>sap</b> , <b>sdp-bind-id</b> , or <b>system-id</b> .
Introduced	23.10.R1
Platforms	All



## **system-id** *string*

Synopsis	System ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">spb events adjacency</a> <a href="#">system-id</a> <i>string</i>
Tree	<a href="#">system-id</a>
String Length	14
Default	0000.0000.0000
Notes	The following elements are part of a choice: <b>sap</b> , <b>sdp-bind-id</b> , or <b>system-id</b> .
Introduced	23.10.R1
Platforms	All

## **l2db** *boolean*

Synopsis	Trace SPB L2DB events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">spb events l2db</a> <i>boolean</i>
Tree	<a href="#">l2db</a>
Default	false
Introduced	23.10.R1
Platforms	All

## **lsdb**

Synopsis	Enable the <b>lsdb</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">spb events lsdb</a>
Tree	<a href="#">lsdb</a>
Introduced	23.10.R1
Platforms	All

## **hostname** (*lsp-id* | *system-id*)

Synopsis	Host name
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">spb events lsdb</a> <a href="#">hostname</a> ( <i>lsp-id</i>   <i>system-id</i> )
Tree	<a href="#">hostname</a>
String Length	20
Default	0000.0000.0000.00-00

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Introduced	23.10.R1
Platforms	All

## **spf**

Synopsis	Enable the <b>spf</b> context
Context	<a href="#">debug service vpls string spb events spf</a>
Tree	<a href="#">spf</a>
Introduced	23.10.R1
Platforms	All

## **system-id string**

Synopsis	System ID
Context	<a href="#">debug service vpls string spb events spf system-id string</a>
Tree	<a href="#">system-id</a>
String Length	14
Default	0000.0000.0000
Introduced	23.10.R1
Platforms	All

## **interface**

Synopsis	Enable the <b>interface</b> context
Context	<a href="#">debug service vpls string spb interface</a>
Tree	<a href="#">interface</a>
Introduced	23.10.R1
Platforms	All

## **sap string**

Synopsis	SAP ID
Context	<a href="#">debug service vpls string spb interface sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45

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Notes	The following elements are part of a choice: <b>sap</b> or <b>sdp-bind-id</b> .
Introduced	23.10.R1
Platforms	All

### **sdp-bind-id** *string*

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">spb interface</a> <a href="#">sdp-bind-id</a> <i>string</i>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>sap</b> or <b>sdp-bind-id</b> .
Introduced	23.10.R1
Platforms	All

### **packet**

Synopsis	Enable the <b>packet</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">spb</a> <a href="#">packet</a>
Tree	<a href="#">packet</a>
Introduced	23.10.R1
Platforms	All

### **detail** *boolean*

Synopsis	Enable detailed tracing
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">spb</a> <a href="#">packet</a> <a href="#">detail</a> <i>boolean</i>
Tree	<a href="#">detail</a>
Default	false
Introduced	23.10.R1
Platforms	All

### **sap** *string*

Synopsis	SAP ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">spb</a> <a href="#">packet</a> <a href="#">sap</a> <i>string</i>

Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	The following elements are part of a choice: <b>sap</b> or <b>sdp-bind-id</b> .
Introduced	23.10.R1
Platforms	All

### **sdp-bind-id** *string*

Synopsis	SDP bind ID
Context	<a href="#">debug service vpls string spb packet sdp-bind-id string</a>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>sap</b> or <b>sdp-bind-id</b> .
Introduced	23.10.R1
Platforms	All

### **type** *keyword*

Synopsis	Packet type
Context	<a href="#">debug service vpls string spb packet type keyword</a>
Tree	<a href="#">type</a>
Options	none, ptop-hello, l1-hello, l1-psnp, l1-csnp, l1-lsp
Default	none
Introduced	23.10.R1
Platforms	All

### **stp**

Synopsis	Enter the <b>stp</b> context
Context	<a href="#">debug service vpls string stp</a>
Tree	<a href="#">stp</a>
Introduced	23.10.R1
Platforms	All

## events

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events</a>
Tree	<a href="#">events</a>
Introduced	23.10.R1
Platforms	All

## all-events

Synopsis	Trace all STP events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events</a> <a href="#">all-events</a>
Tree	<a href="#">all-events</a>
Notes	The following elements are part of a choice: <b>all-events</b> or <b>event-types</b> .
Introduced	23.10.R1
Platforms	All

## event-types

Synopsis	Enter the <b>event-types</b> context
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events</a> <a href="#">event-types</a>
Tree	<a href="#">event-types</a>
Notes	The following elements are part of a choice: <b>all-events</b> or <b>event-types</b> .
Introduced	23.10.R1
Platforms	All

## bpdu *boolean*

Synopsis	Trace received and transmitted BPDUs
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events</a> <a href="#">event-types</a> <a href="#">bpdu</a> <i>boolean</i>
Tree	<a href="#">bpdu</a>
Default	false
Introduced	23.10.R1
Platforms	All

**core-connectivity** *boolean*

Synopsis	Trace STO core connectivity events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events event-types core-connectivity</a> <i>boolean</i>
Tree	<a href="#">core-connectivity</a>
Default	false
Introduced	23.10.R1
Platforms	All

**exception** *boolean*

Synopsis	Trace STP exception events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events event-types exception</a> <i>boolean</i>
Tree	<a href="#">exception</a>
Default	false
Introduced	23.10.R1
Platforms	All

**fsm-state-changes** *boolean*

Synopsis	Trace STP FSM state change events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events event-types fsm-state-changes</a> <i>boolean</i>
Tree	<a href="#">fsm-state-changes</a>
Default	false
Introduced	23.10.R1
Platforms	All

**fsm-timers** *boolean*

Synopsis	Trace STP FSM timer events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events event-types fsm-timers</a> <i>boolean</i>
Tree	<a href="#">fsm-timers</a>
Default	false
Introduced	23.10.R1
Platforms	All

**port-role** *boolean*

Synopsis	Trace STP port role events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events event-types</a> <a href="#">port-role</a> <i>boolean</i>
Tree	<a href="#">port-role</a>
Default	false
Introduced	23.10.R1
Platforms	All

**port-state** *boolean*

Synopsis	Trace STP port state events
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp events event-types</a> <a href="#">port-state</a> <i>boolean</i>
Tree	<a href="#">port-state</a>
Default	false
Introduced	23.10.R1
Platforms	All

**sap** [[sap-id](#)] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Max. Instances	256
Introduced	23.10.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<a href="#">debug service vpls</a> <i>string</i> <a href="#">stp sap</a> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.

Introduced 23.10.R1  
 Platforms All

### **sdp-bind** [[sdp-bind-id](#)] *string*

Synopsis Add a list entry for **sdp-bind**  
 Context [debug service vpls string stp sdp-bind string](#)  
 Tree [sdp-bind](#)  
 Max. Instances 256  
 Introduced 23.10.R1  
 Platforms All

### **[sdp-bind-id]** *string*

Synopsis SDP bind ID  
 Context [debug service vpls string stp sdp-bind string](#)  
 Tree [sdp-bind](#)  
 String Length 3 to 16  
 Notes This element is part of a list key.  
 Introduced 23.10.R1  
 Platforms All

### **vprn** [[service-name](#)] *string*

Synopsis Enter the **vprn** list instance  
 Context [debug service vprn string](#)  
 Tree [vprn](#)  
 Introduced 23.3.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[service-name]** *string*

Synopsis Administrative service name  
 Context [debug service vprn string](#)



Tree	<a href="#">vprn</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp

Synopsis	Enter the <b>ppp</b> context
Context	<a href="#">debug service vprn string ppp</a>
Tree	<a href="#">ppp</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **circuit-id** [[id](#)] *string*

Synopsis	Add a list entry for <b>circuit-id</b>
Context	<a href="#">debug service vprn string ppp circuit-id string</a>
Tree	<a href="#">circuit-id</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **[id]** *string*

Synopsis	Circuit ID of the PPPoE session to debug
Context	<a href="#">debug service vprn string ppp circuit-id string</a>
Tree	<a href="#">circuit-id</a>
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## events

Synopsis	Enable the <b>events</b> context
Context	<a href="#">debug service vprn string ppp events</a>
Tree	<a href="#">events</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Enable PPP debugging for all events
Context	<a href="#">debug service vprn string ppp events all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp-client

Synopsis	Enable the <b>dhcp-client</b> context
Context	<a href="#">debug service vprn string ppp events dhcp-client</a>
Tree	<a href="#">dhcp-client</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service vprn string ppp events dhcp-client terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## I2tp

Synopsis	Enable the <b>I2tp</b> context
Context	<a href="#">debug service vprn string ppp events I2tp</a>
Tree	<a href="#">I2tp</a>
Description	Commands in this context configure debugging events for L2TP sessions.
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>I2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service vprn string ppp events I2tp terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-address-assignment

Synopsis	Enable the <b>local-address-assignment</b> context
Context	<a href="#">debug service vprn string ppp events local-address-assignment</a>
Tree	<a href="#">local-address-assignment</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>I2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service vprn string ppp events local-address-assignment terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>

Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp

Synopsis	Enable the <b>ppp</b> context
Context	<a href="#">debug service vprn string ppp events ppp</a>
Tree	<a href="#">ppp</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>l2tp</b> , <b>local-address-assignment</b> , and <b>ppp</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## terminate-only *boolean*

Synopsis	Debug events for ungraceful terminated sessions only
Context	<a href="#">debug service vprn string ppp events ppp terminate-only boolean</a>
Tree	<a href="#">terminate-only</a>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac [[address](#)] *string*

Synopsis	Add a list entry for <b>mac</b>
Context	<a href="#">debug service vprn string ppp mac string</a>
Tree	<a href="#">mac</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[address](#)] *string*

Synopsis	MAC address of the PPPoE session to debug
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Context	<a href="#">debug service vprn string ppp mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## packets

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug service vprn string ppp packets</a>
Tree	<a href="#">packets</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Enable PPP debugging for all packets
Context	<a href="#">debug service vprn string ppp packets all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## detail-level *keyword*

Synopsis	Detail level of the PPP packet debug output
Context	<a href="#">debug service vprn string ppp packets detail-level keyword</a>
Tree	<a href="#">detail-level</a>
Options	low, medium, high
Default	high
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp-client *boolean***

Synopsis	Enable DHCP client packet debugging
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets dhcp-client</a> <i>boolean</i>
Tree	<a href="#">dhcp-client</a>
Default	false
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**discovery**

Synopsis	Enter the <b>discovery</b> context
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets discovery</a>
Tree	<a href="#">discovery</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**all**

Synopsis	Enable PPP debugging for all discovery packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets discovery</a> <i>all</i>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**padi *boolean***

Synopsis	Enable PPP debugging for PADI discovery packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets discovery padi</a> <i>boolean</i>
Tree	<a href="#">padi</a>
Default	false

Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pado boolean**

Synopsis	Enable PPP debugging for PADO discovery packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets discovery pado</a> <i>boolean</i>
Tree	<a href="#">pado</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**padr boolean**

Synopsis	Enable PPP debugging for PADR discovery packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets discovery padr</a> <i>boolean</i>
Tree	<a href="#">padr</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pads boolean**

Synopsis	Enable PPP debugging for PADS discovery packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets discovery pads</a> <i>boolean</i>
Tree	<a href="#">pads</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padt** *boolean*

Synopsis	Enable PPP debugging for PADT discovery packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets discovery padt</a> <i>boolean</i>
Tree	<a href="#">padt</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>padi</b> , <b>pado</b> , <b>padr</b> , <b>pads</b> , and <b>padt</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mode** *keyword*

Synopsis	PPP packets present in the debug output
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	dropped-only, ingress-and-dropped, egress-ingress-and-dropped
Default	dropped-only
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-session**

Synopsis	Enter the <b>ppp-session</b> context
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets ppp-session</a>
Tree	<a href="#">ppp-session</a>
Notes	The following elements are part of a mandatory choice: <b>all</b> or ( <b>dhcp-client</b> , <b>discovery</b> , and <b>ppp-session</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all**

Synopsis	Enable PPP debugging for all PPP session packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets ppp-session all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).



Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **chap** *boolean*

Synopsis	Enable PPP debugging for CHAP authentication packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets</a> <a href="#">ppp-session</a> <a href="#">chap</a> <i>boolean</i>
Tree	<a href="#">chap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipcp** *boolean*

Synopsis	Enable PPP debugging for IPCP NCP packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets</a> <a href="#">ppp-session</a> <a href="#">ipcp</a> <i>boolean</i>
Tree	<a href="#">ipcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6cp** *boolean*

Synopsis	Enable PPP debugging for IPv6CP NCP packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets</a> <a href="#">ppp-session</a> <a href="#">ipv6cp</a> <i>boolean</i>
Tree	<a href="#">ipv6cp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lcp boolean**

Synopsis	Enable PPP debugging for LCP link establishment packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets</a> <a href="#">ppp-session</a> <a href="#">lcp</a> <i>boolean</i>
Tree	<a href="#">lcp</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pap boolean**

Synopsis	Enable PPP debugging for PAP authentication packets
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp packets</a> <a href="#">ppp-session</a> <a href="#">pap</a> <i>boolean</i>
Tree	<a href="#">pap</a>
Default	false
Notes	The following elements are part of a choice: <b>all</b> or ( <b>chap</b> , <b>ipcp</b> , <b>ipv6cp</b> , <b>lcp</b> , and <b>pap</b> ).
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-id [id] string**

Synopsis	Add a list entry for <b>remote-id</b>
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp remote-id</a> <i>string</i>
Tree	<a href="#">remote-id</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id] string**

Synopsis	Remote ID of the PPPoE session to debug
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp remote-id</a> <i>string</i>
Tree	<a href="#">remote-id</a>
String Length	1 to 255

---

Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap** [[sap-id](#)] *string*

Synopsis	Add a list entry for <b>sap</b>
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[sap-id]** *string*

Synopsis	SAP ID of the PPPoE session to debug
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp sap</a> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-name** [[name](#)] *string*

Synopsis	Add a list entry for <b>user-name</b>
Context	<a href="#">debug service vprn</a> <i>string</i> <a href="#">ppp user-name</a> <i>string</i>
Tree	<a href="#">user-name</a>
Max. Instances	8
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Username of the PPPoE session to debug
Context	<code>debug service vprn string ppp user-name string</code>
Tree	<code>user-name</code>
Description	This command configures the username of the PPPoE session to debug. Only packets after the PAP or CHAP authentication are logged. If the purpose is to include PPPoE discovery packets in the debug log, configure a MAC filter instead.
String Length	1 to 255
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<code>debug subscriber-mgmt</code>
Tree	<code>subscriber-mgmt</code>
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gtp**

Synopsis	Enter the <b>gtp</b> context
Context	<code>debug subscriber-mgmt gtp</code>
Tree	<code>gtp</code>
Description	This command enables the context to configure box-wide GTP parameters and profiles.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**events** *boolean*

Synopsis	Enable GTP event debugging
Context	<code>debug subscriber-mgmt gtp events boolean</code>
Tree	<code>events</code>
Default	false

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Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **imsi** [[imsi-instance](#)] *string*

Synopsis	Add a list entry for <b>imsi</b>
Context	<a href="#">debug subscriber-mgmt gtp imsi</a> <i>string</i>
Tree	<a href="#">imsi</a>
Max. Instances	8
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[imsi-instance]** *string*

Synopsis	IMSI of GTP sessions to debug
Context	<a href="#">debug subscriber-mgmt gtp imsi</a> <i>string</i>
Tree	<a href="#">imsi</a>
String Length	0 to 15
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packets**

Synopsis	Enable the <b>packets</b> context
Context	<a href="#">debug subscriber-mgmt gtp packets</a>
Tree	<a href="#">packets</a>
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **detail-level** *keyword*

Synopsis	Detail level of the GTP packet debug output
Context	<a href="#">debug subscriber-mgmt gtp packets detail-level</a> <i>keyword</i>

Tree	<a href="#">detail-level</a>
Options	high, low
Default	low
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mode keyword**

Synopsis	GTP packets to include in the debug output
Context	<a href="#">debug subscriber-mgmt gtp packets mode keyword</a>
Tree	<a href="#">mode</a>
Options	all, dropped
Default	dropped
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer [address] (ipv4-address-no-zone | ipv6-address-no-zone) router string**

Synopsis	Enter the <b>peer</b> list instance
Context	<a href="#">debug subscriber-mgmt gtp peer (ipv4-address-no-zone   ipv6-address-no-zone) router string</a>
Tree	<a href="#">peer</a>
Max. Instances	8
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	Remote IP address of the GTP peer
Context	<a href="#">debug subscriber-mgmt gtp peer (ipv4-address-no-zone   ipv6-address-no-zone) router string</a>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router string**

Synopsis	Router instance where GTP peer packets are expected
Context	<a href="#">debug subscriber-mgmt gtp peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">router string</a>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **udp-port number**

Synopsis	UDP source (Rx packets) / destination (Tx packets) port
Context	<a href="#">debug subscriber-mgmt gtp peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">router string</a> <a href="#">udp-port number</a>
Tree	<a href="#">udp-port</a>
Description	This command configures the UDP source port of received packets or the UDP destination port of transmitted packets.
Range	0   1 to 65535
Default	2123
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **system**

Synopsis	Enter the <b>system</b> context
Context	<a href="#">debug system</a>
Tree	<a href="#">system</a>
Description	Commands in this context enable debugging of general system level functions and router management protocols.
Introduced	21.5.R1
Platforms	All

### **grpc**

Synopsis	Enter the <b>grpc</b> context
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Context	<a href="#">debug system grpc</a>
Tree	<a href="#">grpc</a>
Introduced	21.5.R1
Platforms	All

## client

Synopsis	Enter the <b>client</b> context
Context	<a href="#">debug system grpc client</a>
Tree	<a href="#">client</a>
Introduced	21.5.R1
Platforms	All

## all

Synopsis	Set debugging for all clients
Context	<a href="#">debug system grpc client all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>ip-address</b> .
Introduced	21.5.R1
Platforms	All

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address for debugging
Context	<a href="#">debug system grpc client ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>ip-address</b> .
Introduced	21.5.R1
Platforms	All

## type keyword

Synopsis	RPCs or service types to debug
Context	<a href="#">debug system grpc type keyword</a>



Tree	<a href="#">type</a>
Options	gnmi-capabilities, gnmi-get, gnmi-set, gnmi-subscribe, rib-api-modify, rib-api-getversion, gnoi-cert-mgmt-rpcs, gnoi-file-rpcs, gnoi-system-rpcs
Max. Instances	10
Introduced	21.5.R1
Platforms	All

## grpc-tunnel

Synopsis	Enter the <b>grpc-tunnel</b> context
Context	<a href="#">debug system grpc-tunnel</a>
Tree	<a href="#">grpc-tunnel</a>
Introduced	22.10.R1
Platforms	All

## tunnel

Synopsis	Enter the <b>tunnel</b> context
Context	<a href="#">debug system grpc-tunnel tunnel</a>
Tree	<a href="#">tunnel</a>
Introduced	22.10.R1
Platforms	All

## all

Synopsis	Set debug output for all tunnels
Context	<a href="#">debug system grpc-tunnel tunnel all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>name</b> .
Introduced	22.10.R1
Platforms	All

## name *string*

Synopsis	Name of the tunnel to restrict the debug output
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Context	<a href="#">debug system grpc-tunnel tunnel name string</a>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>all</b> or <b>name</b> .
Introduced	22.10.R1
Platforms	All

## http-connections

Synopsis	Enable the <b>http-connections</b> context
Context	<a href="#">debug system http-connections</a>
Tree	<a href="#">http-connections</a>
Introduced	22.10.R1
Platforms	All

## client-ip-prefix (*ipv4-prefix* | *ipv6-prefix* | *keyword*)

Synopsis	HTTP client IP prefix
Context	<a href="#">debug system http-connections client-ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i>   <i>keyword</i> )
Tree	<a href="#">client-ip-prefix</a>
Options	any
Default	any
Introduced	22.10.R1
Platforms	All

## management-interface

Synopsis	Enter the <b>management-interface</b> context
Context	<a href="#">debug system management-interface</a>
Tree	<a href="#">management-interface</a>
Introduced	21.5.R1
Platforms	All

## netconf keyword

Synopsis	Debugging verbosity for NETCONF
Context	<a href="#">debug system management-interface netconf keyword</a>
Tree	<a href="#">netconf</a>
Options	error, warning, info
Introduced	21.5.R1
Platforms	All

## remote-management

Synopsis	Enter the <b>remote-management</b> context
Context	<a href="#">debug system management-interface remote-management</a>
Tree	<a href="#">remote-management</a>
Description	Commands in this context configure the SR OS node to use the remote management service. Configuring remote management enables the SR OS node to report itself to a remote manager service running on a remote server, so that it is included in the dynamic list of available nodes. The manager service streamlines the management of multiple SR OS nodes running different SR OS versions using the same client application providing a similar shell to the MD-CLI.
Introduced	21.7.R1
Platforms	All

## manager

Synopsis	Enter the <b>manager</b> context
Context	<a href="#">debug system management-interface remote-management manager</a>
Tree	<a href="#">manager</a>
Description	Commands in this context configure specific manager-related commands.  Commands configured in this context take precedence over command values specified directly in the <b>configure management-interface remote-management</b> context.  If a command is not configured in this context, the command setting is inherited from the higher level context.
Introduced	21.7.R1
Platforms	All

**all**

Synopsis	Enable debug of all managers
Context	<a href="#">debug system management-interface remote-management manager all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>manager-name</b> .
Introduced	21.7.R1
Platforms	All

**manager-name** [[name](#)] *string*

Synopsis	Add a list entry for <b>manager-name</b>
Context	<a href="#">debug system management-interface remote-management manager manager-name string</a>
Tree	<a href="#">manager-name</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>manager-name</b> .
Introduced	21.7.R1
Platforms	All

**[name]** *string*

Synopsis	Manager name
Context	<a href="#">debug system management-interface remote-management manager manager-name string</a>
Tree	<a href="#">manager-name</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

**service** *boolean*

Synopsis	Enable service level debug
Context	<a href="#">debug system management-interface remote-management service boolean</a>
Tree	<a href="#">service</a>
Default	false

Introduced	21.7.R1
Platforms	All

## wlan-gw

Synopsis	Enter the <b>wlan-gw</b> context
Context	<a href="#">debug wlan-gw</a>
Tree	<a href="#">wlan-gw</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## group [id] number

Synopsis	Enter the <b>group</b> list instance
Context	<a href="#">debug wlan-gw group number</a>
Tree	<a href="#">group</a>
Max. Instances	1
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [id] number

Synopsis	WLAN-GW group ID in the system
Context	<a href="#">debug wlan-gw group number</a>
Tree	<a href="#">group</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## learn-ap-mac

Synopsis	Enable the <b>learn-ap-mac</b> context
Context	<a href="#">debug wlan-gw group number learn-ap-mac</a>

Tree	<a href="#">learn-ap-mac</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-remote-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the remote tunnel endpoint
Context	<a href="#">debug wlan-gw group number learn-ap-mac tunnel-remote-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">tunnel-remote-address</a>
Notes	This element is mandatory.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **statistic** [*type*] *keyword name string*

Synopsis	Enter the <b>statistic</b> list instance
Context	<a href="#">debug wlan-gw group number statistic keyword name string</a>
Tree	<a href="#">statistic</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[type]** *keyword*

Synopsis	Type of statistic to trace
Context	<a href="#">debug wlan-gw group number statistic keyword name string</a>
Tree	<a href="#">statistic</a>
Options	<ul style="list-style-type: none"> <li>packet-error – Packet related error</li> <li>host-error – Host related error</li> <li>bd-error – Bridge domain related error</li> <li>forwarding – Number of forwarded packets</li> <li>reassembly – Reassembly related statistic</li> <li>aa – AA related statistic</li> <li>radius – RADIUS related statistic</li> <li>arp – ARP related statistic</li> <li>dhcp4 – DHCP related statistic</li> <li>dhcp6 – DHCPv6 related statistic</li> <li>icmp4 – ICMP related statistic</li> <li>icmp6 – ICMPv6 related statistic</li> </ul>

Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name string**

Synopsis	Name of the statistic to trace
Context	<code>debug wlan-gw group number statistic keyword name string</code>
Tree	<code>statistic</code>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**capture-packet boolean**

Synopsis	Set a single packet capture trigger for the statistic
Context	<code>debug wlan-gw group number statistic keyword name string capture-packet boolean</code>
Tree	<code>capture-packet</code>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ue**

Synopsis	Enable the <b>ue</b> context
Context	<code>debug wlan-gw group number ue</code>
Tree	<code>ue</code>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bridge-domain number**

Synopsis	Bridge domain of the UEs to debug
Context	<code>debug wlan-gw group number ue bridge-domain number</code>

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Tree	<a href="#">bridge-domain</a>
Range	1 to 4294967295
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-address** *string*

Synopsis	MAC address of the UE to debug
Context	<a href="#">debug wlan-gw group number ue mac-address string</a>
Tree	<a href="#">mac-address</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **protocols**

Synopsis	Enable the <b>protocols</b> context
Context	<a href="#">debug wlan-gw group number ue protocols</a>
Tree	<a href="#">protocols</a>
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **arp** *boolean*

Synopsis	Enable debugging for the ARP protocol
Context	<a href="#">debug wlan-gw group number ue protocols arp boolean</a>
Tree	<a href="#">arp</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp4** *boolean*

Synopsis	Enable debugging for the DHCP protocol
Context	<a href="#">debug wlan-gw group number ue protocols dhcp4 boolean</a>
Tree	<a href="#">dhcp4</a>



---

Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp6 boolean**

Synopsis	Enable debugging for the DHCPv6 protocol
Context	<a href="#">debug wlan-gw group number ue protocols dhcp6 boolean</a>
Tree	<a href="#">dhcp6</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp4 boolean**

Synopsis	Enable debugging for the ICMP protocol
Context	<a href="#">debug wlan-gw group number ue protocols icmp4 boolean</a>
Tree	<a href="#">icmp4</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp6 boolean**

Synopsis	Enable debugging for the ICMPv6 protocol
Context	<a href="#">debug wlan-gw group number ue protocols icmp6 boolean</a>
Tree	<a href="#">icmp6</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius boolean**

Synopsis	Enable debugging for the RADIUS protocol
Context	<a href="#">debug wlan-gw group number ue protocols radius boolean</a>

Tree	<a href="#">radius</a>
Default	false
Introduced	22.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.14 esa commands

```
configure
- esa number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - host-port string
  - vm number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cores number
    - description string
    - host-port reference
    - memory number
    - vm-type keyword
```

### 3.14.1 esa command descriptions

#### **esa** [[esa-id](#)] *number*

Synopsis	Enter the <b>esa</b> list instance
Context	<b>configure</b> <a href="#">esa</a> <i>number</i>
Tree	<a href="#">esa</a>
Description	Commands in this context configure the Extended Services Appliance (ESA) instance.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

#### **[esa-id]** *number*

Synopsis	ESA ID
Context	<b>configure</b> <a href="#">esa</a> <i>number</i>
Tree	<a href="#">esa</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

#### **admin-state** *keyword*

Synopsis	Administrative state of the ESA
Context	<b>configure</b> <a href="#">esa</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

#### **description** *string*

Synopsis	Text description
----------	------------------

Context	<b>configure</b> <i>esa number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **host-port** [*host-port*] *string*

Synopsis	Add a list entry for <b>host-port</b>
Context	<b>configure</b> <i>esa number host-port string</i>
Tree	<i>host-port</i>
Max. Instances	4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[host-port]** *string*

Synopsis	Ethernet port associated with the ESA
Context	<b>configure</b> <i>esa number host-port string</i>
Tree	<i>host-port</i>
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **vm** [*vm-id*] *number*

Synopsis	Enter the <b>vm</b> list instance
Context	<b>configure</b> <i>esa number vm number</i>
Tree	<i>vm</i>
Description	Commands in this context configure the ESA-VM instance.
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[vm-id] number**

Synopsis VM ID  
 Context **configure** *esa number vm number*  
 Tree *vm*  
 Range 1 to 4  
 Notes This element is part of a list key.  
 Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **admin-state keyword**

Synopsis Administrative state of the ESA-VM instance  
 Context **configure** *esa number vm number admin-state keyword*  
 Tree *admin-state*  
 Description This command configures the administrative state of the ESA-VM instance. The state affects the operational state of the instance and all entities contained within the instance; however, configuration settings or statistics are not changed, reset, or removed.  
 Options enable, disable  
 Default disable  
 Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **cores number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of CPU physical cores allocated to the ESA-VM  
 Context **configure** *esa number vm number cores number*  
 Tree *cores*  
 Description This command specifies the number of CPU physical cores allocated to the ESA-VM instance. If an invalid value is configured for the number of cores, the VM remains in a failed state.

Range	0 to 128
Default	0
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>esa number vm number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **host-port** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ethernet port associated with the ESA-VM instance
Context	<b>configure</b> <i>esa number vm number host-port reference</i>
Tree	<i>host-port</i>
Description	This command configures an Ethernet port associated with the ESA-VM instance. The port ID must be the same as the port ID associated with the ESA context on which the ESA-VM is configured.
Reference	<b>configure</b> <i>esa number host-port string</i>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **memory** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of memory allocated to the ESA-VM
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Context	<b>configure</b> <i>esa number vm number memory number</i>
Tree	<i>memory</i>
Range	0 to 256
Units	gigabytes
Default	0
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **vm-type** *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESA-VM type
Context	<b>configure</b> <i>esa number vm number vm-type keyword</i>
Tree	<i>vm-type</i>
Options	aa, bb, tunnel, video
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s



## 3.15 eth-cfm commands

```

configure
- eth-cfm
- apply-groups reference
- apply-groups-exclude reference
- default-domain
- apply-groups reference
- apply-groups-exclude reference
- bridge-identifier string vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- id-permission keyword
- mhf-creation
- level (number | keyword)
- mhf-type keyword
- mip-ltr-priority (number | keyword)
- domain string
- apply-groups reference
- apply-groups-exclude reference
- association string
- apply-groups reference
- apply-groups-exclude reference
- auto-mep-discovery boolean
- bridge-identifier string
- apply-groups reference
- apply-groups-exclude reference
- id-permission keyword
- mhf-creation keyword
- mip-ltr-priority number
- vlan number
- ccm-hold-time
- down number
- ccm-interval keyword
- facility-id-permission keyword
- icc-based string
- integer number
- ma-index number
- remote-mep number
- apply-groups reference
- apply-groups-exclude reference
- remote-mac string
- string string
- vid number
- vpn-id string
- dns string
- format keyword
- level number
- mac string
- md-index number
- name string

```

### 3.15.1 eth-cfm command descriptions

#### eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure eth-cfm</b>
Tree	<a href="#">eth-cfm</a>
Description	Commands in this context configure ETH-CFM parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### default-domain

Synopsis	Enter the <b>default-domain</b> context
Context	<b>configure eth-cfm default-domain</b>
Tree	<a href="#">default-domain</a>
Description	<p>Commands in this context configure MIP creation parameters per index (<b>bridge-identifier</b> <i>bridge-id</i> <b>vlan</b> <i>vlan-id</i>) if the MIP creation statement exists as part of the service connection.</p> <p>The MIP creation statement must be present on the connection before any configuration can occur for a MIP under this context. Whether a MIP uses the <b>default-domain</b> creation method is determined by the MIP authoritative nature of the <b>eth-cfm domain association</b>. The <b>eth-cfm default-domain</b> MIP creation is considered only if the <b>eth-cfm domain association</b> is not authoritative.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### bridge-identifier [[bridge-name](#)] *string* **vlan** (*number* | *keyword*)

Synopsis	Enter the <b>bridge-identifier</b> list instance
Context	<b>configure eth-cfm default-domain bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">bridge-identifier</a>
Description	<p>Commands in this context configure the references required to link the CFM function with the service context, allowing the entry of MIP-specific parameters for the index in the default domain table.</p> <p>The <b>info</b> and <b>info detail</b> commands do not display any entries for the instance unless they have previously been accessed. The possible candidates for the instance can be located using the <b>show eth-cfm default-domain</b> command.</p>

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[bridge-name]** *string*

Synopsis	Bridge name in the default domain table
Context	<b>configure</b> <b>eth-cfm</b> <b>default-domain</b> <b>bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>bridge-identifier</b>
Description	This command specifies the bridge name to enter in the default domain associated with the MIP.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan** (*number* | *keyword*)

Synopsis	VLAN ID for the default domain
Context	<b>configure</b> <b>eth-cfm</b> <b>default-domain</b> <b>bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>bridge-identifier</b>
Description	This command configures a VLAN ID for the default domain.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **id-permission** *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	<b>configure</b> <b>eth-cfm</b> <b>default-domain</b> <b>bridge-identifier</b> <i>string</i> <b>vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>id-permission</b> <i>keyword</i>
Tree	<b>id-permission</b>
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.

Options	none, chassis, defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mhf-creation

Synopsis	Enter the <b>mhf-creation</b> context
Context	<b>configure eth-cfm default-domain bridge-identifier string vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mhf-creation</b>
Tree	<b>mhf-creation</b>
Description	Commands in this context configure the MIP method of creation. MIP creation mode and other factors are part of the MIP creation authority ( <b>association</b> or <b>default-domain</b> ) logic. The MIP creation algorithm may result in multiple potential MIPs. Only the lowest-level valid MIP is instantiated.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## level (*number* | *keyword*)

Synopsis	Requested level of the MIP
Context	<b>configure eth-cfm default-domain bridge-identifier string vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mhf-creation level</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>level</b>
Description	This command configures the requested level of the MIP. This is used by the MIP creation algorithm to determine its validity in comparison to other ETH-CFM MIPs and MEPs. If the level is configured as <b>defer</b> , the level value is inherited from the global read-only system values.
Range	0 to 7
Options	defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mhf-type *keyword*

Synopsis	MIP creation mode
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Context	<b>configure eth-cfm default-domain bridge-identifier string vlan</b> ( <i>number   keyword</i> ) <b>mhf-creation mhf-type keyword</b>
Tree	<b>mhf-type</b>
Options	none, default, explicit, defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mip-ltr-priority** (*number | keyword*)

Synopsis	Priority of the Linktrace Response
Context	<b>configure eth-cfm default-domain bridge-identifier string vlan</b> ( <i>number   keyword</i> ) <b>mip-ltr-priority</b> ( <i>number   keyword</i> )
Tree	<b>mip-ltr-priority</b>
Description	This command allows the operator to set the priority of the Linktrace Response Message (ETH-LTR) from a MIP for this association.
Range	0 to 7
Options	defer
Default	defer
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **domain** [**md-admin-name**] *string*

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure eth-cfm domain string</b>
Tree	<b>domain</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[md-admin-name]** *string*

Synopsis	Unique domain name
Context	<b>configure eth-cfm domain string</b>
Tree	<b>domain</b>
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **association** [[ma-admin-name](#)] *string*

Synopsis	Enter the <b>association</b> list instance
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Tree	<a href="#">association</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[ma-admin-name]** *string*

Synopsis	Domain association name
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Tree	<a href="#">association</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **auto-mep-discovery** *boolean*

Synopsis	Allow remote MEP automatic discovery
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">auto-mep-discovery</a> <i>boolean</i>
Tree	<a href="#">auto-mep-discovery</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bridge-identifier** [[bridge-name](#)] *string*

Synopsis	Enter the <b>bridge-identifier</b> list instance
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i>

Tree	<a href="#">bridge-identifier</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[bridge-name]** *string*

Synopsis	Bridge name that links to the service
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i>
Tree	<a href="#">bridge-identifier</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**id-permission** *keyword*

Synopsis	Strategy for the inclusion of Sender ID TLV information
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i> <b>id-permission</b> <i>keyword</i>
Tree	<a href="#">id-permission</a>
Description	This command specifies how the Sender ID TLV information is included for installed MEPs and MIPs. The Sender ID TLV is supported for ETH-CCM, ETH-LB, and ETH-LB PDUs.
Options	none, chassis
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mhf-creation** *keyword*

Synopsis	MIP method of creation
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i> <b>mhf-creation</b> <i>keyword</i>
Tree	<a href="#">mhf-creation</a>

Options	none, default, explicit, static
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mip-ltr-priority** *number*

Synopsis	Priority of the Linktrace Response Message (ETH-LTR) from a MIP
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i> <b>mip-ltr-priority</b> <i>number</i>
Tree	<a href="#">mip-ltr-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan** *number*

Synopsis	VLAN ID for the default domain index
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <a href="#">bridge-identifier</a> <i>string</i> <b>vlan</b> <i>number</i>
Tree	<a href="#">vlan</a>
Range	1 to 4094
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-hold-time**

Synopsis	Enter the <b>ccm-hold-time</b> context
Context	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i> <b>ccm-hold-time</b>
Tree	<a href="#">ccm-hold-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **down** *number*

Synopsis	Additional time before a MEP declares a fault, in CCM timeout conditions
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Context	<b>configure eth-cfm domain string association string ccm-hold-time down number</b>
Tree	<b>down</b>
Range	1 to 1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-interval keyword**

Synopsis	CCM transmission interval for all MEPs in association
Context	<b>configure eth-cfm domain string association string ccm-interval keyword</b>
Tree	<b>ccm-interval</b>
Options	300hz, 10ms, 100ms, 1s, 10s, 60s, 600s
Default	10s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **facility-id-permission keyword**

Synopsis	Sender ID TLV information for facility base MEPs
Context	<b>configure eth-cfm domain string association string facility-id-permission keyword</b>
Tree	<b>facility-id-permission</b>
Options	none, chassis
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **icc-based string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in ICC-based format
Context	<b>configure eth-cfm domain string association string icc-based string</b>
Tree	<b>icc-based</b>

String Length	8 to 13
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **integer number**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in integer format
Context	<b>configure eth-cfm domain string association string integer number</b>
Tree	<a href="#">integer</a>
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-index number**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association (MA) table index
Context	<b>configure eth-cfm domain string association string ma-index number</b>
Tree	<a href="#">ma-index</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **remote-mep [mep-id] number**

Synopsis	Enter the <b>remote-mep</b> list instance
----------	---

Context	<b>configure eth-cfm domain string association string remote-mep number</b>
Tree	<b>remote-mep</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[mep-id] number**

Synopsis	Remote MEP ID
Context	<b>configure eth-cfm domain string association string remote-mep number</b>
Tree	<b>remote-mep</b>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**remote-mac string**

Synopsis	Remote MAC Address for transmitting CFM packets to remote MEPs
Context	<b>configure eth-cfm domain string association string remote-mep number remote-mac string</b>
Tree	<b>remote-mac</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**string string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Association name in raw ASCII string format
Context	<b>configure eth-cfm domain string association string string string</b>
Tree	<b>string</b>
String Length	1 to 45
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vid number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Primary VLAN ID for the Maintenance Association name
Context	<b>configure</b> <i>eth-cfm domain string association string vid number</i>
Tree	<i>vid</i>
Range	0 to 4094
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vpn-id string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN ID for the Maintenance Association name
Context	<b>configure</b> <i>eth-cfm domain string association string vpn-id string</i>
Tree	<i>vpn-id</i>
String Length	0 to 15
Notes	The following elements are part of a mandatory choice: <b>icc-based</b> , <b>integer</b> , <b>string</b> , <b>vid</b> , or <b>vpn-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dns string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Domain name like text string derived from a DNS name
Context	<b>configure</b> <i>eth-cfm domain string dns string</i>
Tree	<i>dns</i>
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: <b>dns</b> , <b>format</b> , <b>mac</b> , or <b>name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**format keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance domain name not to be provided
Context	<b>configure</b> <i>eth-cfm domain string format keyword</i>
Tree	<i>format</i>
Options	none
Notes	The following elements are part of a mandatory choice: <b>dns</b> , <b>format</b> , <b>mac</b> , or <b>name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**level number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance Domain Level (MD Level)
Context	<b>configure</b> <i>eth-cfm domain string level number</i>
Tree	<i>level</i>
Range	0 to 7

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### mac string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maintenance domain MAC name
Context	<b>configure</b> eth-cfm domain string mac string
Tree	mac
String Length	13 to 23
Notes	The following elements are part of a mandatory choice: <b>dns</b> , <b>format</b> , <b>mac</b> , or <b>name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### md-index number



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The index of the Maintenance Domain (MD)
Context	<b>configure</b> eth-cfm domain string md-index number
Tree	md-index
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### name string



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

---

Synopsis	Maintenance Domain name
Context	<b>configure eth-cfm domain</b> <i>string name string</i>
Tree	<i>name</i>
String Length	1 to 43
Notes	The following elements are part of a mandatory choice: <b>dns</b> , <b>format</b> , <b>mac</b> , or <b>name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## 3.16 eth-ring commands

```

configure
- eth-ring number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ccm-hold-time
- down number
- up number
- compatible-version number
- description string
- guard-time number
- node-id string
- path string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- eth-cfm
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- control-mep boolean
- description string
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- port-and-raps-tag string
- rpl-end boolean
- revert-time number
- rpl-node keyword
- sub-ring
- interconnect
- propagate-topology-change boolean
- ring-id reference
- vpls
- type keyword

```



### 3.16.1 eth-ring command descriptions

#### **eth-ring** [[ring-index](#)] *number*

Synopsis	Enter the <b>eth-ring</b> list instance
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i>
Tree	<a href="#">eth-ring</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **[ring-index]** *number*

Synopsis	Ring ID
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i>
Tree	<a href="#">eth-ring</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **admin-state** *keyword*

Synopsis	Administrative state of the Ethernet ring
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **ccm-hold-time**

Synopsis	Enter the <b>ccm-hold-time</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">ccm-hold-time</a>
Tree	<a href="#">ccm-hold-time</a>

---

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **down** *number*

Synopsis	Hold timer for down event dampening
Context	<b>configure</b> <i>eth-ring number ccm-hold-time down number</i>
Tree	<i>down</i>
Range	1 to 5000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **up** *number*

Synopsis	Hold timer for recovery reporting
Context	<b>configure</b> <i>eth-ring number ccm-hold-time up number</i>
Tree	<i>up</i>
Range	0 to 5000
Units	deciseconds
Default	20
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **compatible-version** *number*

Synopsis	Compatibility version for the Ethernet ring
Context	<b>configure</b> <i>eth-ring number compatible-version number</i>
Tree	<i>compatible-version</i>
Range	1 to 2
Default	2
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure eth-ring number description string</b>
Tree	<a href="#">description</a>
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**guard-time** *number*

Synopsis	Ethernet ring guard time
Context	<b>configure eth-ring number guard-time number</b>
Tree	<a href="#">guard-time</a>
Range	1 to 20
Units	deciseconds
Default	5
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**node-id** *string*

Synopsis	MAC address of the RPL link
Context	<b>configure eth-ring number node-id string</b>
Tree	<a href="#">node-id</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**path** [[path-index](#)] *string*

Synopsis	Enter the <b>path</b> list instance
Context	<b>configure eth-ring number path string</b>
Tree	<a href="#">path</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[path-index]** *string*

Synopsis	Path ID
Context	<b>configure eth-ring number path string</b>
Tree	<a href="#">path</a>
String Length	1
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the Ethernet ring path
Context	<b>configure eth-ring number path string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure eth-ring number path string description string</b>
Tree	<a href="#">description</a>
String Length	0 to 80
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure eth-ring number path string eth-cfm</b>
Tree	<a href="#">eth-cfm</a>
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** *md-admin-name reference* *ma-admin-name reference* *mep-id number*

Synopsis Enter the **mep** list instance

Context **configure** *eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*

Tree [mep](#)

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis Maintenance Domain (MD) name

Context **configure** *eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*

Tree [mep](#)

Reference **configure** *eth-cfm domain string*

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis Maintenance Association (MA) name

Context **configure** *eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*

Tree [mep](#)

Reference **configure** *eth-cfm domain string association string*

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis Maintenance Endpoint (MEP) ID

Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
----------	---

Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm</a> <i>boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm-ltm-priority</a> <i>number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7

Default	7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</a>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **control-mep** *boolean*

Synopsis	Enable Ethernet ring control on the MEP
Context	<b>configure</b> <a href="#">eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number control-mep boolean</a>
Tree	<a href="#">control-mep</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80



Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-test

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</b>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## bit-error-threshold *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</b>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## test-pattern

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</b>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**crc-tlv** *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>crc-tlv</b> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <b>pattern</b> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <i>number</i>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">rx-eth-ed</a>

Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace tx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">path</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	all-def
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
----------	------------------------

Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</b>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold number**

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure eth-ring number path string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</b>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-and-raps-tag string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port ID and Ring APS tag ID
Context	<b>configure eth-ring number path string port-and-raps-tag string</b>
Tree	<a href="#">port-and-raps-tag</a>
String Length	1 to 45
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rpl-end *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable path as a Ring Protection Link (RPL) end
Context	<b>configure eth-ring number path string rpl-end boolean</b>
Tree	<a href="#">rpl-end</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## revert-time *number*

Synopsis	Revert time for the Ethernet ring
Context	<b>configure eth-ring number revert-time number</b>
Tree	<a href="#">revert-time</a>
Range	0   60 to 720
Units	seconds
Default	300
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rpl-node *keyword*

Synopsis	Ring Protection Link (RPL) type for the Ethernet ring
Context	<b>configure eth-ring number rpl-node keyword</b>
Tree	<a href="#">rpl-node</a>
Options	owner, neighbor
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## sub-ring

Synopsis	Enter the <b>sub-ring</b> context
Context	<b>configure eth-ring number sub-ring</b>

Tree	<a href="#">sub-ring</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## interconnect

Synopsis	Enter the <b>interconnect</b> context
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <b>interconnect</b>
Tree	<a href="#">interconnect</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## propagate-topology-change *boolean*

Synopsis	Propagate topology changes
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <b>interconnect</b> <a href="#">propagate-topology-change</a> <i>boolean</i>
Tree	<a href="#">propagate-topology-change</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ring-id *reference*

Synopsis	Ring instance of the connection ring for the sub-ring
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <b>interconnect</b> <a href="#">ring-id</a> <i>reference</i>
Tree	<a href="#">ring-id</a>
Reference	<b>configure</b> <a href="#">eth-ring</a> <i>number</i>
Notes	The following elements are part of a choice: <b>ring-id</b> or <b>vpls</b> .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## vpls

Synopsis	Connect sub-ring to VPLS ID that contains sub-ring SAP
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <b>interconnect</b> <a href="#">vpls</a>



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Tree	<a href="#">vpls</a>
Notes	The following elements are part of a choice: <b>ring-id</b> or <b>vpls</b> .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type** *keyword*

Synopsis	Sub-ring type
Context	<b>configure</b> <a href="#">eth-ring</a> <i>number</i> <a href="#">sub-ring</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	virtual-link, non-virtual-link
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## 3.17 filter commands

```

configure
- filter
  - apply-groups reference
  - apply-groups-exclude reference
  - dhcp-filter number
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - bypass-host-creation
      - drop
    - description string
    - entry number
      - action
        - bypass-host-creation
        - drop
      - apply-groups reference
      - apply-groups-exclude reference
      - option
        - absent
        - match
          - exact boolean
          - hex string
          - invert boolean
          - string string
        - number number
        - present
    - dhcp6-filter number
      - apply-groups reference
      - apply-groups-exclude reference
      - default-action
        - bypass-host-creation
          - na boolean
          - pd boolean
        - drop
      - description string
      - entry number
        - action
          - bypass-host-creation
            - na boolean
            - pd boolean
          - drop
        - apply-groups reference
        - apply-groups-exclude reference
        - option
          - absent
          - match
            - exact boolean
            - hex string
            - invert boolean
            - string string
          - number number
          - present
    - gre-tunnel-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - ipv4
        - destination-address string
        - gre-key (keyword | number)

```

configure filter gre-tunnel-template ipv4 skip-ttl-decrement

```

- skip-ttl-decrement boolean
- source-address string
- ipv6
- destination-address string
- gre-key keyword
- skip-hop-decrement boolean
- source-address string
- ip-exception string
- apply-groups reference
- apply-groups-exclude reference
- description string
- entry number
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dst-ip
- address (ipv4-prefix-with-host-bits | ipv4-address)
- mask string
- dst-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- icmp
- code number
- type number
- protocol (number | keyword)
- src-ip
- address (ipv4-prefix-with-host-bits | ipv4-address)
- mask string
- src-port
- eq number
- gt number
- lt number
- range
- end number
- start number
- filter-id number
- ip-filter string
- apply-groups reference
- apply-groups-exclude reference
- chain-to-system-filter boolean
- default-action keyword
- description string
- embed
- filter reference offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- flowspec offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- group number
- router-instance string
- openflow reference offset number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- grt
- sap reference

```

## configure filter ip-filter embed openflow system

```

- system
- vpls reference
- vprn reference
- entry number
- action
- accept
- accept-when
- pattern
  - expression string
  - mask string
  - offset-type keyword
  - offset-value number
- apply-groups reference
- apply-groups-exclude reference
- drop
- drop-when
- extracted-traffic
- packet-length
- eq number
- gt number
- lt number
- range
  - end number
  - start number
- pattern
- expression string
- mask string
- offset-type keyword
- offset-value number
- ttl
- eq number
- gt number
- lt number
- range
  - end number
  - start number
- fc keyword
- forward
- bonding-connection number
- esi-l2
- esi-value string
- vpls reference
- esi-l3
- esi-value string
- sf-ip string
- vas-interface reference
- vprn reference
- gre-tunnel reference
- lsp string
- mpls-policy
- endpoint string
- next-hop
- interface-name string
- nh-ip
- address string
- indirect boolean
- nh-ip-vrf
- address string
- indirect boolean
- router-instance string
- redirect-policy reference
- router-instance string
- sap
- sap-id reference

```

configure filter ip-filter entry action forward sap vpls

```

- vpls reference
- sdp
- sdp-bind-id string
- vpls reference
- srte-policy
- color number
- endpoint string
- srv6-policy
- color number
- endpoint string
- service-sid string
- vprn-target
- adv-prefix string
- bgp-nh string
- lsp string
- vprn reference
- gtp-local-breakout
- http-redirect
- allow-override boolean
- url (keyword | http-redirect-url)
- ignore-match
- l2-aware-nat-bypass boolean
- nat
- nat-policy reference
- rate-limit
- extracted-traffic
- mbs (number | keyword)
- packet-length
- eq number
- gt number
- lt number
- range
- end number
- start number
- pattern
- expression string
- mask string
- offset-type keyword
- offset-value number
- pir (number | keyword)
- pps-pir (number | keyword)
- ttl
- eq number
- gt number
- lt number
- range
- end number
- start number
- reassemble
- remark
- dscp keyword
- secondary
- apply-groups reference
- apply-groups-exclude reference
- forward
- next-hop
- nh-ip-vrf
- address string
- indirect boolean
- router-instance string
- sap
- sap-id reference
- vpls reference
- sdp

```

configure filter ip-filter entry action secondary forward sdp sdp-bind-id

```

    - sdp-bind-id string
    - vpls reference
  - vprn-target
    - adv-prefix string
    - bgp-nh string
    - lsp string
    - vprn reference
  - remark
    - dscp keyword
  - tcp-mss-adjust
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress-pbr keyword
- filter-sample boolean
- interface-sample boolean
- log reference
- match
  - destination-class number
  - dscp keyword
  - dst-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - ip-prefix-list reference
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - fragment keyword
- icmp
  - code number
  - type number
- ip
  - address (ipv4-prefix-with-host-bits | ipv4-address)
  - ip-prefix-list reference
  - mask string
- ip-option
  - mask number
  - type number
- multiple-option boolean
- option-present boolean
- packet-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- port
  - eq number
  - gt number
  - lt number
  - port-list reference
  - range
    - end number
    - start number
- protocol (number | keyword)
- protocol-list reference
- src-ip
  - address (ipv4-prefix-with-host-bits | ipv4-address)

```

configure filter ip-filter entry match src-ip ip-prefix-list

```

- ip-prefix-list reference
- mask string
- src-mac
- address string
- mask string
- src-port
- eq number
- gt number
- lt number
- port-list reference
- range
- end number
- start number
- src-route-option boolean
- tcp-established
- tcp-flags
- ack boolean
- cwr boolean
- ece boolean
- fin boolean
- ns boolean
- psh boolean
- rst boolean
- syn boolean
- urg boolean
- ttl
- eq number
- gt number
- lt number
- range
- end number
- start number
- pbr-down-action-override keyword
- sample-profile reference
- sticky-dest (number | keyword)
- filter-id number
- scope keyword
- shared-policer boolean
- subscriber-mgmt
- host-specific-entry
- credit-control
- range
- end number
- start number
- filter-rule
- range
- end number
- start number
- watermark
- high number
- low number
- shared-entry
- filter-rule
- range
- end number
- start number
- pcc-rule
- range
- end number
- start number
- watermark
- high number
- low number
- type keyword

```

## configure filter ipv6-exception

- **ipv6-exception** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **match**
      - **dst-ip**
        - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
        - **ipv6-prefix-list** *reference*
        - **mask** *string*
      - **dst-port**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **port-list** *reference*
        - **range**
          - **end** *number*
          - **start** *number*
      - **icmp**
        - **code** *number*
        - **type** *number*
      - **next-header** (*number* | *keyword*)
      - **port**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **port-list** *reference*
        - **range**
          - **end** *number*
          - **start** *number*
      - **src-ip**
        - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
        - **ipv6-prefix-list** *reference*
        - **mask** *string*
      - **src-port**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **port-list** *reference*
        - **range**
          - **end** *number*
          - **start** *number*
  - **filter-id** *number*
- **ipv6-filter** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **chain-to-system-filter** *boolean*
  - **default-action** *keyword*
  - **description** *string*
  - **embed**
    - **filter** *reference* **offset** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **flowspec** **offset** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **group** *number*
      - **router-instance** *string*
    - **openflow** *reference* **offset** *number*



configure filter ipv6-filter embed openflow admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **grt**
- **sap** *reference*
- **system**
- **vpls** *reference*
- **vprn** *reference*
- **entry** *number*
  - **action**
    - **accept**
    - **accept-when**
      - **pattern**
        - **expression** *string*
        - **mask** *string*
        - **offset-type** *keyword*
        - **offset-value** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **drop**
    - **drop-when**
      - **extracted-traffic**
      - **hop-limit**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **range**
          - **end** *number*
          - **start** *number*
      - **pattern**
        - **expression** *string*
        - **mask** *string*
        - **offset-type** *keyword*
        - **offset-value** *number*
      - **payload-length**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **range**
          - **end** *number*
          - **start** *number*
  - **fc** *keyword*
  - **forward**
    - **bonding-connection** *number*
    - **esi-l2**
      - **esi-value** *string*
      - **vpls** *reference*
    - **esi-l3**
      - **esi-value** *string*
      - **sf-ip** *string*
      - **vas-interface** *reference*
      - **vprn** *reference*
    - **gre-tunnel** *reference*
    - **lsp** *string*
    - **mpls-policy**
      - **endpoint** *string*
    - **next-hop**
      - **nh-ip**
        - **address** *string*
        - **indirect** *boolean*
      - **nh-ip-vrf**
        - **address** *string*
        - **indirect** *boolean*
        - **router-instance** *string*

## configure filter ipv6-filter entry action forward redirect-policy

```

- redirect-policy reference
- router-instance string
- sap
  - sap-id reference
  - vpls reference
- sdp
  - sdp-bind-id string
  - vpls reference
- srte-policy
  - color number
  - endpoint string
- srv6-policy
  - color number
  - endpoint string
  - service-sid string
- vprn-target
  - adv-prefix string
  - bgp-nh string
  - lsp string
  - vprn reference
- http-redirect
  - allow-override boolean
  - url (keyword | http-redirect-url)
- ignore-match
- nat
  - nat-policy reference
  - nat-type keyword
- rate-limit
  - extracted-traffic
  - hop-limit
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - mbs (number | keyword)
- pattern
  - expression string
  - mask string
  - offset-type keyword
  - offset-value number
- payload-length
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- pir (number | keyword)
- pps-pir (number | keyword)
- remark
  - dscp keyword
- secondary
  - apply-groups reference
  - apply-groups-exclude reference
- forward
  - next-hop
    - nh-ip-vrf
      - address string
      - indirect boolean
      - router-instance string
  - sap
    - sap-id reference

```

configure filter ipv6-filter entry action secondary forward sap vpls

```

    - vpls reference
  - sdp
    - sdp-bind-id string
    - vpls reference
  - vprn-target
    - adv-prefix string
    - bgp-nh string
    - lsp string
    - vprn reference
  - remark
    - dscp keyword
  - tcp-mss-adjust
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress-pbr keyword
  - filter-sample boolean
  - interface-sample boolean
  - log reference
  - match
    - destination-class number
    - dscp keyword
    - dst-ip
      - address (ipv6-prefix-with-host-bits | ipv6-address)
      - ipv6-prefix-list reference
      - mask string
    - dst-port
      - eq number
      - gt number
      - lt number
      - port-list reference
      - range
        - end number
        - start number
    - extension-header
      - ah boolean
      - esp boolean
      - hop-by-hop boolean
      - routing-type0 boolean
    - flow-label
      - mask number
      - value number
    - fragment keyword
    - hop-limit
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
    - icmp
      - code number
      - type number
    - ip
      - address (ipv6-prefix-with-host-bits | ipv6-address)
      - ipv6-prefix-list reference
      - mask string
      - next-header (number | keyword)
      - next-header-list reference
    - packet-length
      - eq number
      - gt number
      - lt number
      - range

```

configure filter ipv6-filter entry match packet-length range end

```

    - end number
    - start number
  - port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - src-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - ipv6-prefix-list reference
    - mask string
  - src-mac
    - address string
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - port-list reference
    - range
      - end number
      - start number
  - tcp-established
  - tcp-flags
    - ack boolean
    - cwr boolean
    - ece boolean
    - fin boolean
    - ns boolean
    - psh boolean
    - rst boolean
    - syn boolean
    - urg boolean
  - pbr-down-action-override keyword
  - sample-profile reference
  - sticky-dest (number | keyword)
- filter-id number
- scope keyword
- shared-policer boolean
- subscriber-mgmt
  - host-specific-entry
    - credit-control
      - range
        - end number
        - start number
    - filter-rule
      - range
        - end number
        - start number
    - watermark
      - high number
      - low number
  - shared-entry
    - filter-rule
      - range
        - end number
        - start number
    - pcc-rule
      - range
        - end number
        - start number

```

configure filter ipv6-filter subscriber-mgmt shared-entry watermark

```

    - watermark
      - high number
      - low number
  - type keyword
- log number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - destination
    - memory
      - max-entries number
      - stop-on-full boolean
    - syslog
      - name reference
      - summary
        - admin-state keyword
        - summary-crit keyword
- mac-filter string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action keyword
  - description string
  - embed
  - entry number
    - action
      - accept
      - apply-groups reference
      - apply-groups-exclude reference
      - drop
      - forward
        - esi-l2
          - esi-value string
          - vpls reference
        - sap
          - sap-id reference
          - vpls reference
        - sdp
          - sdp-bind-id string
          - vpls reference
      - http-redirect
        - url string
      - ignore-match
      - rate-limit
        - pir (number | keyword)
      - secondary
        - apply-groups reference
        - apply-groups-exclude reference
        - forward
          - sap
            - sap-id reference
            - vpls reference
          - sdp
            - sdp-bind-id string
            - vpls reference
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - log reference
  - match
    - dot1p
      - mask number
      - priority number
    - dst-mac

```

configure filter mac-filter entry match dst-mac address

```

    - address string
    - mask string
  - etype string
  - frame-type keyword
  - inner-tag
    - mask number
    - tag number
  - isid
    - range
      - end number
      - start number
    - value number
  - llc-dsap
    - dsap number
    - mask number
  - llc-ssap
    - mask number
    - ssap number
  - outer-tag
    - mask number
    - tag number
  - snap-oui keyword
  - snap-pid number
  - src-mac
    - address string
    - mask string
  - pbr-down-action-override keyword
  - sticky-dest (number | keyword)
- filter-id number
- scope keyword
- type keyword
- match-list
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-prefix-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - apply-path
      - bgp-peers number
        - apply-groups reference
        - apply-groups-exclude reference
        - group string
        - neighbor string
        - router-instance string
    - description string
    - prefix string
    - prefix-exclude string
  - ipv6-prefix-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - apply-path
      - bgp-peers number
        - apply-groups reference
        - apply-groups-exclude reference
        - group string
        - neighbor string
        - router-instance string
    - description string
    - prefix string
    - prefix-exclude string
  - port-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string

```

configure filter match-list port-list port

- **port** *number*
- **range** **start** *number* **end** *number*
- **protocol-list** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **protocol** (*number* | *keyword*)
- **md-auto-id**
- **filter-id-range**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **end** *number*
- **start** *number*
- **redirect-policy** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **ping-test**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **drop-count** *number*
- **hold-down** *number*
- **interval** *number*
- **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **timeout** *number*
- **priority** *number*
- **unicast-rt-test**
- **notify-dest-change** *boolean*
- **router-instance** *string*
- **sticky-dest** (*number* | *keyword*)
- **redirect-policy-binding** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **binding-operator** *keyword*
- **redirect-policy** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **destination** *reference*
- **system-filter**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ip** *reference*
- **ipv6** *reference*

### 3.17.1 filter command descriptions

#### filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure filter</b>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

#### dhcp-filter [[filter-id](#)] *number*

Synopsis	Enter the <b>dhcp-filter</b> list instance
Context	<b>configure filter dhcp-filter</b> <i>number</i>
Tree	<a href="#">dhcp-filter</a>
Introduced	16.0.R1
Platforms	All

#### [\[filter-id\]](#) *number*

Synopsis	Unique DHCP filter policy ID
Context	<b>configure filter dhcp-filter</b> <i>number</i>
Tree	<a href="#">dhcp-filter</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### default-action

Synopsis	Enable the <b>default-action</b> context
Context	<b>configure filter dhcp-filter</b> <i>number</i> <a href="#">default-action</a>
Tree	<a href="#">default-action</a>
Introduced	16.0.R1



Platforms All

## bypass-host-creation

Synopsis Host creation options to bypass

Context **configure filter dhcp-filter number default-action bypass-host-creation**

Tree [bypass-host-creation](#)

Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis DHCP host creation when the filter entry is matched

Context **configure filter dhcp-filter number default-action drop**

Tree [drop](#)

Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.

Introduced 16.0.R1

Platforms All

## description *string*

Synopsis Text description

Context **configure filter dhcp-filter number description string**

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

## entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure filter dhcp-filter number entry number**

Tree [entry](#)

Max. Instances	10
Introduced	16.0.R1
Platforms	All

**[entry-id] number**

Synopsis	DHCP filter entry ID
Context	<b>configure</b> filter dhcp-filter number entry number
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enable the <b>action</b> context
Context	<b>configure</b> filter dhcp-filter number entry number action
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**bypass-host-creation**

Synopsis	Host creation options to bypass
Context	<b>configure</b> filter dhcp-filter number entry number action <a href="#">bypass-host-creation</a>
Tree	<a href="#">bypass-host-creation</a>
Notes	The following elements are part of a mandatory choice: <b>bypass-host-creation</b> or <b>drop</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**drop**

Synopsis	DHCP host creation when the filter entry is matched
----------	---

Context	<b>configure filter dhcp-filter number entry number action drop</b>
Tree	<b>drop</b>
Notes	The following elements are part of a mandatory choice: <b>bypass-host-creation</b> or <b>drop</b> .
Introduced	16.0.R1
Platforms	All

## option

Synopsis	Enable the <b>option</b> context
Context	<b>configure filter dhcp-filter number entry number option</b>
Tree	<b>option</b>
Introduced	16.0.R1
Platforms	All

## absent

Synopsis	Require the absence of related option
Context	<b>configure filter dhcp-filter number entry number option absent</b>
Tree	<b>absent</b>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

## match

Synopsis	Enable the <b>match</b> context
Context	<b>configure filter dhcp-filter number entry number option match</b>
Tree	<b>match</b>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

## exact *boolean*

Synopsis	Use an exact match pattern (not partial)
----------	--

Context	<b>configure filter dhcp-filter number entry number option match exact boolean</b>
Tree	<b>exact</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **hex string**

Synopsis	Matching pattern for the filtered option
Context	<b>configure filter dhcp-filter number entry number option match hex string</b>
Tree	<b>hex</b>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>hex</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	All

### **invert boolean**

Synopsis	Invert (partial) matching criteria
Context	<b>configure filter dhcp-filter number entry number option match invert boolean</b>
Tree	<b>invert</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **string string**

Synopsis	Matching pattern for the filtered option
Context	<b>configure filter dhcp-filter number entry number option match string string</b>
Tree	<b>string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>hex</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number for DHCP or DHCPv6 option to filter on
Context	<b>configure filter dhcp-filter</b> <i>number entry number option number number</i>
Tree	<a href="#">number</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**present**

Synopsis	Require the presence of related option
Context	<b>configure filter dhcp-filter</b> <i>number entry number option present</i>
Tree	<a href="#">present</a>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

**dhcp6-filter** [[filter-id](#)] *number*

Synopsis	Enter the <b>dhcp6-filter</b> list instance
Context	<b>configure filter dhcp6-filter</b> <i>number</i>
Tree	<a href="#">dhcp6-filter</a>
Introduced	16.0.R1
Platforms	All

**[filter-id]** *number*

Synopsis	Unique DHCP filter policy ID
Context	<b>configure filter dhcp6-filter</b> <i>number</i>
Tree	<a href="#">dhcp6-filter</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### default-action

Synopsis Enable the **default-action** context  
 Context **configure filter dhcp6-filter number default-action**  
 Tree [default-action](#)  
 Introduced 16.0.R1  
 Platforms All

### bypass-host-creation

Synopsis Enable the **bypass-host-creation** context  
 Context **configure filter dhcp6-filter number default-action bypass-host-creation**  
 Tree [bypass-host-creation](#)  
 Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### na boolean

Synopsis Bypass the DHCPv6 NA host creation  
 Context **configure filter dhcp6-filter number default-action bypass-host-creation na boolean**  
 Tree [na](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### pd boolean

Synopsis Bypass the DHCPv6 PD host creation  
 Context **configure filter dhcp6-filter number default-action bypass-host-creation pd boolean**  
 Tree [pd](#)  
 Default true  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis Drop DHCPv6 message (do not process)  
 Context **configure filter dhcp6-filter number default-action drop**  
 Tree [drop](#)  
 Notes The following elements are part of a mandatory choice: **bypass-host-creation** or **drop**.  
 Introduced 16.0.R1  
 Platforms All

## description *string*

Synopsis Text description  
 Context **configure filter dhcp6-filter number description string**  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

## entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance  
 Context **configure filter dhcp6-filter number entry number**  
 Tree [entry](#)  
 Max. Instances 10  
 Introduced 16.0.R1  
 Platforms All

## [[entry-id](#)] *number*

Synopsis DHCP filter entry ID  
 Context **configure filter dhcp6-filter number entry number**  
 Tree [entry](#)

Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## action

Synopsis	Enable the <b>action</b> context
Context	<b>configure filter dhcp6-filter number entry number action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

## bypass-host-creation

Synopsis	Enable the <b>bypass-host-creation</b> context
Context	<b>configure filter dhcp6-filter number entry number action bypass-host-creation</b>
Tree	<a href="#">bypass-host-creation</a>
Notes	The following elements are part of a mandatory choice: <b>bypass-host-creation</b> or <b>drop</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## na *boolean*

Synopsis	Bypass the DHCPv6 NA host creation
Context	<b>configure filter dhcp6-filter number entry number action bypass-host-creation na boolean</b>
Tree	<a href="#">na</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pd *boolean*

Synopsis	Bypass the DHCPv6 PD host creation
----------	------------------------------------



Context	<b>configure filter dhcp6-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>action</b> <b>bypass-host-creation</b> <b>pd</b> <i>boolean</i>
Tree	<a href="#">pd</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis	Drop DHCPv6 message (do not process)
Context	<b>configure filter dhcp6-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>action</b> <b>drop</b>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a mandatory choice: <b>bypass-host-creation</b> or <b>drop</b> .
Introduced	16.0.R1
Platforms	All

## option

Synopsis	Enable the <b>option</b> context
Context	<b>configure filter dhcp6-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>option</b>
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	All

## absent

Synopsis	Require the absence of related option
Context	<b>configure filter dhcp6-filter</b> <i>number</i> <b>entry</b> <i>number</i> <b>option</b> <b>absent</b>
Tree	<a href="#">absent</a>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

## match

Synopsis	Enable the <b>match</b> context
Context	<b>configure filter dhcp6-filter number entry number option match</b>
Tree	<a href="#">match</a>
Notes	The following elements are part of a mandatory choice: <b>absent</b> , <b>match</b> , or <b>present</b> .
Introduced	16.0.R1
Platforms	All

## exact *boolean*

Synopsis	Use an exact match pattern (not partial)
Context	<b>configure filter dhcp6-filter number entry number option match exact boolean</b>
Tree	<a href="#">exact</a>
Default	false
Introduced	16.0.R1
Platforms	All

## hex *string*

Synopsis	Matching pattern for the filtered option
Context	<b>configure filter dhcp6-filter number entry number option match hex string</b>
Tree	<a href="#">hex</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>hex</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## invert *boolean*

Synopsis	Invert (partial) matching criteria
Context	<b>configure filter dhcp6-filter number entry number option match invert boolean</b>
Tree	<a href="#">invert</a>
Default	false
Introduced	16.0.R1

Platforms All

### **string** *string*

Synopsis Matching pattern for the filtered option  
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [match](#) *string* *string*  
 Tree [string](#)  
 String Length 1 to 127  
 Notes The following elements are part of a mandatory choice: **hex** or **string**.  
 Introduced 16.0.R1  
 Platforms All

### **number** *number*

Synopsis Number for DHCP or DHCPv6 option to filter on  
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [number](#) *number*  
 Tree [number](#)  
 Range 0 to 255  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **present**

Synopsis Require the presence of related option  
 Context **configure** [filter](#) [dhcp6-filter](#) *number* [entry](#) *number* [option](#) [present](#)  
 Tree [present](#)  
 Notes The following elements are part of a mandatory choice: **absent**, **match**, or **present**.  
 Introduced 16.0.R1  
 Platforms All

### **gre-tunnel-template** [[gre-tunnel-template-name](#)] *string*

Synopsis Enter the **gre-tunnel-template** list instance  
 Context **configure** [filter](#) [gre-tunnel-template](#) *string*

Tree	<a href="#">gre-tunnel-template</a>
Max. Instances	8191
Introduced	16.0.R1
Platforms	All

### **[gre-tunnel-template-name]** *string*

Synopsis	GRE tunnel template ID
Context	<b>configure</b> <a href="#">filter gre-tunnel-template</a> <i>string</i>
Tree	<a href="#">gre-tunnel-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">filter gre-tunnel-template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">filter gre-tunnel-template</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Notes	The following elements are part of a choice: <b>ipv4</b> or <b>ipv6</b> .
Introduced	16.0.R1
Platforms	All

**destination-address** [[address](#)] *string*

Synopsis	Add a list entry for <b>destination-address</b>
Context	<b>configure</b> filter <a href="#">gre-tunnel-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">destination-address</a> <i>string</i>
Tree	<a href="#">destination-address</a>
Description	This command defines a destination for the GRE IP header used to encapsulate the matching IPv4/IPv6 packet.  A single destination address can be specified for an IPv6 <b>gre-tunnel-template</b> .  Traffic matching the associated IPv4 or IPv6 filter is hashed across any available ECMP or UCMP route next hop available to the destination address. If no destination address is available, then matching traffic follows the configured <b>pbr-down-action-override</b> action, if configured. If no <b>pbr-down-action-override</b> is configured traffic is discarded.
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[address]** *string*

Synopsis	Destination IPv4 address
Context	<b>configure</b> filter <a href="#">gre-tunnel-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">destination-address</a> <i>string</i>
Tree	<a href="#">destination-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**gre-key** (*keyword* | *number*)

Synopsis	GRE key
Context	<b>configure</b> filter <a href="#">gre-tunnel-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">gre-key</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">gre-key</a>
Max. Range	0 to 4294967295
Options	if-index
Introduced	16.0.R1
Platforms	All

**skip-ttl-decrement** *boolean*

Synopsis	Decrement TTL
Context	<b>configure</b> filter gre-tunnel-template <i>string</i> ipv4 skip-ttl-decrement <i>boolean</i>
Tree	skip-ttl-decrement
Default	false
Introduced	16.0.R1
Platforms	All

**source-address** *string*

Synopsis	Source IP address of the GRE encapsulated
Context	<b>configure</b> filter gre-tunnel-template <i>string</i> ipv4 source-address <i>string</i>
Tree	source-address
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> filter gre-tunnel-template <i>string</i> ipv6
Tree	ipv6
Notes	The following elements are part of a choice: <b>ipv4</b> or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	All

**destination-address** [*address*] *string*

Synopsis	Add a list entry for <b>destination-address</b>
Context	<b>configure</b> filter gre-tunnel-template <i>string</i> ipv6 destination-address <i>string</i>
Tree	destination-address
Max. Instances	1
Introduced	22.7.R1
Platforms	All

**[address]** *string*

Synopsis	IPv6 destination address
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv6 destination-address string</i>
Tree	<a href="#">destination-address</a>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**gre-key** *keyword*

Synopsis	Include a key value in GRE header
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv6 gre-key keyword</i>
Tree	<a href="#">gre-key</a>
Description	This command includes a key value in the GRE header of ifIndex of the ingress interface.
Options	if-index
Introduced	22.7.R1
Platforms	All

**skip-hop-decrement** *boolean*

Synopsis	Decrement TTL of the received packet
Context	<b>configure filter gre-tunnel-template</b> <i>string ipv6 skip-hop-decrement boolean</i>
Tree	<a href="#">skip-hop-decrement</a>
Description	When configured to <b>true</b> , the system decrements the TTL of the IP packet matching the IPv4 or IPv6 filter when it is encapsulated into the GRE tunnel header. When configured to <b>false</b> , the system increases the TTL of the received packet.
Default	false
Introduced	22.7.R1
Platforms	All

**source-address** *string*

Synopsis	Source IPv6 address of the GRE encapsulated
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Context	<b>configure filter gre-tunnel-template</b> <i>string</i> <b>ipv6 source-address</b> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	22.7.R1
Platforms	All

### **ip-exception** [[filter-name](#)] *string*

Synopsis	Enter the <b>ip-exception</b> list instance
Context	<b>configure filter ip-exception</b> <i>string</i>
Tree	<a href="#">ip-exception</a>
Introduced	20.10.R1
Platforms	VSR

### **[filter-name]** *string*

Synopsis	Filter name
Context	<b>configure filter ip-exception</b> <i>string</i>
Tree	<a href="#">ip-exception</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure filter ip-exception</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
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Context	<b>configure filter ip-exception string entry number</b>
Tree	<b>entry</b>
Introduced	20.10.R1
Platforms	VSR

**[entry-id] number**

Synopsis	ID for a match criteria and the corresponding action
Context	<b>configure filter ip-exception string entry number</b>
Tree	<b>entry</b>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

**description string**

Synopsis	Text description
Context	<b>configure filter ip-exception string entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure filter ip-exception string entry number match</b>
Tree	<b>match</b>
Introduced	20.10.R1
Platforms	VSR

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
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Context	<b>configure filter ip-exception string entry number match dst-ip</b>
Tree	<b>dst-ip</b>
Introduced	20.10.R1
Platforms	VSR

### **address** (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	IP address to match
Context	<b>configure filter ip-exception string entry number match dst-ip address</b> ( <i>ipv4-prefix-with-host-bits   ipv4-address</i> )
Tree	<b>address</b>
Introduced	20.10.R1
Platforms	VSR

### **mask string**

Synopsis	Mask applied as an AND to the IP address
Context	<b>configure filter ip-exception string entry number match dst-ip mask string</b>
Tree	<b>mask</b>
Introduced	20.10.R1
Platforms	VSR

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure filter ip-exception string entry number match dst-port</b>
Tree	<b>dst-port</b>
Introduced	20.10.R1
Platforms	VSR

### **eq number**

Synopsis	Exact match criterion
Context	<b>configure filter ip-exception string entry number match dst-port eq number</b>
Tree	<b>eq</b>
Range	0 to 65535

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Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **gt** *number*

Synopsis	Condition on being greater than the specified value.
Context	<b>configure</b> <a href="#">filter ip-exception</a> <i>string</i> <a href="#">entry number</a> <a href="#">match dst-port</a> <b>gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **lt** *number*

Synopsis	Condition on being less than the specified value.
Context	<b>configure</b> <a href="#">filter ip-exception</a> <i>string</i> <a href="#">entry number</a> <a href="#">match dst-port</a> <b>lt</b> <i>number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">filter ip-exception</a> <i>string</i> <a href="#">entry number</a> <a href="#">match dst-port</a> <b>range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **end number**

Synopsis	Upper bound of the port range to match
Context	<b>configure filter ip-exception string entry number match dst-port range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

### **start number**

Synopsis	Lower bound of the port range to match
Context	<b>configure filter ip-exception string entry number match dst-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

### **icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure filter ip-exception string entry number match icmp</b>
Tree	<a href="#">icmp</a>
Introduced	20.10.R1
Platforms	VSR

### **code number**

Synopsis	ICMP code value to match
Context	<b>configure filter ip-exception string entry number match icmp code number</b>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	20.10.R1

Platforms VSR

### **type number**

Synopsis ICMP type value to match  
 Context **configure filter ip-exception string entry number match icmp type number**  
 Tree [type](#)  
 Range 0 to 255  
 Introduced 20.10.R1  
 Platforms VSR

### **protocol (number | keyword)**

Synopsis IP protocol to match.  
 Context **configure filter ip-exception string entry number match protocol (number | keyword)**  
 Tree [protocol](#)  
 Range 0 to 255  
 Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp  
 Introduced 20.10.R1  
 Platforms VSR

### **src-ip**

Synopsis Enter the **src-ip** context  
 Context **configure filter ip-exception string entry number match src-ip**  
 Tree [src-ip](#)  
 Introduced 20.10.R1  
 Platforms VSR

### **address (ipv4-prefix-with-host-bits | ipv4-address)**

Synopsis IP address to match  
 Context **configure filter ip-exception string entry number match src-ip address (ipv4-prefix-with-host-bits | ipv4-address)**

Tree	<a href="#">address</a>
Introduced	20.10.R1
Platforms	VSR

**mask string**

Synopsis	Mask applied as an AND to the IP address
Context	<b>configure</b> <a href="#">filter ip-exception string entry number match src-ip mask string</a>
Tree	<a href="#">mask</a>
Introduced	20.10.R1
Platforms	VSR

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">filter ip-exception string entry number match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	20.10.R1
Platforms	VSR

**eq number**

Synopsis	Exact match criterion
Context	<b>configure</b> <a href="#">filter ip-exception string entry number match src-port eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

**gt number**

Synopsis	Condition on being greater than the specified value.
Context	<b>configure</b> <a href="#">filter ip-exception string entry number match src-port gt number</a>
Tree	<a href="#">gt</a>

Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **lt** *number*

Synopsis	Condition on being less than the specified value.
Context	<b>configure</b> <a href="#">filter ip-exception</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-port</a> <b>lt</b> <a href="#">number</a>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">filter ip-exception</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-port</a> <b>range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **end** *number*

Synopsis	Upper bound of the port range to match
Context	<b>configure</b> <a href="#">filter ip-exception</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <b>end</b> <a href="#">number</a>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

**start number**

Synopsis	Lower bound of the port range to match
Context	<b>configure filter ip-exception string entry number match src-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

**filter-id number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Filter ID
Context	<b>configure filter ip-exception string filter-id number</b>
Tree	<a href="#">filter-id</a>
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

**ip-filter [filter-name] string**

Synopsis	Enter the <b>ip-filter</b> list instance
Context	<b>configure filter ip-filter string</b>
Tree	<a href="#">ip-filter</a>
Introduced	16.0.R1
Platforms	All

**[filter-name] string**

Synopsis	Filter name
Context	<b>configure filter ip-filter string</b>
Tree	<a href="#">ip-filter</a>
String Length	1 to 64



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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **chain-to-system-filter** *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	<b>configure filter ip-filter</b> <i>string</i> <b>chain-to-system-filter</b> <i>boolean</i>
Tree	<a href="#">chain-to-system-filter</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **default-action** *keyword*

Synopsis	Action for packets that do not match any entry
Context	<b>configure filter ip-filter</b> <i>string</i> <b>default-action</b> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	drop, accept
Default	drop
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure filter ip-filter</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **embed**

Synopsis	Enter the <b>embed</b> context
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Context	<b>configure filter ip-filter string embed</b>
Tree	<b>embed</b>
Description	Commands in this context embed a previously defined IPv4 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

### **filter [name] reference offset number**

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure filter ip-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	All

### **[name] reference**

Synopsis	IPv4 policy to be embedded in the filter
Context	<b>configure filter ip-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Reference	<b>configure filter ip-filter string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **offset number**

Synopsis	Offset of the inserted entries
Context	<b>configure filter ip-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** filter ip-filter *string* embed filter *reference* offset *number* admin-state *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **flowspec** [offset](#) *number*

Synopsis Enter the **flowspec** list instance

Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number*

Tree [flowspec](#)

Introduced 16.0.R1

Platforms All

### **offset** *number*

Synopsis Offset of the inserted entries

Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number*

Tree [flowspec](#)

Range 0 to 2097151

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** filter ip-filter *string* embed flowspec [offset](#) *number* admin-state *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **group** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	<b>configure</b> filter ip-filter <i>string</i> embed flowspec offset <i>number</i> group <i>number</i>
Tree	group
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual router for an external configured set of flowspec rules
Context	<b>configure</b> filter ip-filter <i>string</i> embed flowspec offset <i>number</i> router-instance <i>string</i>
Tree	router-instance
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **openflow** [*of-switch*] *reference* offset *number*

Synopsis	Enter the <b>openflow</b> list instance
Context	<b>configure</b> filter ip-filter <i>string</i> embed openflow <i>reference</i> offset <i>number</i>
Tree	openflow
Introduced	16.0.R4

Platforms All

### **[of-switch]** *reference*

Synopsis Referenced Hybrid OpenFlow Switch (OFS) name

Context **configure** filter ip-filter string embed openflow reference offset number

Tree openflow

Reference **configure** openflow of-switch string

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **offset** *number*

Synopsis Offset of the inserted entries

Context **configure** filter ip-filter string embed openflow reference offset number

Tree openflow

Range 0 to 2097150

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** filter ip-filter string embed openflow reference offset number admin-state keyword

Tree admin-state

Options enable, disable

Default enable

Introduced 16.0.R4

Platforms All

## grt

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Global routing context
Context	<b>configure filter ip-filter string embed openflow reference offset number grt</b>
Tree	<a href="#">grt</a>
Notes	The following elements are part of a choice: <b>grt</b> , <b>system</b> , ( <b>sap</b> and <b>vpls</b> ), or <b>vpn</b> .
Introduced	16.0.R4
Platforms	All

## sap reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	<b>configure filter ip-filter string embed openflow reference offset number sap reference</b>
Tree	<a href="#">sap</a>
Reference	<b>configure service vpls string sap string</b>
Notes	The following elements are part of a choice: <b>grt</b> , <b>system</b> , ( <b>sap</b> and <b>vpls</b> ), or <b>vpn</b> .
Introduced	16.0.R4
Platforms	All

## system

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	<b>configure filter ip-filter string embed openflow reference offset number system</b>
Tree	<a href="#">system</a>
Notes	The following elements are part of a choice: <b>grt</b> , <b>system</b> , ( <b>sap</b> and <b>vpls</b> ), or <b>vpn</b> .
Introduced	16.0.R4

Platforms All

### **vpls** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPLS context

Context **configure** filter ip-filter *string* embed openflow *reference* offset *number* vpls *reference*

Tree vpls

Reference **configure** service vpls *string*

Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.

Introduced 16.0.R4

Platforms All

### **vprn** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPRN context

Context **configure** filter ip-filter *string* embed openflow *reference* offset *number* vprn *reference*

Tree vprn

Reference **configure** service vprn *string*

Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.

Introduced 16.0.R4

Platforms All

### **entry** [*entry-id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** filter ip-filter *string* entry *number*

Tree entry

Introduced 16.0.R1

Platforms All

### [entry-id] *number*

Synopsis ID for a match criteria and the corresponding action  
 Context **configure filter ip-filter string entry number**  
 Tree [entry](#)  
 Range 1 to 2097151  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### action

Synopsis Enable the **action** context  
 Context **configure filter ip-filter string entry number action**  
 Tree [action](#)  
 Introduced 16.0.R1  
 Platforms All

### accept

Synopsis Accept regular routing to forward a matching packet  
 Context **configure filter ip-filter string entry number action accept**  
 Tree [accept](#)  
 Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.  
 Introduced 16.0.R1  
 Platforms All

### accept-when

Synopsis Enable the **accept-when** context  
 Context **configure filter ip-filter string entry number action accept-when**  
 Tree [accept-when](#)



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Introduced	19.5.R1
Platforms	All

## **pattern**

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure filter ip-filter string entry number action accept-when pattern</b>
Tree	<a href="#">pattern</a>
Introduced	19.5.R1
Platforms	All

## **expression string**

Synopsis	Pattern expression to match
Context	<b>configure filter ip-filter string entry number action accept-when pattern expression string</b>
Tree	<a href="#">expression</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## **mask string**

Synopsis	Mask for the pattern expression
Context	<b>configure filter ip-filter string entry number action accept-when pattern mask string</b>
Tree	<a href="#">mask</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## **offset-type keyword**

Synopsis	Starting point reference for offset value of pattern
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Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-type <i>keyword</i>
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### offset-value *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action accept-when pattern offset-value <i>number</i>
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### drop

Synopsis	Drop a packet matching this entry
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

### drop-when

Synopsis	Enable the <b>drop-when</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action drop-when
Tree	drop-when
Introduced	16.0.R1

Platforms All

### extracted-traffic

Synopsis Drop traffic extracted to CPM  
 Context **configure filter ip-filter string entry number action drop-when extracted-traffic**  
 Tree [extracted-traffic](#)  
 Introduced 16.0.R1  
 Platforms All

### packet-length

Synopsis Enable the **packet-length** context  
 Context **configure filter ip-filter string entry number action drop-when packet-length**  
 Tree [packet-length](#)  
 Notes The following elements are part of a choice: **packet-length** or **tll**.  
 Introduced 16.0.R1  
 Platforms All

### eq number

Synopsis Exact match criterion for the length  
 Context **configure filter ip-filter string entry number action drop-when packet-length eq number**  
 Tree [eq](#)  
 Range 0 to 65535  
 Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### gt number

Synopsis Greater than match criterion for the length  
 Context **configure filter ip-filter string entry number action drop-when packet-length gt number**  
 Tree [gt](#)  
 Range 0 to 65534

Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than match criterion for the length
Context	<b>configure filter ip-filter string entry number action drop-when packet-length lt number</b>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number action drop-when packet-length range</b>
Tree	<b>range</b>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the length range
Context	<b>configure filter ip-filter string entry number action drop-when packet-length range end number</b>
Tree	<b>end</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the length range
Context	<b>configure</b> filter ip-filter string entry number action drop-when packet-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**pattern**

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure</b> filter ip-filter string entry number action drop-when pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

**expression string**

Synopsis	Pattern expression to match
Context	<b>configure</b> filter ip-filter string entry number action drop-when pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**mask string**

Synopsis	Mask for the pattern expression
Context	<b>configure</b> filter ip-filter string entry number action drop-when pattern mask string
Tree	mask
String Length	3 to 18
Notes	This element is mandatory.

Introduced	16.0.R4
Platforms	All

### **offset-type** *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <b>offset-type</b> <i>keyword</i>
Tree	<a href="#">offset-type</a>
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **offset-value** *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <b>offset-value</b> <i>number</i>
Tree	<a href="#">offset-value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **ttl**

Synopsis	Enable the <b>ttl</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop-when</a> <b>ttl</b>
Tree	<a href="#">ttl</a>
Notes	The following elements are part of a choice: <b>packet-length</b> or <b>ttl</b> .
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Equal to condition match value
Context	<b>configure filter ip-filter string entry number action drop-when ttl eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Greater than condition match value
Context	<b>configure filter ip-filter string entry number action drop-when ttl gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Less than condition match value
Context	<b>configure filter ip-filter string entry number action drop-when ttl lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number action drop-when ttl range</b>
Tree	<a href="#">range</a>

Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ip-filter string entry number action drop-when ttl range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the range
Context	<b>configure filter ip-filter string entry number action drop-when ttl range start number</b>
Tree	<b>start</b>
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **fc keyword**

Synopsis	Class name to be forwarded for matching packets
Context	<b>configure filter ip-filter string entry number action fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All



## forward

Synopsis	Enter the <b>forward</b> context
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward</b>
Tree	<b>forward</b>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

## bonding-connection *number*

Synopsis	Connection ID over which packet is forwarded
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward bonding-connection</b> <i>number</i>
Tree	<b>bonding-connection</b>
Range	1 to 2
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esi-l2

Synopsis	Enable the <b>esi-l2</b> context
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward esi-l2</b>
Tree	<b>esi-l2</b>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
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Context	<b>configure filter ip-filter string entry number action forward esi-l2 esi-value string</b>
Tree	<b>esi-value</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### vpls reference

Synopsis	VPLS service name
Context	<b>configure filter ip-filter string entry number action forward esi-l2 vpls reference</b>
Tree	<b>vpls</b>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

### esi-l3

Synopsis	Enable the <b>esi-l3</b> context
Context	<b>configure filter ip-filter string entry number action forward esi-l3</b>
Tree	<b>esi-l3</b>
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, srv6-policy, or vprn-target.</b>
Introduced	16.0.R1
Platforms	All

### esi-value string



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	<b>configure filter ip-filter string entry number action forward esi-l3 esi-value string</b>
Tree	<b>esi-value</b>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sf-ip string**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	<b>configure filter ip-filter string entry number action forward esi-l3 sf-ip string</b>
Tree	<a href="#">sf-ip</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vas-interface reference**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress R-VPLS IP interface name
Context	<b>configure filter ip-filter string entry number action forward esi-l3 vas-interface reference</b>
Tree	<a href="#">vas-interface</a>
Reference	<b>configure service vprn string interface string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vprn reference**



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN service name
Context	<b>configure filter ip-filter</b> <i>string entry number action forward esi-l3 vprn reference</i>
Tree	<a href="#">vprn</a>
Reference	<b>configure service vprn</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **gre-tunnel** *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	<b>configure filter ip-filter</b> <i>string entry number action forward gre-tunnel reference</i>
Tree	<a href="#">gre-tunnel</a>
Reference	<b>configure filter gre-tunnel-template</b> <i>string</i>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **lsp** *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure filter ip-filter</b> <i>string entry number action forward lsp string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **mpls-policy**

Synopsis	Enable the <b>mpls-policy</b> context
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Context	<b>configure filter ip-filter string entry number action forward mpls-policy</b>
Tree	<a href="#">mpls-policy</a>
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, srv6-policy, or vprn-target.</b>
Introduced	19.10.R1
Platforms	All

### endpoint string

Synopsis	MPLS forwarding policy endpoint IPv4 address
Context	<b>configure filter ip-filter string entry number action forward mpls-policy endpoint string</b>
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### next-hop

Synopsis	Enable the <b>next-hop</b> context
Context	<b>configure filter ip-filter string entry number action forward next-hop</b>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, srv6-policy, or vprn-target.</b>
Introduced	16.0.R1
Platforms	All

### interface-name string



#### WARNING:

This element is deprecated and will be removed in a future release.

Synopsis	IP interface name that forwards matching packets
Context	<b>configure filter ip-filter string entry number action forward next-hop interface-name string</b>
Tree	<a href="#">interface-name</a>

String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>interface-name</b> , <b>nh-ip</b> , or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Deprecated	23.10.R2
Platforms	All

## nh-ip

Synopsis	Enable the <b>nh-ip</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip
Tree	nh-ip
Notes	The following elements are part of a mandatory choice: <b>interface-name</b> , <b>nh-ip</b> , or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Platforms	All

## address *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip address <i>string</i>
Tree	address
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## indirect *boolean*

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action forward next-hop nh-ip indirect <i>boolean</i>
Tree	indirect

Default	false
Introduced	16.0.R1
Platforms	All

## nh-ip-vrf

Synopsis	Enable the <b>nh-ip-vrf</b> context
Context	<b>configure filter ip-filter string entry number action forward next-hop nh-ip-vrf</b>
Tree	<a href="#">nh-ip-vrf</a>
Notes	The following elements are part of a mandatory choice: <b>interface-name</b> , <b>nh-ip</b> , or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Platforms	All

## address string



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	<b>configure filter ip-filter string entry number action forward next-hop nh-ip-vrf address string</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure filter ip-filter string entry number action forward next-hop nh-ip-vrf indirect boolean</b>
Tree	<a href="#">indirect</a>
Default	false
Introduced	16.0.R1

Platforms All

### router-instance *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">next-hop</a> <a href="#">nh-ip-vrf</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### redirect-policy *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">redirect-policy</a> <i>reference</i>
Tree	<a href="#">redirect-policy</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">redirect-policy</a> <i>string</i>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### router-instance *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



Synopsis	Router name or VPRN service name
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry number</b> <i>action forward router-instance</i> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sap

Synopsis	Enable the <b>sap</b> context
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry number</b> <i>action forward sap</i>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sap-id reference

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry number</b> <i>action forward sap sap-id</i> <i>reference</i>
Tree	<a href="#">sap-id</a>
Reference	<b>configure service vpls</b> <i>string sap</i> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls reference

Synopsis	VPLS associated with the SAP
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry number</b> <i>action forward sap vpls</i> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls</b> <i>string</i>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## sdp

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward sdp</a>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## sdp-bind-id *string*

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward sdp sdp-bind-id</a> <i>string</i>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls *reference*

Synopsis	VPLS associated with the SDP
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">action forward sdp vpls</a> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service vpls</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## srte-policy

Synopsis	Enable the <b>srte-policy</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">srte-policy</a>
Tree	<a href="#">srte-policy</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	19.10.R1
Platforms	All

## color *number*

Synopsis	SR-TE policy color ID
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">srte-policy</a> <a href="#">color</a> <i>number</i>
Tree	<a href="#">color</a>
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

## endpoint *string*

Synopsis	SR-TE policy endpoint IPv4 address
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">srte-policy</a> <a href="#">endpoint</a> <i>string</i>
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

## srv6-policy

Synopsis	Enable the <b>srv6-policy</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">srv6-policy</a>
Tree	<a href="#">srv6-policy</a>

Description	Command in this context configure the redirection of packets to an active SRv6 policy.
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vpn-target</b> .
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **color number**

Synopsis	SRv6 policy color
Context	<b>configure filter ip-filter string entry number action forward srv6-policy color number</b>
Tree	<a href="#">color</a>
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **endpoint string**

Synopsis	SRv6 policy endpoint IPv6 address
Context	<b>configure filter ip-filter string entry number action forward srv6-policy endpoint string</b>
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **service-sid string**

Synopsis	SRv6 service segment identifier
Context	<b>configure filter ip-filter string entry number action forward srv6-policy service-sid string</b>
Tree	<a href="#">service-sid</a>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

## vprn-target

Synopsis	Enable the <b>vprn-target</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">vprn-target</a>
Tree	<a href="#">vprn-target</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## adv-prefix *string*

Synopsis	Advertised IP prefix for target destination
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">vprn-target</a> <a href="#">adv-prefix</a> <i>string</i>
Tree	<a href="#">adv-prefix</a>
Introduced	16.0.R1
Platforms	All

## bgp-nh *string*

Synopsis	Target BGP next hop IP address
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">vprn-target</a> <a href="#">bgp-nh</a> <i>string</i>
Tree	<a href="#">bgp-nh</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## lsp *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">vprn-target</a> <a href="#">lsp</a> <i>string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Introduced	16.0.R1

Platforms All

### **vprn** *reference*

Synopsis Routing context used for route lookup

Context **configure** [filter ip-filter](#) *string* [entry number](#) [action forward](#) [vprn-target](#) [vprn](#) *reference*

Tree [vprn](#)

Reference **configure** [service vprn](#) *string*

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

### **gtp-local-breakout**

Synopsis Break out matching traffic locally from a GTP tunnel for GTP-subscriber-hosts, or forward for other entities

Context **configure** [filter ip-filter](#) *string* [entry number](#) [action gtp-local-breakout](#)

Tree [gtp-local-breakout](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect**

Synopsis Enable the **http-redirect** context

Context **configure** [filter ip-filter](#) *string* [entry number](#) [action http-redirect](#)

Tree [http-redirect](#)

Description Commands in this context configure the filter entry action for HTTP redirection.

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **gtp-local-breakout**, **http-redirect**, **ignore-match**, **nat**, **reassemble**, or **tcp-mss-adjust**.

Introduced 16.0.R1

Platforms All

**allow-override** *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action http-redirect allow-override <i>boolean</i>
Tree	allow-override
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry. When configured to <b>true</b> , the RADIUS VSA can override the HTTP redirect URL. When configured to <b>false</b> , the HTTP redirect URL is not overridden. This does not apply if the CPF option is specified for the URL.
Default	false
Introduced	16.0.R1
Platforms	All

**url** (*keyword* | *http-redirect-url*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action http-redirect url ( <i>keyword</i>   <i>http-redirect-url</i> )
Tree	url
Description	This command specifies the URL to use for HTTP redirection for this filter entry. A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only. The following macro substitutions may be used: \$URL — request-URI in the HTTP GET request received \$MAC — a string that represents the MAC address of the subscriber host \$IP — a string that represents the IP address of the subscriber host \$SUB — a string that represents the subscriber ID \$SAP — a string that represents a SAP ID \$SAPDESC — description string configured on the SAP \$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format) \$RID — a string that represents the remote ID of the subscriber host

	(hexadecimal format)
String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## ignore-match

Synopsis	Ignore match criteria for the entry
Context	<b>configure filter ip-filter</b> <i>string entry number action ignore-match</i>
Tree	<a href="#">ignore-match</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

## l2-aware-nat-bypass *boolean*

Synopsis	Divert traffic from an L2-Aware NAT subscriber
Context	<b>configure filter ip-filter</b> <i>string entry number action l2-aware-nat-bypass boolean</i>
Tree	<a href="#">l2-aware-nat-bypass</a>
Description	<p>When configured to <b>true</b>, the filter action selectively diverts traffic from a L2-Aware NAT subscriber away from NAT. This action is only applicable to L2-Aware NAT subscribers and must be configured together with action <b>accept</b>. Traffic identified in the match condition bypasses L2-Aware NAT. An example is to bypass NAT for on-net destinations (within the customer network).</p> <p>For selective NAT bypass to take effect, in addition to IP filter configuration, the L2-Aware NAT subscriber must be specifically enabled for selective bypass via the <b>allow-bypass</b> configuration option in the <b>configure subscriber-mgmt sub-profile nat allow-bypass</b> context.</p> <p>When configured to <b>false</b>, traffic that is not classified for bypass automatically diverts to L2-Aware NAT, unless it is explicitly configured in the IP filter action to be dropped.</p>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## nat

Synopsis	Enable the <b>nat</b> context
Context	<b>configure</b> filter ip-filter string entry number action nat
Tree	nat
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat-policy reference

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name when action is NAT
Context	<b>configure</b> filter ip-filter string entry number action nat nat-policy reference
Tree	nat-policy
Reference	<b>configure</b> service nat nat-policy string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rate-limit

Synopsis	Enable the <b>rate-limit</b> context
Context	<b>configure</b> filter ip-filter string entry number action rate-limit
Tree	rate-limit
Introduced	16.0.R1
Platforms	All

## extracted-traffic

Synopsis	Limit the rate of traffic extracted to the CPM
Context	<b>configure</b> filter ip-filter string entry number action rate-limit extracted-traffic
Tree	extracted-traffic
Introduced	22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mbs** (*number* | *keyword*)

Synopsis Maximum burst size

Context **configure filter ip-filter string entry number action rate-limit mbs** (*number* | *keyword*)

Tree [mbs](#)

Range 0 to 268435456

Units bytes

Options auto

Default auto

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-length**

Synopsis Enable the **packet-length** context

Context **configure filter ip-filter string entry number action rate-limit packet-length**

Tree [packet-length](#)

Notes The following elements are part of a choice: **packet-length** or **ttl**.

Introduced 16.0.R1

Platforms All

### **eq** *number*

Synopsis Exact match criterion for the length

Context **configure filter ip-filter string entry number action rate-limit packet-length eq number**

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

**gt number**

Synopsis	Greater than match criterion for the length
Context	<b>configure filter ip-filter string entry number action rate-limit packet-length gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: <b>eq, gt, lt, or range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than match criterion for the length
Context	<b>configure filter ip-filter string entry number action rate-limit packet-length lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq, gt, lt, or range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number action rate-limit packet-length range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a mandatory choice: <b>eq, gt, lt, or range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the length range
Context	<b>configure filter ip-filter string entry number action rate-limit packet-length range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the length range
Context	<b>configure</b> filter ip-filter string entry number action rate-limit packet-length range start number
Tree	start
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**pattern**

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure</b> filter ip-filter string entry number action rate-limit pattern
Tree	pattern
Introduced	16.0.R4
Platforms	All

**expression string**

Synopsis	Pattern expression to match
Context	<b>configure</b> filter ip-filter string entry number action rate-limit pattern expression string
Tree	expression
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**mask** *string*

Synopsis	Mask for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">pattern</a> <b>mask</b> <i>string</i>
Tree	<a href="#">mask</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**offset-type** *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">pattern</a> <b>offset-type</b> <i>keyword</i>
Tree	<a href="#">offset-type</a>
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**offset-value** *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">pattern</a> <b>offset-value</b> <i>number</i>
Tree	<a href="#">offset-value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Peak information rate
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>

Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: <b>pir</b> or <b>pps-pir</b> .
Introduced	16.0.R1
Platforms	All

### **pps-pir** (*number* | *keyword*)

Synopsis	Peak information rate
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action rate-limit pps-pir ( <i>number</i>   <i>keyword</i> )
Tree	pps-pir
Range	0 to 1000000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: <b>pir</b> or <b>pps-pir</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ttl**

Synopsis	Enable the <b>ttl</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action rate-limit ttl
Tree	ttl
Notes	The following elements are part of a choice: <b>packet-length</b> or <b>ttl</b> .
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Equal to condition match value
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action rate-limit ttl eq <i>number</i>
Tree	eq
Range	0 to 255

Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than condition match value
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>tll</b> <b>gt</b> <i>number</i>
Tree	<b>gt</b>
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Less than condition match value
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>tll</b> <b>lt</b> <i>number</i>
Tree	<b>lt</b>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>rate-limit</b> <b>tll</b> <b>range</b>
Tree	<b>range</b>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ip-filter string entry number action rate-limit ttl range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the range
Context	<b>configure filter ip-filter string entry number action rate-limit ttl range start number</b>
Tree	<b>start</b>
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**reassemble**

Synopsis	Forward matching packets to reassembly function
Context	<b>configure filter ip-filter string entry number action reassemble</b>
Tree	<b>reassemble</b>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>gtp-local-breakout</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , <b>reassemble</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remark**

Synopsis	Enable the <b>remark</b> context
Context	<b>configure filter ip-filter string entry number action remark</b>
Tree	<b>remark</b>



Introduced	16.0.R1
Platforms	All

### **dscp keyword**

Synopsis	Destination SAP
Context	<b>configure filter ip-filter</b> <i>string entry number action remark dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **secondary**

Synopsis	Enable the <b>secondary</b> context
Context	<b>configure filter ip-filter</b> <i>string entry number action secondary</i>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

### **forward**

Synopsis	Enter the <b>forward</b> context
Context	<b>configure filter ip-filter</b> <i>string entry number action secondary forward</i>
Tree	<a href="#">forward</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## next-hop

Synopsis	Enable the <b>next-hop</b> context
Context	<b>configure filter ip-filter string entry number action secondary forward next-hop</b>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## nh-ip-vrf

Synopsis	Enable the <b>nh-ip-vrf</b> context
Context	<b>configure filter ip-filter string entry number action secondary forward next-hop nh-ip-vrf</b>
Tree	<a href="#">nh-ip-vrf</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## address string

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 address of next hop to forward matching packets
Context	<b>configure filter ip-filter string entry number action secondary forward next-hop nh-ip-vrf address string</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure filter ip-filter string entry number action secondary forward next-hop nh-ip-vrf indirect boolean</b>

Tree	<a href="#">indirect</a>
Default	false
Introduced	16.0.R1
Platforms	All

### router-instance *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">next-hop</a> <a href="#">nh-ip-vrf</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### sap

Synopsis	Enable the <b>sap</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sap</a>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### sap-id *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sap</a> <a href="#">sap-id</a> <i>reference</i>

Tree	<a href="#">sap-id</a>
Reference	<b>configure</b> <a href="#">service vpls string sap string</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### vpls reference

Synopsis	VPLS the sdp-bind-id belongs to
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward sap vpls reference</a>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service vpls string</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### sdp

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward sdp</a>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### sdp-bind-id *string*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward sdp sdp-bind-id string</a>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vpls** *reference*

Synopsis	VPLS associated with the SDP
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward sdp vpls reference</a>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service vpls string</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vprn-target**

Synopsis	Enable the <b>vprn-target</b> context
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward vprn-target</a>
Tree	<a href="#">vprn-target</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	21.7.R1
Platforms	All

### **adv-prefix** *string*

Synopsis	Advertised IP prefix for the target destination
Context	<b>configure</b> <a href="#">filter ip-filter string entry number action secondary forward vprn-target adv-prefix string</a>
Tree	<a href="#">adv-prefix</a>
Introduced	21.7.R1
Platforms	All

### **bgp-nh** *string*

Synopsis	Target BGP next hop IP address
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Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action secondary forward vprn-target bgp-nh <i>string</i>
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

### lsp string

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action secondary forward vprn-target lsp <i>string</i>
Tree	lsp
String Length	1 to 64
Introduced	21.7.R1
Platforms	All

### vprn reference

Synopsis	Routing context used for route lookup
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action secondary forward vprn-target vprn <i>reference</i>
Tree	vprn
Reference	<b>configure</b> service vprn <i>string</i>
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

### remark

Synopsis	Enable the <b>remark</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> action secondary remark
Tree	remark
Introduced	16.0.R1
Platforms	All

**dscp keyword**

Synopsis	Destination SAP
Context	<b>configure filter ip-filter string entry number action secondary remark dscp keyword</b>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**tcp-mss-adjust**

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	<b>configure filter ip-filter string entry number action tcp-mss-adjust</b>
Tree	<b>tcp-mss-adjust</b>
Notes	The following elements are part of a mandatory choice: <b>accept, drop, forward, gtp-local-breakout, http-redirect, ignore-match, nat, reassemble, or tcp-mss-adjust.</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure filter ip-filter string entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**egress-pbr** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">egress-pbr</a> <i>keyword</i>
Tree	<a href="#">egress-pbr</a>
Options	true, true-with-l4lb
Introduced	16.0.R1
Platforms	All

**filter-sample** *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">filter-sample</a> <i>boolean</i>
Tree	<a href="#">filter-sample</a>
Default	false
Introduced	16.0.R1
Platforms	All

**interface-sample** *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd interface mode
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">interface-sample</a> <i>boolean</i>
Tree	<a href="#">interface-sample</a>
Default	true
Introduced	16.0.R1
Platforms	All

**log** *reference*

Synopsis	Log that is used for packets matching this entry
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry number</a> <a href="#">log</a> <i>reference</i>
Tree	<a href="#">log</a>
Reference	<b>configure</b> <a href="#">filter log</a> <i>number</i>



Introduced	16.0.R1
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure filter ip-filter</b> <i>string entry number match</i>
Tree	<a href="#">match</a>
Description	Commands in this context configure match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	16.0.R1
Platforms	All

## destination-class *number*

Synopsis	Destination class as a match criterion
Context	<b>configure filter ip-filter</b> <i>string entry number match destination-class number</i>
Tree	<a href="#">destination-class</a>
Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the <b>destination-class-lookup</b> command (under the <b>ingress</b> context for the service interface) to be enabled (set to <b>true</b> ).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

## dscp *keyword*

Synopsis	DSCP used as an IP filter match criterion
Context	<b>configure filter ip-filter</b> <i>string entry number match dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

## dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure filter ip-filter string entry number match dst-ip</b>
Tree	<a href="#">dst-ip</a>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	16.0.R1
Platforms	All

## address (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	IPv4 address used as the match criterion
Context	<b>configure filter ip-filter string entry number match dst-ip address (<i>ipv4-prefix-with-host-bits   ipv4-address</i>)</b>
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## ip-prefix-list *reference*

Synopsis	IPv4 address prefix list used as match criterion
Context	<b>configure filter ip-filter string entry number match dst-ip ip-prefix-list reference</b>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure filter match-list ip-prefix-list string</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## mask *string*

Synopsis	IPv4 address mask used as the match criterion
Context	<b>configure filter ip-filter string entry number match dst-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .

Introduced	16.0.R1
Platforms	All

## **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure filter ip-filter string entry number match dst-port</b>
Tree	<a href="#">dst-port</a>
Description	Commands in this context configure match criteria for the destination port.
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	All

## **eq number**

Synopsis	Exact value as the match criterion
Context	<b>configure filter ip-filter string entry number match dst-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **gt number**

Synopsis	Greater than value as the match criterion
Context	<b>configure filter ip-filter string entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Less than value as the match criterion
Context	<b>configure filter ip-filter string entry number match dst-port lt number</b>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ip-filter string entry number match dst-port port-list reference</b>
Tree	<b>port-list</b>
Reference	<b>configure filter match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number match dst-port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure filter ip-filter string entry number match dst-port range end number</b>
Tree	<b>end</b>
Range	1 to 65535

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the port range
Context	<b>configure filter ip-filter string entry number match dst-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**fragment keyword**

Synopsis	Match criterion for fragmented packets
Context	<b>configure filter ip-filter string entry number match fragment keyword</b>
Tree	<a href="#">fragment</a>
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

**icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure filter ip-filter string entry number match icmp</b>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	All

**code number**

Synopsis	ICMP code value to match
Context	<b>configure filter ip-filter string entry number match icmp code number</b>

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Tree	<a href="#">code</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	All

### **type** *number*

Synopsis	ICMP type value to match
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">icmp</a> <i>type</i> <i>number</i>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	All

### **ip**

Synopsis	Enter the <b>ip</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">ip</a>
Tree	<a href="#">ip</a>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	21.10.R1
Platforms	All

### **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IPv4 address used as the match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">ip</a> <a href="#">address</a> ( <i>ipv4-prefix-with-host-bits</i>   <i>ipv4-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

## **ip-prefix-list** *reference*

Synopsis	IPv4 address prefix list used as match criterion
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> match ip ip-prefix-list <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> filter match-list ip-prefix-list <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

## **mask** *string*

Synopsis	IPv4 address mask used as the match criterion
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> match ip mask <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

## **ip-option**

Synopsis	Enable the <b>ip-option</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> match ip-option
Tree	<a href="#">ip-option</a>
Introduced	16.0.R1
Platforms	All

## **mask** *number*

Synopsis	Mask that is ANDed with ip-option value in the packet header
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> match ip-option mask <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R1

Platforms All

### **type** *number*

Synopsis Specific IP option to match

Context **configure filter ip-filter** *string entry number match ip-option type number*

Tree [type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **multiple-option** *boolean*

Synopsis Match based on presence of multiple options in header

Context **configure filter ip-filter** *string entry number match multiple-option boolean*

Tree [multiple-option](#)

Introduced 16.0.R1

Platforms All

### **option-present** *boolean*

Synopsis Match on the presence of any IP option in the packet

Context **configure filter ip-filter** *string entry number match option-present boolean*

Tree [option-present](#)

Introduced 16.0.R1

Platforms All

### **packet-length**

Synopsis Enable the **packet-length** context

Context **configure filter ip-filter** *string entry number match packet-length*

Tree [packet-length](#)

Description Commands in this context specify the match criterion for the IPv4 packet length. The IPv4 packet length represents the total packet length which includes the IPv4 header and the payload.



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Introduced	19.5.R1
Platforms	All

### **eq** *number*

Synopsis	Exact match criterion for the length
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <b>packet-length</b> <b>eq</b> <i>number</i>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than match criterion for the length
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <b>packet-length</b> <b>gt</b> <i>number</i>
Tree	<b>gt</b>
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

### **lt** *number*

Synopsis	Less than match criterion for the length
Context	<b>configure</b> <b>filter</b> <b>ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <b>packet-length</b> <b>lt</b> <i>number</i>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number match packet-length range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

## end number

Synopsis	Upper bound of the length range
Context	<b>configure filter ip-filter string entry number match packet-length range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## start number

Synopsis	Lower bound of the length range
Context	<b>configure filter ip-filter string entry number match packet-length range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## port

Synopsis	Enter the <b>port</b> context
Context	<b>configure filter ip-filter string entry number match port</b>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).

Introduced	16.0.R1
Platforms	All

**eq number**

Synopsis	Exact value as the match criterion
Context	<b>configure filter ip-filter string entry number match port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than value as the match criterion
Context	<b>configure filter ip-filter string entry number match port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than value as the match criterion
Context	<b>configure filter ip-filter string entry number match port lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> match port port-list <i>reference</i>
Tree	port-list
Reference	<b>configure</b> filter match-list port-list <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> match port range
Tree	range
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end** *number*

Synopsis	Upper bound of the port range
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> match port range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start** *number*

Synopsis	Lower bound of the port range
Context	<b>configure</b> filter ip-filter <i>string</i> entry <i>number</i> match port range start <i>number</i>
Tree	start
Range	0 to 65534

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **protocol** (*number* | *keyword*)

Synopsis	IP protocol identifier as a match criterion
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match protocol</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>protocol</b>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>protocol</b> or <b>protocol-list</b> .
Introduced	16.0.R1
Platforms	All

### **protocol-list** *reference*

Synopsis	Name of the protocol list as a match criterion
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match protocol-list</b> <i>reference</i>
Tree	<b>protocol-list</b>
Reference	<b>configure filter match-list protocol-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>protocol</b> or <b>protocol-list</b> .
Introduced	20.7.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure filter ip-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match src-ip</b>
Tree	<b>src-ip</b>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IPv4 address used as the match criterion
Context	<b>configure filter ip-filter</b> <i>string entry number match src-ip address</i> ( <i>ipv4-prefix-with-host-bits</i>   <i>ipv4-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** *reference*

Synopsis	IPv4 address prefix list used as match criterion
Context	<b>configure filter ip-filter</b> <i>string entry number match src-ip ip-prefix-list reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure filter match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**mask** *string*

Synopsis	IPv4 address mask used as the match criterion
Context	<b>configure filter ip-filter</b> <i>string entry number match src-ip mask string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**src-mac**

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure filter ip-filter</b> <i>string entry number match src-mac</i>
Tree	<a href="#">src-mac</a>
Introduced	19.5.R1

Platforms All

### **address string**

Synopsis MAC address used as the match criterion  
 Context **configure filter ip-filter string entry number match src-mac address string**  
 Tree [address](#)  
 Notes This element is mandatory.  
 Introduced 19.5.R1  
 Platforms All

### **mask string**

Synopsis MAC address mask as the match criterion  
 Context **configure filter ip-filter string entry number match src-mac mask string**  
 Tree [mask](#)  
 Default ff:ff:ff:ff:ff:ff  
 Introduced 19.5.R1  
 Platforms All

### **src-port**

Synopsis Enter the **src-port** context  
 Context **configure filter ip-filter string entry number match src-port**  
 Tree [src-port](#)  
 Description Commands in this context configure match criteria for the source port.  
 Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).  
 Introduced 16.0.R1  
 Platforms All

### **eq number**

Synopsis Exact value as the match criterion  
 Context **configure filter ip-filter string entry number match src-port eq number**  
 Tree [eq](#)

Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than value as the match criterion
Context	<b>configure</b> <a href="#">filter ip-filter string entry number match src-port</a> <b>gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than value as the match criterion
Context	<b>configure</b> <a href="#">filter ip-filter string entry number match src-port</a> <b>lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure</b> <a href="#">filter ip-filter string entry number match src-port</a> <b>port-list reference</b>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">filter match-list port-list string</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All



## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string entry number match src-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the port range
Context	<b>configure filter ip-filter string entry number match src-port range end number</b>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the port range
Context	<b>configure filter ip-filter string entry number match src-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## src-route-option boolean

Synopsis	Match based on presence of source route option
Context	<b>configure filter ip-filter string entry number match src-route-option boolean</b>
Tree	<a href="#">src-route-option</a>
Introduced	16.0.R1

Platforms All

### **tcp-established**

Synopsis Match packets containing the TCP flag as ACK or RST

Context **configure filter ip-filter string entry number match tcp-established**

Tree [tcp-established](#)

Notes The following elements are part of a choice: **tcp-established** or **tcp-flags**.

Introduced 22.10.R1

Platforms All

### **tcp-flags**

Synopsis Enter the **tcp-flags** context

Context **configure filter ip-filter string entry number match tcp-flags**

Tree [tcp-flags](#)

Notes The following elements are part of a choice: **tcp-established** or **tcp-flags**.

Introduced 16.0.R1

Platforms All

### **ack boolean**

Synopsis Match TCP ACK as per value of the ACK TCP flag bit

Context **configure filter ip-filter string entry number match tcp-flags ack boolean**

Tree [ack](#)

Introduced 16.0.R1

Platforms All

### **cwr boolean**

Synopsis Match TCP CWR as per value of the CWR TCP flag bit

Context **configure filter ip-filter string entry number match tcp-flags cwr boolean**

Tree [cwr](#)

Introduced 16.0.R1

Platforms All

**ece boolean**

Synopsis	Match TCP ECE as per value of the ECE TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags ece boolean</b>
Tree	<a href="#">ece</a>
Introduced	16.0.R1
Platforms	All

**fin boolean**

Synopsis	Match TCP FIN as per value of the FIN TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags fin boolean</b>
Tree	<a href="#">fin</a>
Introduced	16.0.R1
Platforms	All

**ns boolean**

Synopsis	Match TCP NS as per value of the NS TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags ns boolean</b>
Tree	<a href="#">ns</a>
Introduced	16.0.R1
Platforms	All

**psh boolean**

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags psh boolean</b>
Tree	<a href="#">psh</a>
Introduced	16.0.R1
Platforms	All

**rst boolean**

Synopsis	Match TCP RST as per value of the RST TCP flag bit
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Context	<b>configure filter ip-filter string entry number match tcp-flags rst boolean</b>
Tree	<a href="#">rst</a>
Introduced	16.0.R1
Platforms	All

**syn boolean**

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags syn boolean</b>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	All

**urg boolean**

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	<b>configure filter ip-filter string entry number match tcp-flags urg boolean</b>
Tree	<a href="#">urg</a>
Introduced	16.0.R1
Platforms	All

**ttl**

Synopsis	Enable the <b>ttl</b> context
Context	<b>configure filter ip-filter string entry number match ttl</b>
Tree	<a href="#">ttl</a>
Introduced	21.10.R1
Platforms	All

**eq number**

Synopsis	Equal to condition match value
Context	<b>configure filter ip-filter string entry number match ttl eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 255

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Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than condition match value
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">ttl</a> <b>gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

### **lt** *number*

Synopsis	Less than condition match value
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">ttl</a> <b>lt</b> <i>number</i>
Tree	<a href="#">lt</a>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">ttl</a> <b>range</b>
Tree	<a href="#">range</a>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

**end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ip-filter string entry number match ttl range end number</b>
Tree	<a href="#">end</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

**start number**

Synopsis	Lower bound of the range
Context	<b>configure filter ip-filter string entry number match ttl range start number</b>
Tree	<a href="#">start</a>
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

**pbr-down-action-override keyword**

Synopsis	Action when PBR or PBF target for this entry is not available
Context	<b>configure filter ip-filter string entry number pbr-down-action-override keyword</b>
Tree	<a href="#">pbr-down-action-override</a>
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

**sample-profile reference**

Synopsis	Cflowd sample profile ID to match packets
Context	<b>configure filter ip-filter string entry number sample-profile reference</b>
Tree	<a href="#">sample-profile</a>

Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	<b>configure</b> <a href="#">cflowd sample-profile</a> <i>number</i>
Introduced	20.10.R1
Platforms	All

### **sticky-dest** (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>sticky-dest</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">sticky-dest</a>
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

### **filter-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP filter ID
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">filter-id</a> <i>number</i>
Tree	<a href="#">filter-id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **scope** *keyword*

Synopsis	Scope of the filter definition
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <a href="#">scope</a> <i>keyword</i>

Tree	<a href="#">scope</a>
Description	This command configures the filter policy scope. If the scope of the policy is <b>template</b> and is applied to one or more services or network interfaces, the scope cannot be changed.
Options	exclusive, template, embedded, system, cpm
Default	template
Introduced	16.0.R1
Platforms	All

### **shared-policer** *boolean*

Synopsis	Share policer among active ports in the LAG
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <b>shared-policer</b> <i>boolean</i>
Tree	<a href="#">shared-policer</a>
Description	When configured to <b>true</b> , and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP.  When configured to <b>false</b> , and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <b>subscriber-mgmt</b>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-specific-entry**

Synopsis	Enter the <b>host-specific-entry</b> context
Context	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i> <b>subscriber-mgmt</b> <b>host-specific-entry</b>
Tree	<a href="#">host-specific-entry</a>



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## credit-control

Synopsis	Enter the <b>credit-control</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control</b>
Tree	<a href="#">credit-control</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of range for credit control filter entries
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of range for credit control filter entries
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry credit-control range start number</b>
Tree	<a href="#">start</a>

Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter-rule

Synopsis	Enter the <b>filter-rule</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule</b>
Tree	<a href="#">filter-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of range for inserting filter rule entries
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of range for inserting filter rule entries
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Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry filter-rule range start number</b>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## watermark

Synopsis	Enter the <b>watermark</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry watermark</b>
Tree	<a href="#">watermark</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry watermark high number</b>
Tree	<a href="#">high</a>
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	<b>configure filter ip-filter string subscriber-mgmt host-specific-entry watermark low number</b>
Tree	<a href="#">low</a>
Range	0 to 100
Default	90
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## shared-entry

Synopsis Enter the **shared-entry** context  
Context **configure filter ip-filter string subscriber-mgmt shared-entry**  
Tree [shared-entry](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter-rule

Synopsis Enter the **filter-rule** context  
Context **configure filter ip-filter string subscriber-mgmt shared-entry filter-rule**  
Tree [filter-rule](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis Enable the **range** context  
Context **configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range**  
Tree [range](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis Upper bound of range for inserting shared host rules  
Context **configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range end number**  
Tree [end](#)  
Range 1 to 2097151  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	Lower bound of range for inserting shared host rules
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry filter-rule range start number</b>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pcc-rule**

Synopsis	Enter the <b>pcc-rule</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule</b>
Tree	<a href="#">pcc-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the range for PCC rule filter entries
Context	<b>configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis Lower bound of the range for PCC rule filter entries

Context **configure filter ip-filter string subscriber-mgmt shared-entry pcc-rule range start number**

Tree [start](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **watermark**

Synopsis Enable the **watermark** context

Context **configure filter ip-filter string subscriber-mgmt shared-entry watermark**

Tree [watermark](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high number**

Synopsis Limit of RADIUS shared filters before generating high watermark notification

Context **configure filter ip-filter string subscriber-mgmt shared-entry watermark high number**

Tree [high](#)

Range 1 to 8000

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis Limit of RADIUS or Diameter shared filters before clearing high watermark notification

Context **configure filter ip-filter string subscriber-mgmt shared-entry watermark low number**

Tree [low](#)

Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Set of match criteria for the filter policy
Context	<b>configure</b> filter ip-filter <i>string</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Options	normal, src-mac, packet-length, destination-class
Default	normal
Introduced	19.5.R1
Platforms	All

**ipv6-exception** [[filter-name](#)] *string*

Synopsis	Enter the <b>ipv6-exception</b> list instance
Context	<b>configure</b> filter ipv6-exception <i>string</i>
Tree	<a href="#">ipv6-exception</a>
Introduced	20.10.R1
Platforms	VSR

**[filter-name]** *string*

Synopsis	Filter name
Context	<b>configure</b> filter ipv6-exception <i>string</i>
Tree	<a href="#">ipv6-exception</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

**description string**

Synopsis	Text description
Context	<b>configure filter ipv6-exception string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR

**entry [entry-id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure filter ipv6-exception string entry number</b>
Tree	<a href="#">entry</a>
Introduced	20.10.R1
Platforms	VSR

**[entry-id] number**

Synopsis	ID for a match criteria and the corresponding action
Context	<b>configure filter ipv6-exception string entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	VSR

**description string**

Synopsis	Text description
Context	<b>configure filter ipv6-exception string entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	VSR



## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure filter ipv6-exception</b> <i>string entry number match</i>
Tree	<a href="#">match</a>
Introduced	20.10.R1
Platforms	VSR

## dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure filter ipv6-exception</b> <i>string entry number match dst-ip</i>
Tree	<a href="#">dst-ip</a>
Introduced	20.10.R1
Platforms	VSR

## address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	<b>configure filter ipv6-exception</b> <i>string entry number match dst-ip address</i> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR

## ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	<b>configure filter ipv6-exception</b> <i>string entry number match dst-ip ipv6-prefix-list reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure filter match-list ipv6-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR

### **mask string**

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure filter ipv6-exception string entry number match dst-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure filter ipv6-exception string entry number match dst-port</b>
Tree	<a href="#">dst-port</a>
Description	Commands in this context configure match criteria for the destination port.
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	20.10.R1
Platforms	VSR

### **eq number**

Synopsis	Exact value as the match criterion
Context	<b>configure filter ipv6-exception string entry number match dst-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **gt number**

Synopsis	Greater than value as the match criterion
Context	<b>configure filter ipv6-exception string entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534

Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **lt number**

Synopsis	Less than value as the match criterion
Context	<b>configure filter ipv6-exception string entry number match dst-port lt number</b>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ipv6-exception string entry number match dst-port port-list reference</b>
Tree	<b>port-list</b>
Reference	<b>configure filter match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-exception string entry number match dst-port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure filter ipv6-exception</b> <i>string entry number match dst-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

### **start number**

Synopsis	Lower bound of the port range
Context	<b>configure filter ipv6-exception</b> <i>string entry number match dst-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

### **icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure filter ipv6-exception</b> <i>string entry number match icmp</i>
Tree	<a href="#">icmp</a>
Introduced	20.10.R1
Platforms	VSR

### **code number**

Synopsis	ICMPv6 code value to match
Context	<b>configure filter ipv6-exception</b> <i>string entry number match icmp code number</i>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	20.10.R1

Platforms VSR

### **type** *number*

Synopsis ICMPv6 type value to match  
 Context **configure filter ipv6-exception** *string entry number match icmp type number*  
 Tree [type](#)  
 Range 0 to 255  
 Introduced 20.10.R1  
 Platforms VSR

### **next-header** (*number* | *keyword*)

Synopsis IP protocol to match  
 Context **configure filter ipv6-exception** *string entry number match next-header* (*number* | *keyword*)  
 Tree [next-header](#)  
 Range 0 to 255  
 Options tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp  
 Introduced 20.10.R1  
 Platforms VSR

### **port**

Synopsis Enter the **port** context  
 Context **configure filter ipv6-exception** *string entry number match port*  
 Tree [port](#)  
 Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).  
 Introduced 20.10.R1  
 Platforms VSR

### **eq** *number*

Synopsis Exact value as the match criterion

Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port eq</b> <i>number</i>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **gt** *number*

Synopsis	Greater than value as the match criterion
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port gt</b> <i>number</i>
Tree	<b>gt</b>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **lt** *number*

Synopsis	Less than value as the match criterion
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port lt</b> <i>number</i>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port port-list</b> <i>reference</i>
Tree	<b>port-list</b>
Reference	<b>configure filter match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .

Introduced	20.10.R1
Platforms	VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-exception</b> <i>string entry number match port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

## end number

Synopsis	Upper bound of the port range
Context	<b>configure filter ipv6-exception</b> <i>string entry number match port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

## start number

Synopsis	Lower bound of the port range
Context	<b>configure filter ipv6-exception</b> <i>string entry number match port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

## src-ip

Synopsis	Enter the <b>src-ip</b> context
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Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match src-ip</b>
Tree	<a href="#">src-ip</a>
Introduced	20.10.R1
Platforms	VSR

### **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match src-ip</b> <b>address</b> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR

### **ipv6-prefix-list** *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match src-ip</b> <b>ipv6-prefix-list</b> <i>reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure filter match-list</b> <b>ipv6-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR

### **mask** *string*

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure filter ipv6-exception</b> <i>string</i> <b>entry</b> <i>number</i> <b>match src-ip</b> <b>mask</b> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.10.R1
Platforms	VSR



## src-port

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure filter ipv6-exception string entry number match src-port</b>
Tree	<a href="#">src-port</a>
Description	Commands in this context configure match criteria for the source port.
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	20.10.R1
Platforms	VSR

## eq number

Synopsis	Exact value as the match criterion
Context	<b>configure filter ipv6-exception string entry number match src-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

## gt number

Synopsis	Greater than value as the match criterion
Context	<b>configure filter ipv6-exception string entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

## lt number

Synopsis	Less than value as the match criterion
Context	<b>configure filter ipv6-exception string entry number match src-port lt number</b>
Tree	<a href="#">lt</a>

Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-exception</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>port-list</b> <i>reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-exception</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	VSR

### **end** *number*

Synopsis	Upper bound of the port range
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-exception</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

**start number**

Synopsis	Lower bound of the port range
Context	<b>configure filter ipv6-exception</b> <i>string entry number match src-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	VSR

**filter-id number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Filter ID
Context	<b>configure filter ipv6-exception</b> <i>string filter-id number</i>
Tree	<a href="#">filter-id</a>
Range	1 to 65535
Introduced	20.10.R1
Platforms	VSR

**ipv6-filter** [[filter-name](#)] *string*

Synopsis	Enter the <b>ipv6-filter</b> list instance
Context	<b>configure filter ipv6-filter</b> <i>string</i>
Tree	<a href="#">ipv6-filter</a>
Introduced	16.0.R1
Platforms	All

**[filter-name]** *string*

Synopsis	Filter name
Context	<b>configure filter ipv6-filter</b> <i>string</i>
Tree	<a href="#">ipv6-filter</a>
String Length	1 to 64

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **chain-to-system-filter** *boolean*

Synopsis	Chain filter policy to the active IPvX system filter policy
Context	<b>configure filter ipv6-filter</b> <i>string chain-to-system-filter boolean</i>
Tree	<a href="#">chain-to-system-filter</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **default-action** *keyword*

Synopsis	Action for packets that do not match any entry
Context	<b>configure filter ipv6-filter</b> <i>string default-action keyword</i>
Tree	<a href="#">default-action</a>
Options	drop, accept
Default	drop
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure filter ipv6-filter</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **embed**

Synopsis	Enter the <b>embed</b> context
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Context	<b>configure filter ipv6-filter string embed</b>
Tree	<b>embed</b>
Description	Commands in this context embed a previously defined IPv6 embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

### **filter [name] reference offset number**

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure filter ipv6-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	All

### **[name] reference**

Synopsis	IPv6 policy to be embedded in the filter
Context	<b>configure filter ipv6-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Reference	<b>configure filter ipv6-filter string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **offset number**

Synopsis	Offset of the inserted entries
Context	<b>configure filter ipv6-filter string embed filter reference offset number</b>
Tree	<b>filter</b>
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** **filter** **ipv6-filter** *string* **embed** **filter** *reference* **offset** *number* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **flowspec** **offset** *number*

Synopsis Enter the **flowspec** list instance

Context **configure** **filter** **ipv6-filter** *string* **embed** **flowspec** **offset** *number*

Tree [flowspec](#)

Introduced 16.0.R1

Platforms All

### **offset** *number*

Synopsis Offset of the inserted entries

Context **configure** **filter** **ipv6-filter** *string* **embed** **flowspec** **offset** *number*

Tree [flowspec](#)

Range 0 to 2097151

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the embedded filter

Context **configure** **filter** **ipv6-filter** *string* **embed** **flowspec** **offset** *number* **admin-state** *keyword*

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **group** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface group ID for an external configured set of flowspec rules
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">embed</a> <a href="#">flowspec</a> <a href="#">offset</a> <i>number</i> <a href="#">group</a> <i>number</i>
Tree	<a href="#">group</a>
Range	0 to 16383
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual router for an external configured set of flowspec rules
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">embed</a> <a href="#">flowspec</a> <a href="#">offset</a> <i>number</i> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **openflow** [[of-switch](#)] *reference* [offset](#) *number*

Synopsis	Enter the <b>openflow</b> list instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">embed</a> <a href="#">openflow</a> <i>reference</i> <a href="#">offset</a> <i>number</i>
Tree	<a href="#">openflow</a>

Introduced	16.0.R4
Platforms	All

**[of-switch] reference**

Synopsis	Referenced Hybrid OpenFlow Switch (OFS) name
Context	<b>configure filter ipv6-filter string embed openflow reference offset number</b>
Tree	<a href="#">openflow</a>
Reference	<b>configure openflow of-switch string</b>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**offset number**

Synopsis	Offset of the inserted entries
Context	<b>configure filter ipv6-filter string embed openflow reference offset number</b>
Tree	<a href="#">openflow</a>
Range	0 to 2097150
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the embedded filter
Context	<b>configure filter ipv6-filter string embed openflow reference offset number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All



## grt

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Global routing context
Context	<b>configure filter ipv6-filter string embed openflow reference offset number grt</b>
Tree	<a href="#">grt</a>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>
Introduced	16.0.R4
Platforms	All

## sap reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP context
Context	<b>configure filter ipv6-filter string embed openflow reference offset number sap reference</b>
Tree	<a href="#">sap</a>
Reference	<b>configure service vpls string sap string</b>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>
Introduced	16.0.R4
Platforms	All

## system

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	System context
Context	<b>configure filter ipv6-filter string embed openflow reference offset number system</b>
Tree	<a href="#">system</a>
Notes	The following elements are part of a choice: <b>grt, system, (sap and vpls), or vprn.</b>
Introduced	16.0.R4

Platforms All

## vpls reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPLS context

Context **configure** filter ipv6-filter string embed openflow reference offset number vpls reference

Tree vpls

Reference **configure** service vpls string

Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.

Introduced 16.0.R4

Platforms All

## vprn reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis VPRN context

Context **configure** filter ipv6-filter string embed openflow reference offset number vprn reference

Tree vprn

Reference **configure** service vprn string

Notes The following elements are part of a choice: **grt**, **system**, (**sap** and **vpls**), or **vprn**.

Introduced 16.0.R4

Platforms All

## entry [entry-id] number

Synopsis Enter the **entry** list instance

Context **configure** filter ipv6-filter string entry number

Tree entry

Introduced 16.0.R1

Platforms All

### [entry-id] *number*

Synopsis ID for a match criteria and the corresponding action

Context **configure filter ipv6-filter** *string entry number*

Tree [entry](#)

Range 1 to 2097151

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### action

Synopsis Enable the **action** context

Context **configure filter ipv6-filter** *string entry number action*

Tree [action](#)

Introduced 16.0.R1

Platforms All

### accept

Synopsis Accept regular routing to forward a matching packet

Context **configure filter ipv6-filter** *string entry number action accept*

Tree [accept](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, **ignore-match**, **nat**, or **tcp-mss-adjust**.

Introduced 16.0.R1

Platforms All

### accept-when

Synopsis Enable the **accept-when** context

Context **configure filter ipv6-filter** *string entry number action accept-when*

Tree [accept-when](#)

Introduced	19.5.R1
Platforms	All

## **pattern**

Synopsis	Enable the <b>pattern</b> context
Context	<b>configure filter ipv6-filter string entry number action accept-when pattern</b>
Tree	<a href="#">pattern</a>
Introduced	19.5.R1
Platforms	All

## **expression string**

Synopsis	Pattern expression to match
Context	<b>configure filter ipv6-filter string entry number action accept-when pattern expression string</b>
Tree	<a href="#">expression</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## **mask string**

Synopsis	Mask for the pattern expression
Context	<b>configure filter ipv6-filter string entry number action accept-when pattern mask string</b>
Tree	<a href="#">mask</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## **offset-type keyword**

Synopsis	Starting point reference for offset value of pattern
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Context	<b>configure</b> filter ipv6-filter string entry number action accept-when pattern offset-type keyword
Tree	offset-type
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### offset-value number

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> filter ipv6-filter string entry number action accept-when pattern offset-value number
Tree	offset-value
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### drop

Synopsis	Drop a packet matching this entry
Context	<b>configure</b> filter ipv6-filter string entry number action drop
Tree	drop
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

### drop-when

Synopsis	Enable the <b>drop-when</b> context
Context	<b>configure</b> filter ipv6-filter string entry number action drop-when
Tree	drop-when
Introduced	16.0.R1

Platforms All

### extracted-traffic

Synopsis Drop traffic extracted to CPM  
 Context **configure filter ipv6-filter string entry number action drop-when extracted-traffic**  
 Tree [extracted-traffic](#)  
 Introduced 16.0.R1  
 Platforms All

### hop-limit

Synopsis Enable the **hop-limit** context  
 Context **configure filter ipv6-filter string entry number action drop-when hop-limit**  
 Tree [hop-limit](#)  
 Notes The following elements are part of a choice: **hop-limit** or **payload-length**.  
 Introduced 16.0.R1  
 Platforms All

### eq number

Synopsis Equal to condition match value  
 Context **configure filter ipv6-filter string entry number action drop-when hop-limit eq number**  
 Tree [eq](#)  
 Range 0 to 255  
 Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### gt number

Synopsis Greater than condition match value  
 Context **configure filter ipv6-filter string entry number action drop-when hop-limit gt number**  
 Tree [gt](#)  
 Range 0 to 254

Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than condition match value
Context	<b>configure filter ipv6-filter string entry number action drop-when hop-limit lt number</b>
Tree	<b>lt</b>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number action drop-when hop-limit range</b>
Tree	<b>range</b>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ipv6-filter string entry number action drop-when hop-limit range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **start number**

Synopsis Lower bound of the range

Context **configure filter ipv6-filter string entry number action drop-when hop-limit range start number**

Tree [start](#)

Range 0 to 254

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **pattern**

Synopsis Enable the **pattern** context

Context **configure filter ipv6-filter string entry number action drop-when pattern**

Tree [pattern](#)

Introduced 16.0.R4

Platforms All

### **expression string**

Synopsis Pattern expression to match

Context **configure filter ipv6-filter string entry number action drop-when pattern expression string**

Tree [expression](#)

String Length 3 to 18

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

### **mask string**

Synopsis Mask for the pattern expression

Context **configure filter ipv6-filter string entry number action drop-when pattern mask string**



Tree	<a href="#">mask</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **offset-type** *keyword*

Synopsis	Starting point reference for offset value of pattern
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <a href="#">offset-type</a> <a href="#">keyword</a>
Tree	<a href="#">offset-type</a>
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **offset-value** *number*

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">pattern</a> <a href="#">offset-value</a> <a href="#">number</a>
Tree	<a href="#">offset-value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **payload-length**

Synopsis	Enable the <b>payload-length</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">action</a> <a href="#">drop-when</a> <a href="#">payload-length</a>
Tree	<a href="#">payload-length</a>
Notes	The following elements are part of a choice: <b>hop-limit</b> or <b>payload-length</b> .
Introduced	16.0.R1

Platforms All

### **eq** *number*

Synopsis Exact match criterion for the length

Context **configure** filter ipv6-filter *string* entry *number* action drop-when payload-length eq *number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

### **gt** *number*

Synopsis Greater than match criterion for the length

Context **configure** filter ipv6-filter *string* entry *number* action drop-when payload-length gt *number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

### **lt** *number*

Synopsis Less than match criterion for the length

Context **configure** filter ipv6-filter *string* entry *number* action drop-when payload-length lt *number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action drop-when payload-length range</b>
Tree	<b>range</b>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the length range
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action drop-when payload-length range end number</b>
Tree	<b>end</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the length range
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action drop-when payload-length range start number</b>
Tree	<b>start</b>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## fc keyword

Synopsis	Class name to be forwarded for matching packets
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action fc keyword</b>
Tree	<b>fc</b>

Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

## forward

Synopsis	Enter the <b>forward</b> context
Context	<b>configure filter ipv6-filter string entry number action forward</b>
Tree	<a href="#">forward</a>
Notes	The following elements are part of a mandatory choice: <b>accept, drop, forward, http-redirect, ignore-match, nat, or tcp-mss-adjust.</b>
Introduced	16.0.R1
Platforms	All

## bonding-connection *number*

Synopsis	Connection ID over which packet is forwarded
Context	<b>configure filter ipv6-filter string entry number action forward bonding-connection number</b>
Tree	<a href="#">bonding-connection</a>
Range	1 to 2
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, srv6-policy, or vprn-target.</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esi-l2

Synopsis	Enable the <b>esi-l2</b> context
Context	<b>configure filter ipv6-filter string entry number action forward esi-l2</b>
Tree	<a href="#">esi-l2</a>
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, srv6-policy, or vprn-target.</b>
Introduced	16.0.R1

Platforms All

### **esi-value** *string*

Synopsis ESI of the first ESI-identified appliance

Context **configure** [filter ipv6-filter](#) *string* [entry number](#) [action forward esi-l2](#) *esi-value* *string*

Tree [esi-value](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **vpls** *reference*

Synopsis VPLS service name

Context **configure** [filter ipv6-filter](#) *string* [entry number](#) [action forward esi-l2](#) *vpls* *reference*

Tree [vpls](#)

Reference **configure** [service vpls](#) *string*

Notes This element is mandatory.

Introduced 16.0.R3

Platforms All

### **esi-l3**

Synopsis Enable the **esi-l3** context

Context **configure** [filter ipv6-filter](#) *string* [entry number](#) [action forward esi-l3](#)

Tree [esi-l3](#)

Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vpn-target**.

Introduced 16.0.R1

Platforms All

**esi-value** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ESI of the first ESI-identified appliance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">esi-l3</a> <a href="#">esi-value</a> <i>string</i>
Tree	<a href="#">esi-value</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**sf-ip** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the service function to forward traffic
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">esi-l3</a> <a href="#">sf-ip</a> <i>string</i>
Tree	<a href="#">sf-ip</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**vas-interface** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress R-VPLS IP interface name
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">esi-l3</a> <a href="#">vas-interface</a> <i>reference</i>
Tree	<a href="#">vas-interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

### **vprn** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN service name
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">esi-l3</a> <a href="#">vprn</a> <i>reference</i>
Tree	<a href="#">vprn</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **gre-tunnel** *reference*

Synopsis	GRE tunnel template ID that sets the location where an encapsulated matching packet is transported
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">gre-tunnel</a> <i>reference</i>
Tree	<a href="#">gre-tunnel</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">gre-tunnel-template</a> <i>string</i>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **lsp** *string*

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">lsp</a> <i>string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64

Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## mpls-policy

Synopsis	Enable the <b>mpls-policy</b> context
Context	<b>configure filter ipv6-filter string entry number action forward mpls-policy</b>
Tree	<a href="#">mpls-policy</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	19.10.R1
Platforms	All

## endpoint *string*

Synopsis	MPLS forwarding policy endpoint IPv6 address
Context	<b>configure filter ipv6-filter string entry number action forward mpls-policy endpoint string</b>
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

## next-hop

Synopsis	Enable the <b>next-hop</b> context
Context	<b>configure filter ipv6-filter string entry number action forward next-hop</b>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All



## nh-ip

Synopsis	Enable the <b>nh-ip</b> context
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip</b>
Tree	<a href="#">nh-ip</a>
Notes	The following elements are part of a mandatory choice: <b>nh-ip</b> or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Platforms	All

## address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip address string</b>
Tree	<a href="#">address</a>
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip indirect boolean</b>
Tree	<a href="#">indirect</a>
Default	false
Introduced	16.0.R1
Platforms	All

## nh-ip-vrf

Synopsis	Enable the <b>nh-ip-vrf</b> context
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf</b>
Tree	<a href="#">nh-ip-vrf</a>

Notes	The following elements are part of a mandatory choice: <b>nh-ip</b> or <b>nh-ip-vrf</b> .
Introduced	16.0.R1
Platforms	All

### **address string**

Synopsis	IPv6 address of next hop to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf address string</b>
Tree	<a href="#">address</a>
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **indirect boolean**

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf indirect boolean</b>
Tree	<a href="#">indirect</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **router-instance string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	<b>configure filter ipv6-filter string entry number action forward next-hop nh-ip-vrf router-instance string</b>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

### **redirect-policy** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop or forward next hop router that forwards a packet that matches this entry
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward</b> <b>redirect-policy</b> <i>reference</i>
Tree	<b>redirect-policy</b>
Reference	<b>configure filter</b> <b>redirect-policy</b> <i>string</i>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward</b> <b>router-instance</b> <i>string</i>
Tree	<b>router-instance</b>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **sap**

Synopsis	Enable the <b>sap</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action forward</b> <b>sap</b>

Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **sap-id** *reference*

Synopsis	VPLS Ethernet SAP ID used to forward matching packets
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sap</a> <a href="#">sap-id</a> <i>reference</i>
Tree	<a href="#">sap-id</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vpls** *reference*

Synopsis	VPLS associated with the SAP
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sap</a> <a href="#">vpls</a> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sdp**

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">sdp</a>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>bonding-connection</b> , <b>esi-l2</b> , <b>esi-l3</b> , <b>gre-tunnel</b> , <b>lsp</b> , <b>mpls-policy</b> , <b>next-hop</b> , <b>redirect-policy</b> , <b>router-instance</b> , <b>sap</b> , <b>sdp</b> , <b>srte-policy</b> , <b>srv6-policy</b> , or <b>vprn-target</b> .
Introduced	16.0.R1

Platforms All

### **sdp-bind-id** *string*

Synopsis VPLS SDP bind ID used to forward matching packets

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [forward](#) [sdp](#) [sdp-bind-id](#) *string*

Tree [sdp-bind-id](#)

String Length 3 to 16

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **vpls** *reference*

Synopsis VPLS associated with the SDP

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [forward](#) [sdp](#) [vpls](#) *reference*

Tree [vpls](#)

Reference **configure** [service](#) [vpls](#) *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **srte-policy**

Synopsis Enable the **srte-policy** context

Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [forward](#) [srte-policy](#)

Tree [srte-policy](#)

Notes The following elements are part of a choice: **bonding-connection**, **esi-l2**, **esi-l3**, **gre-tunnel**, **lsp**, **mpls-policy**, **next-hop**, **redirect-policy**, **router-instance**, **sap**, **sdp**, **srte-policy**, **srv6-policy**, or **vprn-target**.

Introduced 19.10.R1

Platforms All

**color number**

Synopsis	SR-TE policy color ID
Context	<b>configure filter ipv6-filter string entry number action forward srte-policy color number</b>
Tree	<a href="#">color</a>
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**endpoint string**

Synopsis	SR-TE policy endpoint IPv6 address
Context	<b>configure filter ipv6-filter string entry number action forward srte-policy endpoint string</b>
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**srv6-policy**

Synopsis	Enable the <b>srv6-policy</b> context
Context	<b>configure filter ipv6-filter string entry number action forward srv6-policy</b>
Tree	<a href="#">srv6-policy</a>
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, srv6-policy, or vprn-target.</b>
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**color number**

Synopsis	SRv6 policy color
Context	<b>configure filter ipv6-filter string entry number action forward srv6-policy color number</b>
Tree	<a href="#">color</a>
Range	0 to 4294967295

Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **endpoint string**

Synopsis	SRv6 policy endpoint IPv6 address
Context	<b>configure filter ipv6-filter string entry number action forward srv6-policy endpoint string</b>
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **service-sid string**

Synopsis	SRv6 service segment identifier
Context	<b>configure filter ipv6-filter string entry number action forward srv6-policy service-sid string</b>
Tree	<a href="#">service-sid</a>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **vprn-target**

Synopsis	Enable the <b>vprn-target</b> context
Context	<b>configure filter ipv6-filter string entry number action forward vprn-target</b>
Tree	<a href="#">vprn-target</a>
Notes	The following elements are part of a choice: <b>bonding-connection, esi-l2, esi-l3, gre-tunnel, lsp, mpls-policy, next-hop, redirect-policy, router-instance, sap, sdp, srte-policy, srv6-policy, or vprn-target.</b>
Introduced	16.0.R1
Platforms	All

**adv-prefix string**

Synopsis	Advertised IP prefix for target destination
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">vprn-target</a> <a href="#">adv-prefix</a> <i>string</i>
Tree	<a href="#">adv-prefix</a>
Introduced	16.0.R1
Platforms	All

**bgp-nh string**

Synopsis	Target BGP next hop IP address
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">vprn-target</a> <a href="#">bgp-nh</a> <i>string</i>
Tree	<a href="#">bgp-nh</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**lsp string**

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">vprn-target</a> <a href="#">lsp</a> <i>string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**vprn reference**

Synopsis	Routing context used for route lookup
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a> <a href="#">vprn-target</a> <a href="#">vprn</a> <i>reference</i>
Tree	<a href="#">vprn</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All



## http-redirect

Synopsis	Enable the <b>http-redirect</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <a href="#">http-redirect</a>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context configure the filter entry action for HTTP redirection.
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

## allow-override *boolean*

Synopsis	Override the HTTP redirect URL by a RADIUS VSA
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <a href="#">http-redirect</a> <b>allow-override</b> <i>boolean</i>
Tree	<a href="#">allow-override</a>
Description	This command specifies whether the RADIUS VSA can override the configured HTTP redirect URL for this filter entry.  When configured to <b>true</b> , the RADIUS VSA can override the HTTP redirect URL.  When configured to <b>false</b> , the HTTP redirect URL is not overridden.  This does not apply if the CPF option is specified for the URL.
Default	false
Introduced	16.0.R1
Platforms	All

## url (*keyword* | *http-redirect-url*)



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	URL used for HTTP redirect action
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <a href="#">http-redirect</a> <b>url</b> ( <i>keyword</i>   <i>http-redirect-url</i> )
Tree	<a href="#">url</a>
Description	This command specifies the URL to use for HTTP redirection for this filter entry.

A URL can be specified or the CPF option can be used for BNG CUPS ESM sessions only.

The following macro substitutions may be used:

\$URL — request-URI in the HTTP GET request received

\$MAC — a string that represents the MAC address of the subscriber host

\$IP — a string that represents the IP address of the subscriber host

\$SUB — a string that represents the subscriber ID

\$SAP — a string that represents a SAP ID

\$SAPDESC — description string configured on the SAP

\$CID — a string that represents the circuit ID or interface ID of the subscriber host (hexadecimal format)

\$RID — a string that represents the remote ID of the subscriber host (hexadecimal format)

String Length	1 to 255
Options	from-cpf
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## ignore-match

Synopsis	Ignore match criteria for the entry
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>ignore-match</b>
Tree	<b>ignore-match</b>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	All

## nat

Synopsis	Enable the <b>nat</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>nat</b>
Tree	<b>nat</b>

Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### nat-policy *reference*



#### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy name when action is NAT
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action nat nat-policy</b> <i>reference</i>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure service nat nat-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### nat-type *keyword*



#### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT type to assign when action is NAT
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action nat nat-type</b> <i>keyword</i>
Tree	<a href="#">nat-type</a>
Options	dslite, nat64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### rate-limit

Synopsis	Enable the <b>rate-limit</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action rate-limit</b>
Tree	<a href="#">rate-limit</a>
Introduced	16.0.R1

Platforms All

### extracted-traffic

Synopsis Limit the rate of traffic extracted to the CPM  
 Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [extracted-traffic](#)  
 Tree [extracted-traffic](#)  
 Introduced 22.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### hop-limit

Synopsis Enable the **hop-limit** context  
 Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [hop-limit](#)  
 Tree [hop-limit](#)  
 Notes The following elements are part of a choice: **hop-limit** or **payload-length**.  
 Introduced 16.0.R1  
 Platforms All

### eq *number*

Synopsis Equal to condition match value  
 Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [hop-limit](#) [eq](#) *number*  
 Tree [eq](#)  
 Range 0 to 255  
 Notes The following elements are part of a mandatory choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### gt *number*

Synopsis Greater than condition match value  
 Context **configure** [filter](#) [ipv6-filter](#) *string* [entry](#) *number* [action](#) [rate-limit](#) [hop-limit](#) [gt](#) *number*  
 Tree [gt](#)  
 Range 0 to 254

Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than condition match value
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit lt number</b>
Tree	<b>lt</b>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit range</b>
Tree	<b>range</b>
Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ipv6-filter string entry number action rate-limit hop-limit range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **start number**

Synopsis Lower bound of the range

Context **configure filter ipv6-filter string entry number action rate-limit hop-limit range start number**

Tree [start](#)

Range 0 to 254

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **mbs (number | keyword)**

Synopsis Maximum burst size

Context **configure filter ipv6-filter string entry number action rate-limit mbs (number | keyword)**

Tree [mbs](#)

Range 0 to 268435456

Units bytes

Options auto

Default auto

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pattern**

Synopsis Enable the **pattern** context

Context **configure filter ipv6-filter string entry number action rate-limit pattern**

Tree [pattern](#)

Introduced 16.0.R4

Platforms All

**expression string**

Synopsis	Pattern expression to match
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">pattern</a> <a href="#">expression</a> <i>string</i>
Tree	<a href="#">expression</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**mask string**

Synopsis	Mask for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">pattern</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
String Length	3 to 18
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**offset-type keyword**

Synopsis	Starting point reference for offset value of pattern
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">pattern</a> <a href="#">offset-type</a> <i>keyword</i>
Tree	<a href="#">offset-type</a>
Options	layer-3, layer-4, data, dns-qtype
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**offset-value number**

Synopsis	Offset value for the pattern expression
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">pattern</a> <a href="#">offset-value</a> <i>number</i>

Tree	<a href="#">offset-value</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## payload-length

Synopsis	Enable the <b>payload-length</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <a href="#">action rate-limit payload-length</a>
Tree	<a href="#">payload-length</a>
Notes	The following elements are part of a choice: <b>hop-limit</b> or <b>payload-length</b> .
Introduced	16.0.R1
Platforms	All

## eq *number*

Synopsis	Exact match criterion for the length
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <a href="#">action rate-limit payload-length eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## gt *number*

Synopsis	Greater than match criterion for the length
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <a href="#">action rate-limit payload-length gt</a> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All



**lt number**

Synopsis	Less than match criterion for the length
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <b>action rate-limit payload-length lt number</b>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <b>action rate-limit payload-length range</b>
Tree	<b>range</b>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the length range
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <b>action rate-limit payload-length range end number</b>
Tree	<b>end</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the length range
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <b>action rate-limit payload-length range start number</b>

Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	Peak information rate
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action rate-limit pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a mandatory choice: <b>pir</b> or <b>pps-pir</b> .
Introduced	16.0.R1
Platforms	All

### **pps-pir** (*number* | *keyword*)

Synopsis	Peak information rate
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action rate-limit pps-pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pps-pir</a>
Range	0 to 1000000000
Units	packets per second
Options	max
Notes	The following elements are part of a mandatory choice: <b>pir</b> or <b>pps-pir</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **remark**

Synopsis	Enable the <b>remark</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action remark</b>

Tree	<a href="#">remark</a>
Introduced	16.0.R1
Platforms	All

### **dscp keyword**

Synopsis	Destination SAP
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <a href="#">remark</a> <a href="#">dscp</a> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **secondary**

Synopsis	Enable the <b>secondary</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <a href="#">secondary</a>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

### **forward**

Synopsis	Enter the <b>forward</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <a href="#">secondary</a> <a href="#">forward</a>
Tree	<a href="#">forward</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## next-hop

Synopsis	Enable the <b>next-hop</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop</b>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

## nh-ip-vrf

Synopsis	Enable the <b>nh-ip-vrf</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf</b>
Tree	<a href="#">nh-ip-vrf</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## address string

Synopsis	IPv6 address of next hop to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf address string</b>
Tree	<a href="#">address</a>
Description	This command specifies the IPv6 address of a direct or indirect next hop to which matching packets are forwarded.
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## indirect boolean

Synopsis	Allow next hop to be indirectly reachable
Context	<b>configure filter ipv6-filter string entry number action secondary forward next-hop nh-ip-vrf indirect boolean</b>
Tree	<a href="#">indirect</a>

Default	false
Introduced	16.0.R1
Platforms	All

### router-instance *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context for route lookup for forwarding packets
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <b>action secondary forward next-hop nh-ip-vrf router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### sap

Synopsis	Enable the <b>sap</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <b>action secondary forward sap</b>
Tree	<a href="#">sap</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### sap-id *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP ID used to forward packets matching the entry
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number</b> <b>action secondary forward sap sap-id</b> <i>reference</i>
Tree	<a href="#">sap-id</a>

Reference	<b>configure service vpls string sap string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vpls reference**

Synopsis	VPLS the sdp-bind-id belongs to
Context	<b>configure filter ipv6-filter string entry number action secondary forward sap vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sdp**

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure filter ipv6-filter string entry number action secondary forward sdp</b>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	16.0.R1
Platforms	All

### **sdp-bind-id string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure filter ipv6-filter string entry number action secondary forward sdp sdp-bind-id string</b>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vpls reference**

Synopsis	VPLS associated with the SDP
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">sdp</a> <a href="#">vpls</a> <i>reference</i>
Tree	<a href="#">vpls</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **vprn-target**

Synopsis	Enable the <b>vprn-target</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">vprn-target</a>
Tree	<a href="#">vprn-target</a>
Notes	The following elements are part of a choice: <b>next-hop</b> , <b>sap</b> , <b>sdp</b> , or <b>vprn-target</b> .
Introduced	21.7.R1
Platforms	All

### **adv-prefix string**

Synopsis	Advertised IP prefix for the target destination
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a> <a href="#">vprn-target</a> <a href="#">adv-prefix</a> <i>string</i>
Tree	<a href="#">adv-prefix</a>
Introduced	21.7.R1
Platforms	All

**bgp-nh string**

Synopsis	Target BGP next hop IP address
Context	<b>configure</b> filter ipv6-filter string entry number action secondary forward vprn-target bgp-nh string
Tree	bgp-nh
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

**lsp string**

Synopsis	LSP that is specified to forward a packet matching this entry
Context	<b>configure</b> filter ipv6-filter string entry number action secondary forward vprn-target lsp string
Tree	lsp
String Length	1 to 64
Introduced	21.7.R1
Platforms	All

**vprn reference**

Synopsis	Routing context used for route lookup
Context	<b>configure</b> filter ipv6-filter string entry number action secondary forward vprn-target vprn reference
Tree	vprn
Reference	<b>configure</b> service vprn string
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

**remark**

Synopsis	Enable the <b>remark</b> context
Context	<b>configure</b> filter ipv6-filter string entry number action secondary remark
Tree	remark



Introduced	16.0.R1
Platforms	All

### **dscp** *keyword*

Synopsis	Destination SAP
Context	<b>configure</b> <b>filter</b> <b>ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>secondary</b> <b>remark</b> <b>dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **tcp-mss-adjust**

Synopsis	Adjust MSS option of TCP matching packets to configured value of tcp-mss in router interface context
Context	<b>configure</b> <b>filter</b> <b>ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <b>tcp-mss-adjust</b>
Tree	<b>tcp-mss-adjust</b>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , <b>ignore-match</b> , <b>nat</b> , or <b>tcp-mss-adjust</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>filter</b> <b>ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**egress-pbr** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBR that has an effect when this filter is applied on egress
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">egress-pbr</a> <i>keyword</i>
Tree	<a href="#">egress-pbr</a>
Options	true, true-with-I4Ib
Introduced	16.0.R1
Platforms	All

**filter-sample** *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd ACL mode
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">filter-sample</a> <i>boolean</i>
Tree	<a href="#">filter-sample</a>
Default	false
Introduced	16.0.R1
Platforms	All

**interface-sample** *boolean*

Synopsis	Sample matching traffic if IP interface is set to cflowd interface mode
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">interface-sample</a> <i>boolean</i>
Tree	<a href="#">interface-sample</a>
Default	true
Introduced	16.0.R1
Platforms	All

**log** *reference*

Synopsis	Log that is used for packets matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">log</a> <i>reference</i>
Tree	<a href="#">log</a>

Reference	<b>configure filter log</b> <i>number</i>
Introduced	16.0.R1
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure filter ipv6-filter</b> <i>string entry number match</i>
Tree	<a href="#">match</a>
Description	Commands in this context provide match criteria for the filter entry. When the match criteria are satisfied, the action associated with the match criteria is executed.
Introduced	16.0.R1
Platforms	All

## destination-class *number*

Synopsis	Destination class as a match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match destination-class number</i>
Tree	<a href="#">destination-class</a>
Description	This command configures the BGP destination class value as a match criterion. Filtering egress traffic on the destination class requires the <b>destination-class-lookup</b> command (under the <b>ingress</b> context for the service interface) to be enabled (set to <b>true</b> ).
Range	1 to 255
Introduced	20.7.R1
Platforms	All

## dscp *keyword*

Synopsis	DSCP used as an IP filter match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1

Platforms All

## dst-ip

Synopsis Enter the **dst-ip** context

Context **configure filter ipv6-filter string entry number match dst-ip**

Tree [dst-ip](#)

Notes The following elements are part of a choice: **ip** or (**dst-ip** and **src-ip**).

Introduced 16.0.R1

Platforms All

## address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis IPv6 address used as the match criterion

Context **configure filter ipv6-filter string entry number match dst-ip address (*ipv6-prefix-with-host-bits* | *ipv6-address*)**

Tree [address](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R1

Platforms All

## ipv6-prefix-list *reference*

Synopsis IPv6 address prefix list used as match criterion

Context **configure filter ipv6-filter string entry number match dst-ip ipv6-prefix-list *reference***

Tree [ipv6-prefix-list](#)

Reference **configure filter match-list ipv6-prefix-list string**

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R1

Platforms All

## mask *string*

Synopsis IPv6 address mask used as the match criterion

Context **configure filter ipv6-filter string entry number match dst-ip mask *string***

Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a>
Tree	<a href="#">dst-port</a>
Description	Commands in this context configure match criteria for the destination port.
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	All

## **eq number**

Synopsis	Exact value as the match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **gt number**

Synopsis	Greater than value as the match criterion
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">gt</a> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Less than value as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <i>dst-port</i> <b>lt</b> <i>number</i>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list** *reference*

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <i>dst-port</i> <b>port-list</b> <i>reference</i>
Tree	<b>port-list</b>
Reference	<b>configure filter match-list</b> <b>port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <i>dst-port</i> <b>range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of the port range
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <i>dst-port</i> <b>range</b> <b>end</b> <i>number</i>
Tree	<b>end</b>
Range	1 to 65535

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the port range
Context	<b>configure filter ipv6-filter string entry number match dst-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**extension-header**

Synopsis	Enter the <b>extension-header</b> context
Context	<b>configure filter ipv6-filter string entry number match extension-header</b>
Tree	<a href="#">extension-header</a>
Introduced	16.0.R1
Platforms	All

**ah boolean**

Synopsis	Match a packet as per the existence of an AH Extension Header
Context	<b>configure filter ipv6-filter string entry number match extension-header ah boolean</b>
Tree	<a href="#">ah</a>
Introduced	16.0.R1
Platforms	All

**esp boolean**

Synopsis	Match a packet as per the existence of an Encapsulation security payload extension header
Context	<b>configure filter ipv6-filter string entry number match extension-header esp boolean</b>

Tree	<a href="#">esp</a>
Introduced	16.0.R1
Platforms	All

### **hop-by-hop** *boolean*

Synopsis	Match on Hop-by-Hop Options Extension Header existence
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">extension-header</a> <a href="#">hop-by-hop</a> <i>boolean</i>
Tree	<a href="#">hop-by-hop</a>
Introduced	16.0.R2
Platforms	All

### **routing-type0** *boolean*

Synopsis	Match a packet as per the existence of a routing Extension Header
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">extension-header</a> <a href="#">routing-type0</a> <i>boolean</i>
Tree	<a href="#">routing-type0</a>
Introduced	16.0.R1
Platforms	All

### **flow-label**

Synopsis	Enable the <b>flow-label</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">flow-label</a>
Tree	<a href="#">flow-label</a>
Description	Commands in this context configure the flow label and optional mask match condition.
Introduced	16.0.R1
Platforms	All

### **mask** *number*

Synopsis	Flow label mask for the IPv6 filter entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">flow-label</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>



Description	This command specifies the IPv6 address mask for the flow label filter entry. This value can be expressed in decimal, hexadecimal, or binary format.
Range	1 to 1048575
Default	1048575
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Flow label as a match criterion
Context	<b>configure</b> <b>filter</b> <b>ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <b>flow-label</b> <b>value</b> <i>number</i>
Tree	<b>value</b>
Description	This command specifies the flow label to use as a match criterion. This value can be expressed in decimal, hexadecimal, or binary format.
Range	0 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **fragment** *keyword*

Synopsis	Match criterion for fragmented packages
Context	<b>configure</b> <b>filter</b> <b>ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <b>fragment</b> <i>keyword</i>
Tree	<b>fragment</b>
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

### **hop-limit**

Synopsis	Enable the <b>hop-limit</b> context
Context	<b>configure</b> <b>filter</b> <b>ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match</b> <b>hop-limit</b>
Tree	<b>hop-limit</b>
Introduced	21.10.R1
Platforms	All

### **eq number**

Synopsis	Equal to condition match value
Context	<b>configure filter ipv6-filter string entry number match hop-limit eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

### **gt number**

Synopsis	Greater than condition match value
Context	<b>configure filter ipv6-filter string entry number match hop-limit gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 254
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

### **lt number**

Synopsis	Less than condition match value
Context	<b>configure filter ipv6-filter string entry number match hop-limit lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 255
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number match hop-limit range</b>
Tree	<a href="#">range</a>

Description	This command in this context specify an inclusive range. When range is used, the start of the range (the first value entered) must be smaller than the end of the range (the second value entered).
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the range
Context	<b>configure filter ipv6-filter string entry number match hop-limit range end number</b>
Tree	<b>end</b>
Range	1 to 255
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the range
Context	<b>configure filter ipv6-filter string entry number match hop-limit range start number</b>
Tree	<b>start</b>
Range	0 to 254
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

### **icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure filter ipv6-filter string entry number match icmp</b>
Tree	<b>icmp</b>
Introduced	16.0.R1
Platforms	All

**code number**

Synopsis	ICMPv6 code value to match
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number match icmp code number</b>
Tree	<b>code</b>
Range	0 to 255
Introduced	16.0.R1
Platforms	All

**type number**

Synopsis	ICMPv6 type value to match
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number match icmp type number</b>
Tree	<b>type</b>
Range	0 to 255
Introduced	16.0.R1
Platforms	All

**ip**

Synopsis	Enter the <b>ip</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number match ip</b>
Tree	<b>ip</b>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	21.10.R1
Platforms	All

**address** (*ipv6-prefix-with-host-bits | ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number match ip address</b> ( <i>ipv6-prefix-with-host-bits   ipv6-address</i> )
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

### ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match ip ipv6-prefix-list reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure filter match-list</b> <a href="#">ipv6-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

### mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match ip mask string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	21.10.R1
Platforms	All

### next-header (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure filter ipv6-filter</b> <i>string entry number match next-header</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Notes	The following elements are part of a choice: <b>next-header</b> or <b>next-header-list</b> .
Introduced	16.0.R1
Platforms	All

### next-header-list *reference*

Synopsis	Name of the protocol list as a match criterion
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Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match next-header-list</b> <i>reference</i>
Tree	<a href="#">next-header-list</a>
Reference	<b>configure filter match-list protocol-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>next-header</b> or <b>next-header-list</b> .
Introduced	20.7.R1
Platforms	All

## packet-length

Synopsis	Enable the <b>packet-length</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length</b>
Tree	<a href="#">packet-length</a>
Description	Commands in this context specify the match criterion for the IPv6 packet length. The IPv6 packet length represents the total packet length which includes the IPv6 header and the payload.
Introduced	19.5.R1
Platforms	All

## eq number

Synopsis	Exact match criterion for the length
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length eq</b> <i>number</i>
Tree	<a href="#">eq</a>
Range	40 to 65575
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

## gt number

Synopsis	Greater than match criterion for the length
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	40 to 65574
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .

Introduced	19.5.R1
Platforms	All

**lt number**

Synopsis	Less than match criterion for the length
Context	<b>configure filter ipv6-filter string entry number match packet-length lt number</b>
Tree	<b>lt</b>
Range	41 to 65575
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number match packet-length range</b>
Tree	<b>range</b>
Notes	The following elements are part of a mandatory choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.5.R1
Platforms	All

**end number**

Synopsis	Upper bound of packet length range as match criterion
Context	<b>configure filter ipv6-filter string entry number match packet-length range end number</b>
Tree	<b>end</b>
Range	41 to 65575
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

**start number**

Synopsis	Lower bound of packet length range as match criterion
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Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match packet-length</b> <i>range</i> <b>start</b> <i>number</i>
Tree	<a href="#">start</a>
Range	40 to 65574
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

## port

Synopsis	Enter the <b>port</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port</b>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	All

## eq *number*

Synopsis	Exact value as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port eq</b> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## gt *number*

Synopsis	Greater than value as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>match port gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1



Platforms All

### **lt** *number*

Synopsis Less than value as the match criterion

Context **configure filter ipv6-filter** *string entry number match port lt number*

Tree **lt**

Range 1 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range.**

Introduced 16.0.R1

Platforms All

### **port-list** *reference*

Synopsis Name of the port list as the match criterion

Context **configure filter ipv6-filter** *string entry number match port port-list reference*

Tree **port-list**

Reference **configure filter match-list port-list** *string*

Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range.**

Introduced 16.0.R1

Platforms All

### **range**

Synopsis Enable the **range** context

Context **configure filter ipv6-filter** *string entry number match port range*

Tree **range**

Notes The following elements are part of a choice: **eq, gt, lt, port-list, or range.**

Introduced 16.0.R1

Platforms All

### **end** *number*

Synopsis Upper bound of the port range

Context **configure filter ipv6-filter** *string entry number match port range end number*

Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the port range
Context	<b>configure filter ipv6-filter</b> <i>string</i> <a href="#">entry number match port range start number</a>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <a href="#">entry number match src-ip</a>
Tree	<a href="#">src-ip</a>
Notes	The following elements are part of a choice: <b>ip</b> or ( <b>dst-ip</b> and <b>src-ip</b> ).
Introduced	16.0.R1
Platforms	All

### **address** (*ipv6-prefix-with-host-bits | ipv6-address*)

Synopsis	IPv6 address used as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string</i> <a href="#">entry number match src-ip address</a> ( <i>ipv6-prefix-with-host-bits   ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## ipv6-prefix-list *reference*

Synopsis	IPv6 address prefix list used as match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match src-ip ipv6-prefix-list reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure filter match-list</b> <a href="#">ipv6-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## mask *string*

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match src-ip mask string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## src-mac

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure filter ipv6-filter</b> <i>string entry number match src-mac</i>
Tree	<a href="#">src-mac</a>
Introduced	19.5.R1
Platforms	All

## address *string*

Synopsis	MAC address used as the match criterion
Context	<b>configure filter ipv6-filter</b> <i>string entry number match src-mac address string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	19.5.R1

Platforms All

### mask string

Synopsis MAC address mask as the match criterion  
 Context **configure filter ipv6-filter string entry number match src-mac mask string**  
 Tree [mask](#)  
 Default ff:ff:ff:ff:ff:ff  
 Introduced 19.5.R1  
 Platforms All

### src-port

Synopsis Enter the **src-port** context  
 Context **configure filter ipv6-filter string entry number match src-port**  
 Tree [src-port](#)  
 Description Commands in this context configure match criteria for the source port.  
 Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).  
 Introduced 16.0.R1  
 Platforms All

### eq number

Synopsis Exact value as the match criterion  
 Context **configure filter ipv6-filter string entry number match src-port eq number**  
 Tree [eq](#)  
 Range 0 to 65535  
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### gt number

Synopsis Greater than value as the match criterion  
 Context **configure filter ipv6-filter string entry number match src-port gt number**

Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Less than value as the match criterion
Context	<b>configure filter ipv6-filter string entry number match src-port lt number</b>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure filter ipv6-filter string entry number match src-port port-list reference</b>
Tree	<a href="#">port-list</a>
Reference	<b>configure filter match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string entry number match src-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number match src-port range end number</b>
Tree	<b>end</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the port range
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number match src-port range start number</b>
Tree	<b>start</b>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **tcp-established**

Synopsis	Match packets containing the TCP flag as ACK or RST
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number match tcp-established</b>
Tree	<b>tcp-established</b>
Notes	The following elements are part of a choice: <b>tcp-established</b> or <b>tcp-flags</b> .
Introduced	22.10.R1
Platforms	All

### **tcp-flags**

Synopsis	Enter the <b>tcp-flags</b> context
Context	<b>configure filter ipv6-filter</b> <i>string</i> <b>entry number match tcp-flags</b>
Tree	<b>tcp-flags</b>
Notes	The following elements are part of a choice: <b>tcp-established</b> or <b>tcp-flags</b> .

Introduced 16.0.R1  
Platforms All

### **ack boolean**

Synopsis Match TCP ACK as per value of the ACK TCP flag bit  
Context **configure filter ipv6-filter string entry number match tcp-flags ack boolean**  
Tree [ack](#)  
Introduced 16.0.R1  
Platforms All

### **cwr boolean**

Synopsis Match TCP CWR as per value of the CWR TCP flag bit  
Context **configure filter ipv6-filter string entry number match tcp-flags cwr boolean**  
Tree [cwr](#)  
Introduced 16.0.R1  
Platforms All

### **ece boolean**

Synopsis Match TCP ECE as per value of the ECE TCP flag bit  
Context **configure filter ipv6-filter string entry number match tcp-flags ece boolean**  
Tree [ece](#)  
Introduced 16.0.R1  
Platforms All

### **fin boolean**

Synopsis Match TCP FIN as per value of the FIN TCP flag bit  
Context **configure filter ipv6-filter string entry number match tcp-flags fin boolean**  
Tree [fin](#)  
Introduced 16.0.R1  
Platforms All

**ns boolean**

Synopsis	Match TCP NS as per value of the NS TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags ns boolean</b>
Tree	<a href="#">ns</a>
Introduced	16.0.R1
Platforms	All

**psh boolean**

Synopsis	Match TCP PSH as per value of the PSH TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags psh boolean</b>
Tree	<a href="#">psh</a>
Introduced	16.0.R1
Platforms	All

**rst boolean**

Synopsis	Match TCP RST as per value of the RST TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags rst boolean</b>
Tree	<a href="#">rst</a>
Introduced	16.0.R1
Platforms	All

**syn boolean**

Synopsis	Match TCP SYN as per value of the SYN TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags syn boolean</b>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	All

**urg boolean**

Synopsis	Match TCP URG as per value of the URG TCP flag bit
Context	<b>configure filter ipv6-filter string entry number match tcp-flags urg boolean</b>



Tree	<a href="#">urg</a>
Introduced	16.0.R1
Platforms	All

### **pbr-down-action-override** *keyword*

Synopsis	Action when PBR or PBF target for this entry is not available
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">pbr-down-action-override</a> <i>keyword</i>
Tree	<a href="#">pbr-down-action-override</a>
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

### **sample-profile** *reference*

Synopsis	Cflowd sample profile ID to match packets
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">sample-profile</a> <i>reference</i>
Tree	<a href="#">sample-profile</a>
Description	This command allows traffic matching an IPv4 or IPv6 filter to be sampled for cflowd processing using a specific sample profile ID. This option is only compatible if the associated interface is configured for interface-based sampling and is only supported for ingress sampling. An IP filter can only specify a single alternate sample profile ID for cflowd sampling, but the ID can be used in multiple entries.
Reference	<b>configure</b> <a href="#">cflowd</a> <a href="#">sample-profile</a> <i>number</i>
Introduced	20.10.R1
Platforms	All

### **sticky-dest** (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">sticky-dest</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">sticky-dest</a>
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1

Platforms All

### **filter-id** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IPv6 filter identifier

Context **configure filter ipv6-filter** *string filter-id number*

Tree [filter-id](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

### **scope** *keyword*

Synopsis Scope of the filter definition

Context **configure filter ipv6-filter** *string scope keyword*

Tree [scope](#)

Description This command configures the filter policy scope.  
If the scope of the policy is **template** and is applied to one or more services or network interfaces, the scope cannot be changed.

Options exclusive, template, embedded, system, cpm

Default template

Introduced 16.0.R1

Platforms All

### **shared-policer** *boolean*

Synopsis Share policer among active ports in the LAG

Context **configure filter ipv6-filter** *string shared-policer boolean*

Tree [shared-policer](#)

Description When configured to **true**, and when the filter policy is configured on a LAG endpoint, the system programs the policer rates in the filter policy per line card FP of the LAG based on the number of active ports in the LAG for each FP.

When configured to **false**, and when the filter policy is configured on a LAG endpoint, the system programs the same policer rate on each line card FP of the LAG.

Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## subscriber-mgmt

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt</b>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-specific-entry

Synopsis	Enter the <b>host-specific-entry</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry</b>
Tree	<a href="#">host-specific-entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## credit-control

Synopsis	Enter the <b>credit-control</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control</b>
Tree	<a href="#">credit-control</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis Upper bound of range for credit control filter entries

Context **configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range end number**

Tree [end](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis Lower bound of range for credit control filter entries

Context **configure filter ipv6-filter string subscriber-mgmt host-specific-entry credit-control range start number**

Tree [start](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter-rule**

Synopsis Enter the **filter-rule** context

Context **configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule**

Tree [filter-rule](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis Enable the **range** context

Context **configure filter ipv6-filter string subscriber-mgmt host-specific-entry filter-rule range**

Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of range for inserting filter rule entries
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">host-specific-entry</a> <a href="#">filter-rule</a> <a href="#">range</a> <a href="#">end number</a>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of range for inserting filter rule entries
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">host-specific-entry</a> <a href="#">filter-rule</a> <a href="#">range</a> <a href="#">start number</a>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**watermark**

Synopsis	Enter the <b>watermark</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">host-specific-entry</a> <a href="#">watermark</a>
Tree	<a href="#">watermark</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark for host-specific entries, to raise a table full alarm
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark high number</b>
Tree	<a href="#">high</a>
Range	0 to 100
Default	95
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark for host-specific entries, to clear a table full alarm
Context	<b>configure filter ipv6-filter string subscriber-mgmt host-specific-entry watermark low number</b>
Tree	<a href="#">low</a>
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## shared-entry

Synopsis	Enter the <b>shared-entry</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry</b>
Tree	<a href="#">shared-entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter-rule

Synopsis	Enter the <b>filter-rule</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule</b>
Tree	<a href="#">filter-rule</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis Enable the **range** context

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range**

Tree [range](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis Upper bound of range for inserting shared host rules

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range end number**

Tree [end](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis Lower bound of range for inserting shared host rules

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry filter-rule range start number**

Tree [start](#)

Range 1 to 2097151

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pcc-rule

Synopsis Enter the **pcc-rule** context

Context **configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule**

Tree	<a href="#">pcc-rule</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of the range for PCC rule filter entries
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of the range for PCC rule filter entries
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry pcc-rule range start number</b>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**watermark**

Synopsis	Enable the <b>watermark</b> context
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry watermark</b>
Tree	<a href="#">watermark</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**high number**

Synopsis	Limit of RADIUS shared filters before generating high watermark notification
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry watermark high number</b>
Tree	<a href="#">high</a>
Range	1 to 8000
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**low number**

Synopsis	Limit of RADIUS or Diameter shared filters before clearing high watermark notification
Context	<b>configure filter ipv6-filter string subscriber-mgmt shared-entry watermark low number</b>
Tree	<a href="#">low</a>
Range	0 to 7999
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Set of match criteria for the filter policy
Context	<b>configure filter ipv6-filter string type keyword</b>
Tree	<a href="#">type</a>
Description	This command configures the filter policy type that defines the list of match criteria supported in a filter policy.
Options	normal, src-mac, packet-length, destination-class

Default	normal
Introduced	19.5.R1
Platforms	All

**log** [*log-id*] *number*

Synopsis	Enter the <b>log</b> list instance
Context	<b>configure</b> <i>filter log number</i>
Tree	<i>log</i>
Introduced	16.0.R1
Platforms	All

**[log-id]** *number*

Synopsis	Filter log identifier
Context	<b>configure</b> <i>filter log number</i>
Tree	<i>log</i>
Range	101 to 199
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of filter logging
Context	<b>configure</b> <i>filter log number admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

## destination

Synopsis	Enter the <b>destination</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

## memory

Synopsis	Enter the <b>memory</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a> <a href="#">memory</a>
Tree	<a href="#">memory</a>
Notes	The following elements are part of a choice: <b>memory</b> or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

## max-entries *number*

Synopsis	Maximum number of memory entries that the log can store
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a> <a href="#">memory</a> <a href="#">max-entries</a> <i>number</i>
Tree	<a href="#">max-entries</a>
Range	1 to 50000
Default	1000
Introduced	16.0.R1
Platforms	All

**stop-on-full** *boolean*

Synopsis	Stop logging when maximum number of memory entries is reached or wrap-around is used
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a> <a href="#">memory</a> <b>stop-on-full</b> <i>boolean</i>
Tree	<a href="#">stop-on-full</a>
Default	false
Introduced	16.0.R1
Platforms	All

**syslog**

Synopsis	Enter the <b>syslog</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a> <b>syslog</b>
Tree	<a href="#">syslog</a>
Notes	The following elements are part of a choice: <b>memory</b> or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

**name** *reference*

Synopsis	Syslog server definition ID
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a> <a href="#">syslog</a> <b>name</b> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">syslog</a> <i>string</i>
Introduced	21.2.R1
Platforms	All

**summary**

Synopsis	Enter the <b>summary</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a> <a href="#">syslog</a> <b>summary</b>
Tree	<a href="#">summary</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of filter log summarization
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a> <a href="#">syslog</a> <a href="#">summary</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**summary-crit** *keyword*

Synopsis	Summary for filter log entries
Context	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i> <a href="#">destination</a> <a href="#">syslog</a> <a href="#">summary</a> <b>summary-crit</b> <i>keyword</i>
Tree	<a href="#">summary-crit</a>
Options	src-addr, dst-addr
Default	src-addr
Introduced	16.0.R1
Platforms	All

**mac-filter** [[filter-name](#)] *string*

Synopsis	Enter the <b>mac-filter</b> list instance
Context	<b>configure</b> <a href="#">filter</a> <b>mac-filter</b> <i>string</i>
Tree	<a href="#">mac-filter</a>
Introduced	16.0.R1
Platforms	All

**[filter-name]** *string*

Synopsis	Filter name
Context	<b>configure</b> <a href="#">filter</a> <b>mac-filter</b> <i>string</i>
Tree	<a href="#">mac-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

### **default-action** *keyword*

Synopsis	Action for packets that do not match any entry
Context	<b>configure</b> <b>filter</b> <b>mac-filter</b> <i>string</i> <b>default-action</b> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	drop, accept
Default	drop
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>filter</b> <b>mac-filter</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **embed**

Synopsis	Enter the <b>embed</b> context
Context	<b>configure</b> <b>filter</b> <b>mac-filter</b> <i>string</i> <b>embed</b>
Tree	<a href="#">embed</a>
Description	Commands in this context embed a previously defined MAC embedded filter policy or Hybrid OpenFlow switch instance into an exclusive, template, or system filter policy at the specified offset value. Rules derived from the BGP FlowSpec can also be embedded into template filter policies only.
Introduced	16.0.R1
Platforms	All

**entry** [*entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure filter mac-filter string entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[entry-id]** *number*

Synopsis	ID for a match criteria and the corresponding action
Context	<b>configure filter mac-filter string entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enable the <b>action</b> context
Context	<b>configure filter mac-filter string entry number action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**accept**

Synopsis	Accept regular routing to forward a matching packet
Context	<b>configure filter mac-filter string entry number action accept</b>
Tree	<a href="#">accept</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , or <b>ignore-match</b> .
Introduced	16.0.R1
Platforms	All

## drop

Synopsis	Drop a packet matching this entry
Context	<b>configure filter mac-filter</b> <i>string entry number action drop</i>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , or <b>ignore-match</b> .
Introduced	16.0.R1
Platforms	All

## forward

Synopsis	Enter the <b>forward</b> context
Context	<b>configure filter mac-filter</b> <i>string entry number action forward</i>
Tree	<a href="#">forward</a>
Notes	The following elements are part of a mandatory choice: <b>accept</b> , <b>drop</b> , <b>forward</b> , <b>http-redirect</b> , or <b>ignore-match</b> .
Introduced	16.0.R1
Platforms	All

## esi-l2

Synopsis	Enable the <b>esi-l2</b> context
Context	<b>configure filter mac-filter</b> <i>string entry number action forward esi-l2</i>
Tree	<a href="#">esi-l2</a>
Notes	The following elements are part of a choice: <b>esi-l2</b> , <b>sap</b> , or <b>sdp</b> .
Introduced	16.0.R1
Platforms	All

## esi-value *string*

Synopsis	ESI of the first ESI-identified appliance
Context	<b>configure filter mac-filter</b> <i>string entry number action forward esi-l2 esi-value string</i>
Tree	<a href="#">esi-value</a>
Notes	This element is mandatory.



Introduced 16.0.R1  
 Platforms All

### **vpls** *reference*

Synopsis VPLS service name  
 Context **configure** [filter](#) [mac-filter](#) *string* [entry](#) *number* [action](#) [forward](#) [esi-l2](#) [vpls](#) *reference*  
 Tree [vpls](#)  
 Reference **configure** [service](#) [vpls](#) *string*  
 Notes This element is mandatory.  
 Introduced 16.0.R3  
 Platforms All

### **sap**

Synopsis Enable the **sap** context  
 Context **configure** [filter](#) [mac-filter](#) *string* [entry](#) *number* [action](#) [forward](#) [sap](#)  
 Tree [sap](#)  
 Notes The following elements are part of a choice: **esi-l2**, **sap**, or **sdp**.  
 Introduced 16.0.R1  
 Platforms All

### **sap-id** *reference*

Synopsis VPLS Ethernet SAP ID used to forward matching packets  
 Context **configure** [filter](#) [mac-filter](#) *string* [entry](#) *number* [action](#) [forward](#) [sap](#) [sap-id](#) *reference*  
 Tree [sap-id](#)  
 Reference **configure** [service](#) [vpls](#) *string* [sap](#) *string*  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **vpls** *reference*

Synopsis VPLS associated with the SAP

Context	<b>configure filter mac-filter string entry number action forward sap vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## sdp

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure filter mac-filter string entry number action forward sdp</b>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>esi-l2</b> , <b>sap</b> , or <b>sdp</b> .
Introduced	16.0.R1
Platforms	All

## sdp-bind-id string

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure filter mac-filter string entry number action forward sdp sdp-bind-id string</b>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls reference

Synopsis	VPLS associated with the SDP
Context	<b>configure filter mac-filter string entry number action forward sdp vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

## http-redirect

Synopsis Enable the **http-redirect** context

Context **configure filter mac-filter string entry number action http-redirect**

Tree [http-redirect](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

## url string



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis URL that is used for redirecting

Context **configure filter mac-filter string entry number action http-redirect url string**

Tree [url](#)

String Length 1 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## ignore-match

Synopsis Ignore match criteria for the entry

Context **configure filter mac-filter string entry number action ignore-match**

Tree [ignore-match](#)

Notes The following elements are part of a mandatory choice: **accept**, **drop**, **forward**, **http-redirect**, or **ignore-match**.

Introduced 16.0.R1

Platforms All

**rate-limit**

Synopsis	Enable the <b>rate-limit</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a>
Tree	<a href="#">rate-limit</a>
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Peak information rate
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">rate-limit</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**secondary**

Synopsis	Enable the <b>secondary</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

**forward**

Synopsis	Enter the <b>forward</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">secondary</a> <a href="#">forward</a>
Tree	<a href="#">forward</a>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

## sap

Synopsis Enable the **sap** context

Context **configure** [filter](#) [mac-filter](#) [string](#) [entry](#) [number](#) [action](#) [secondary](#) [forward](#) [sap](#)

Tree [sap](#)

Notes The following elements are part of a choice: **sap** or **sdp**.

Introduced 16.0.R1

Platforms All

## sap-id reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis SAP ID used to forward packets matching the entry

Context **configure** [filter](#) [mac-filter](#) [string](#) [entry](#) [number](#) [action](#) [secondary](#) [forward](#) [sap](#) [sap-id](#) [reference](#)

Tree [sap-id](#)

Reference **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## vpls reference

Synopsis VPLS the sdp-bind-id belongs to

Context **configure** [filter](#) [mac-filter](#) [string](#) [entry](#) [number](#) [action](#) [secondary](#) [forward](#) [sap](#) [vpls](#) [reference](#)

Tree [vpls](#)

Reference **configure** [service](#) [vpls](#) [string](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## sdp

Synopsis	Enable the <b>sdp</b> context
Context	<b>configure filter mac-filter string entry number action secondary forward sdp</b>
Tree	<a href="#">sdp</a>
Notes	The following elements are part of a choice: <b>sap</b> or <b>sdp</b> .
Introduced	16.0.R1
Platforms	All

## sdp-bind-id *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPLS SDP bind ID used to forward matching packets
Context	<b>configure filter mac-filter string entry number action secondary forward sdp sdp-bind-id string</b>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## vpls *reference*

Synopsis	VPLS associated with the SDP
Context	<b>configure filter mac-filter string entry number action secondary forward sdp vpls reference</b>
Tree	<a href="#">vpls</a>
Reference	<b>configure service vpls string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **log** *reference*

Synopsis	Log that is used for packets matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">log</a> <i>reference</i>
Tree	<a href="#">log</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

### **dot1p**

Synopsis	Enable the <b>dot1p</b> context
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dot1p</a>
Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

### **mask number**

Synopsis	802.1p mask value used as a MAC filter match criterion
Context	<b>configure filter mac-filter string entry number match dot1p mask number</b>
Tree	<a href="#">mask</a>
Range	1 to 7
Default	7
Introduced	16.0.R1
Platforms	All

### **priority number**

Synopsis	IEEE 802.1p value used as a MAC filter match criterion
Context	<b>configure filter mac-filter string entry number match dot1p priority number</b>
Tree	<a href="#">priority</a>
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **dst-mac**

Synopsis	Enable the <b>dst-mac</b> context
Context	<b>configure filter mac-filter string entry number match dst-mac</b>
Tree	<a href="#">dst-mac</a>
Introduced	16.0.R1
Platforms	All

### **address string**

Synopsis	MAC address used as the match criterion
Context	<b>configure filter mac-filter string entry number match dst-mac address string</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1



Platforms All

### **mask string**

Synopsis MAC address mask as the match criterion  
 Context **configure filter mac-filter string entry number match dst-mac mask string**  
 Tree [mask](#)  
 Default ff:ff:ff:ff:ff:ff  
 Introduced 16.0.R1  
 Platforms All

### **etype string**

Synopsis Ethernet type  
 Context **configure filter mac-filter string entry number match etype string**  
 Tree [etype](#)  
 String Length 5 to 6  
 Introduced 16.0.R1  
 Platforms All

### **frame-type keyword**

Synopsis MAC frame as match criteria  
 Context **configure filter mac-filter string entry number match frame-type keyword**  
 Tree [frame-type](#)  
 Options 802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii  
 Introduced 16.0.R1  
 Platforms All

### **inner-tag**

Synopsis Enable the **inner-tag** context  
 Context **configure filter mac-filter string entry number match inner-tag**  
 Tree [inner-tag](#)  
 Introduced 16.0.R1

Platforms All

### **mask number**

Synopsis Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value

Context **configure filter mac-filter string entry number match inner-tag mask number**

Tree **mask**

Range 1 to 4095

Default 4095

Introduced 16.0.R1

Platforms All

### **tag number**

Synopsis Matching value against VID of the second or first VLAN tag in the packet carried transparently

Context **configure filter mac-filter string entry number match inner-tag tag number**

Tree **tag**

Range 0 to 4095

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **isid**

Synopsis Enter the **isid** context

Context **configure filter mac-filter string entry number match isid**

Tree **isid**

Introduced 16.0.R1

Platforms All

### **range**

Synopsis Enable the **range** context

Context **configure filter mac-filter string entry number match isid range**

Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>range</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the ISID range
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">isid</a> <a href="#">range</a> <a href="#">end</a> <a href="#">number</a>
Tree	<a href="#">end</a>
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the ISID range
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">isid</a> <a href="#">range</a> <a href="#">start</a> <a href="#">number</a>
Tree	<a href="#">start</a>
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Lowest value of 24-bit service instance identifier for the service matching this entry
Context	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">isid</a> <a href="#">value</a> <a href="#">number</a>
Tree	<a href="#">value</a>
Range	0 to 16777215
Notes	The following elements are part of a choice: <b>range</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

## llc-dsap

Synopsis	Enable the <b>llc-dsap</b> context
Context	<b>configure filter mac-filter string entry number match llc-dsap</b>
Tree	<a href="#">llc-dsap</a>
Introduced	16.0.R1
Platforms	All

## dsap number

Synopsis	DSAP value
Context	<b>configure filter mac-filter string entry number match llc-dsap dsap number</b>
Tree	<a href="#">dsap</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## mask number

Synopsis	Destination SAP mask
Context	<b>configure filter mac-filter string entry number match llc-dsap mask number</b>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

## llc-ssap

Synopsis	Enable the <b>llc-ssap</b> context
Context	<b>configure filter mac-filter string entry number match llc-ssap</b>
Tree	<a href="#">llc-ssap</a>
Introduced	16.0.R1
Platforms	All

**mask number**

Synopsis	Source SAP mask
Context	<b>configure filter mac-filter string entry number match llc-ssap mask number</b>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

**ssap number**

Synopsis	Source or destination SAP value
Context	<b>configure filter mac-filter string entry number match llc-ssap ssap number</b>
Tree	<a href="#">ssap</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**outer-tag**

Synopsis	Enable the <b>outer-tag</b> context
Context	<b>configure filter mac-filter string entry number match outer-tag</b>
Tree	<a href="#">outer-tag</a>
Introduced	16.0.R1
Platforms	All

**mask number**

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	<b>configure filter mac-filter string entry number match outer-tag mask number</b>
Tree	<a href="#">mask</a>
Range	1 to 4095

Default	4095
Introduced	16.0.R1
Platforms	All

### **tag number**

Synopsis	Matching value against VID of the second or first VLAN tag in the packet carried transparently
Context	<b>configure filter mac-filter string entry number match outer-tag tag number</b>
Tree	<a href="#">tag</a>
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **snap-oui keyword**

Synopsis	Parameter snap-oui as a MAC filter match criteria
Context	<b>configure filter mac-filter string entry number match snap-oui keyword</b>
Tree	<a href="#">snap-oui</a>
Options	zero, non-zero
Introduced	16.0.R1
Platforms	All

### **snap-pid number**

Synopsis	Parameter snap-pid as a MAC filter match criteria
Context	<b>configure filter mac-filter string entry number match snap-pid number</b>
Tree	<a href="#">snap-pid</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## src-mac

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure filter mac-filter string entry number match src-mac</b>
Tree	<a href="#">src-mac</a>
Introduced	16.0.R1
Platforms	All

## address string

Synopsis	MAC address used as the match criterion
Context	<b>configure filter mac-filter string entry number match src-mac address string</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## mask string

Synopsis	MAC address mask as the match criterion
Context	<b>configure filter mac-filter string entry number match src-mac mask string</b>
Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

## pbr-down-action-override keyword

Synopsis	Action when PBR or PBF target for this entry is not available
Context	<b>configure filter mac-filter string entry number pbr-down-action-override keyword</b>
Tree	<a href="#">pbr-down-action-override</a>
Options	drop, forward, filter-default-action
Introduced	16.0.R1
Platforms	All

**sticky-dest** (*number* | *keyword*)

Synopsis	Time before action with available PBR or PBF destination and highest priority
Context	<b>configure</b> <b>filter</b> <b>mac-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>sticky-dest</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">sticky-dest</a>
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

**filter-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC filter ID
Context	<b>configure</b> <b>filter</b> <b>mac-filter</b> <i>string</i> <b>filter-id</b> <i>number</i>
Tree	<a href="#">filter-id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**scope** *keyword*

Synopsis	Filter policy scope
Context	<b>configure</b> <b>filter</b> <b>mac-filter</b> <i>string</i> <b>scope</b> <i>keyword</i>
Tree	<a href="#">scope</a>
Options	exclusive, template, embedded, system, cpm
Default	template
Introduced	16.0.R1
Platforms	All



**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC filter policy
Context	<b>configure</b> filter mac-filter <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	normal, isid, vid
Default	normal
Introduced	16.0.R1
Platforms	All

**match-list**

Synopsis	Enter the <b>match-list</b> context
Context	<b>configure</b> filter match-list
Tree	<b>match-list</b>
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** [*prefix-list-name*] *string*

Synopsis	Enter the <b>ip-prefix-list</b> list instance
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i>
Tree	<b>ip-prefix-list</b>
Introduced	16.0.R1
Platforms	All

**[prefix-list-name]** *string*

Synopsis	IP prefix list name
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i>
Tree	<b>ip-prefix-list</b>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

## apply-path

Synopsis	Enter the <b>apply-path</b> context
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i> apply-path
Tree	apply-path
Introduced	16.0.R1
Platforms	All

## bgp-peers [*criteria-index*] *number*

Synopsis	Enter the <b>bgp-peers</b> list instance
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers
Introduced	16.0.R1
Platforms	All

## [*criteria-index*] *number*

Synopsis	BGP peers auto-generation configuration index
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## group *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
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Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> group <i>string</i>
Tree	group
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### neighbor *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> neighbor <i>string</i>
Tree	neighbor
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### router-instance *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	<b>configure</b> filter match-list ip-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> router-instance <i>string</i>
Tree	router-instance
Default	Base
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**prefix** [[ip-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Description	<p>Commands in this context add IPv4 prefixes to the prefix match list. Prefixes can overlap IPv4 address space.</p> <p>An IPv4 prefix addition is blocked if resource exhaustion is detected anywhere in the system due to filter policies that use the prefix list.</p>
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

**[ip-prefix]** *string*

Synopsis	IPv4 prefix to be added to the prefix list
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

**prefix-exclude** [[ip-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix-exclude</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ip-prefix-list</a> <i>string</i> <a href="#">prefix-exclude</a> <i>string</i>
Tree	<a href="#">prefix-exclude</a>

Description	Commands in this context exclude IPv4 prefixes from the prefix match list. This command is mutually exclusive with the <b>apply-path</b> command.
Max. Instances	512
Introduced	16.0.R4
Platforms	All

**[ip-prefix]** *string*

Synopsis	IPv4 prefix to be added to the prefix list
Context	<b>configure</b> <b>filter</b> <b>match-list</b> <b>ip-prefix-list</b> <i>string</i> <b>prefix-exclude</b> <i>string</i>
Tree	<a href="#">prefix-exclude</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**ipv6-prefix-list** [[prefix-list-name](#)] *string*

Synopsis	Enter the <b>ipv6-prefix-list</b> list instance
Context	<b>configure</b> <b>filter</b> <b>match-list</b> <b>ipv6-prefix-list</b> <i>string</i>
Tree	<a href="#">ipv6-prefix-list</a>
Introduced	16.0.R1
Platforms	All

**[prefix-list-name]** *string*

Synopsis	IP prefix list name
Context	<b>configure</b> <b>filter</b> <b>match-list</b> <b>ipv6-prefix-list</b> <i>string</i>
Tree	<a href="#">ipv6-prefix-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## apply-path

Synopsis	Enter the <b>apply-path</b> context
Context	<b>configure</b> filter match-list ipv6-prefix-list <i>string</i> apply-path
Tree	apply-path
Introduced	16.0.R1
Platforms	All

## bgp-peers [*criteria-index*] *number*

Synopsis	Enter the <b>bgp-peers</b> list instance
Context	<b>configure</b> filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers
Introduced	16.0.R1
Platforms	All

## [*criteria-index*] *number*

Synopsis	BGP peers auto-generation configuration index
Context	<b>configure</b> filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers <i>number</i>
Tree	bgp-peers
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## group *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance group configuration
Context	<b>configure</b> filter match-list ipv6-prefix-list <i>string</i> apply-path bgp-peers <i>number</i> group <i>string</i>
Tree	group
String Length	1 to 255

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **neighbor** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Regular expression to match against the base router BGP instance neighbor configuration
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">apply-path</a> <a href="#">bgp-peers</a> <i>number</i> <b>neighbor</b> <i>string</i>
Tree	<a href="#">neighbor</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Target routing instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">apply-path</a> <a href="#">bgp-peers</a> <i>number</i> <b>router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **prefix** [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

### **[ipv6-prefix]** *string*

Synopsis	IPv6 prefix to be added to the prefix list
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

### **prefix-exclude** [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix-exclude</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i> <a href="#">prefix-exclude</a> <i>string</i>
Tree	<a href="#">prefix-exclude</a>
Description	Commands in this context exclude IPv6 prefixes from the prefix match list. This command is mutually exclusive with the <b>apply-path</b> command.
Max. Instances	512
Introduced	16.0.R4



Platforms All

### **[ipv6-prefix]** *string*

Synopsis IPv6 prefix to be added to the prefix list

Context **configure** **filter** **match-list** **ipv6-prefix-list** *string* **prefix-exclude** *string*

Tree [prefix-exclude](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **port-list** [[port-list-name](#)] *string*

Synopsis Enter the **port-list** list instance

Context **configure** **filter** **match-list** **port-list** *string*

Tree [port-list](#)

Max. Instances 5120

Introduced 16.0.R1

Platforms All

### **[port-list-name]** *string*

Synopsis Port list name

Context **configure** **filter** **match-list** **port-list** *string*

Tree [port-list](#)

Description This command specifies the port list name. If special characters are used (#, \$, spaces, and so on), the string must be enclosed within double quotes.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**port** [[value](#)] *number*

Synopsis	Add a list entry for <b>port</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

**[value]** *number*

Synopsis	Port value
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	0 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**range** [start](#) *number* [end](#) *number*

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i> <a href="#">range</a> <a href="#">start</a> <i>number</i> <a href="#">end</a> <i>number</i>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

**start** *number*

Synopsis	Lower bound of the port list range
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Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i> <a href="#">range</a> <a href="#">start</a> <i>number</i> <a href="#">end</a> <i>number</i>
Tree	<a href="#">range</a>
Range	0 to 65534
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of the port list range
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i> <a href="#">range</a> <a href="#">start</a> <i>number</i> <a href="#">end</a> <i>number</i>
Tree	<a href="#">range</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **protocol-list** [[protocol-list-name](#)] *string*

Synopsis	Enter the <b>protocol-list</b> list instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">protocol-list</a> <i>string</i>
Tree	<a href="#">protocol-list</a>
Max. Instances	512
Introduced	20.7.R1
Platforms	All

### [[protocol-list-name](#)] *string*

Synopsis	Protocol list name
Context	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">protocol-list</a> <i>string</i>
Tree	<a href="#">protocol-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.7.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [filter](#) [match-list](#) [protocol-list](#) *string* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 20.7.R1  
 Platforms All

### **protocol** [[protocol-id](#)] (*number* | *keyword*)

Synopsis Add a list entry for **protocol**  
 Context **configure** [filter](#) [match-list](#) [protocol-list](#) *string* **protocol** (*number* | *keyword*)  
 Tree [protocol](#)  
 Max. Instances 32  
 Introduced 20.7.R1  
 Platforms All

### **[protocol-id]** (*number* | *keyword*)

Synopsis IP protocol identifier  
 Context **configure** [filter](#) [match-list](#) [protocol-list](#) *string* **protocol** (*number* | *keyword*)  
 Tree [protocol](#)  
 Range 0 to 255  
 Options icmp, igmp, ip, tcp, egg, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp  
 Notes This element is part of a list key.  
 Introduced 20.7.R1  
 Platforms All

## md-auto-id

Synopsis	Enter the <b>md-auto-id</b> context
Context	<b>configure</b> filter md-auto-id
Tree	md-auto-id
Introduced	16.0.R1
Platforms	All

## filter-id-range

Synopsis	Enable the <b>filter-id-range</b> context
Context	<b>configure</b> filter md-auto-id filter-id-range
Tree	filter-id-range
Introduced	16.0.R1
Platforms	All

## end number

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	<b>configure</b> filter md-auto-id filter-id-range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## start number

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
----------	-----------------------------

Context	<b>configure</b> filter md-auto-id filter-id-range start <i>number</i>
Tree	<a href="#">start</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **redirect-policy** [[redirect-policy-name](#)] *string*

Synopsis	Enter the <b>redirect-policy</b> list instance
Context	<b>configure</b> filter <a href="#">redirect-policy</a> <i>string</i>
Tree	<a href="#">redirect-policy</a>
Introduced	16.0.R1
Platforms	All

### **[redirect-policy-name]** *string*

Synopsis	Redirect policy name
Context	<b>configure</b> filter <a href="#">redirect-policy</a> <i>string</i>
Tree	<a href="#">redirect-policy</a>
Description	This command specifies the redirect policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the redirect policy
Context	<b>configure</b> filter <a href="#">redirect-policy</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [filter](#) [redirect-policy](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **destination** [[destination-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **destination** list instance  
 Context **configure** [filter](#) [redirect-policy](#) *string* [destination](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [destination](#)  
 Introduced 16.0.R1  
 Platforms All

### [[destination-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address and type of destination  
 Context **configure** [filter](#) [redirect-policy](#) *string* [destination](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [destination](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the destination  
 Context **configure** [filter](#) [redirect-policy](#) *string* [destination](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [admin-state](#) *keyword*

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **ping-test**

Synopsis	Enable the <b>ping-test</b> context
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">ping-test</a>
Tree	<a href="#">ping-test</a>
Introduced	16.0.R1
Platforms	All

### **drop-count** *number*

Synopsis	Number of consecutive requests that fail before destination is declared unreachable
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">ping-test drop-count</a> <i>number</i>
Tree	<a href="#">drop-count</a>
Range	1 to 60
Default	3
Introduced	16.0.R1
Platforms	All



### **hold-down** *number*

Synopsis	Time for the system to be held down if this test has marked it unreachable
Context	<b>configure</b> <b>filter</b> <b>redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>ping-test</b> <b>hold-down</b> <i>number</i>
Tree	<b>hold-down</b>
Range	0 to 86400
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Time between consecutive requests which are sent to the far end host
Context	<b>configure</b> <b>filter</b> <b>redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>ping-test</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source address to use in the IP packet of the ping test
Context	<b>configure</b> <b>filter</b> <b>redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>ping-test</b> <b>source-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>source-address</b>
Introduced	16.0.R4
Platforms	All

### **timeout** *number*

Synopsis	Time required to receive a response from the far end host
----------	---

Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>ping-test timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Priority for this destination
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	1 to 255
Default	100
Introduced	16.0.R1
Platforms	All

### **unicast-rt-test**

Synopsis	Enable the <b>unicast-rt-test</b> context
Context	<b>configure filter redirect-policy</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>unicast-rt-test</b>
Tree	<b>unicast-rt-test</b>
Introduced	16.0.R1
Platforms	All

### **notify-dest-change** *boolean*

Synopsis	Send notifications when the active destination changes
Context	<b>configure filter redirect-policy</b> <i>string notify-dest-change</i> <i>boolean</i>
Tree	<b>notify-dest-change</b>
Description	When configured to <b>true</b> , notifications (such as Log and SNMP) are sent when the active destination of a redirect policy changes. No notification is sent when there are no more active destinations (as this scenario is covered by another notification).

When configured to **false**, the notification generation is disabled.

Default	false
Introduced	16.0.R4
Platforms	All

### **router-instance** *string*

Synopsis	Routing context to use for route lookup
Context	<b>configure</b> <a href="#">filter</a> <a href="#">redirect-policy</a> <i>string</i> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R1
Platforms	All

### **sticky-dest** (*number* | *keyword*)

Synopsis	Time required by system before applying the current best destination as active destination
Context	<b>configure</b> <a href="#">filter</a> <a href="#">redirect-policy</a> <i>string</i> <a href="#">sticky-dest</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">sticky-dest</a>
Range	0 to 65535
Units	seconds
Options	no-hold-time-up
Introduced	16.0.R1
Platforms	All

### **redirect-policy-binding** [[binding-name](#)] *string*

Synopsis	Enter the <b>redirect-policy-binding</b> list instance
Context	<b>configure</b> <a href="#">filter</a> <a href="#">redirect-policy-binding</a> <i>string</i>
Tree	<a href="#">redirect-policy-binding</a>
Max. Instances	16
Introduced	16.0.R4
Platforms	All

**[binding-name]** *string*

Synopsis	Binding name
Context	<b>configure</b> filter <a href="#">redirect-policy-binding</a> <i>string</i>
Tree	<a href="#">redirect-policy-binding</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**binding-operator** *keyword*

Synopsis	Logical operator used to obtain the master test result
Context	<b>configure</b> filter <a href="#">redirect-policy-binding</a> <i>string</i> <a href="#">binding-operator</a> <i>keyword</i>
Tree	<a href="#">binding-operator</a>
Description	This command configures the logical operator to use with the destinations' test results to obtain the master test result (the redirect policy binding test result).
Options	and, or
Default	and
Introduced	16.0.R4
Platforms	All

**redirect-policy** [[redirect-policy-name](#)] *reference*

Synopsis	Enter the <b>redirect-policy</b> list instance
Context	<b>configure</b> filter <a href="#">redirect-policy-binding</a> <i>string</i> <a href="#">redirect-policy</a> <i>reference</i>
Tree	<a href="#">redirect-policy</a>
Introduced	16.0.R4
Platforms	All

**[redirect-policy-name]** *reference*

Synopsis	Redirect policy name
Context	<b>configure</b> filter <a href="#">redirect-policy-binding</a> <i>string</i> <a href="#">redirect-policy</a> <i>reference</i>
Tree	<a href="#">redirect-policy</a>
Reference	<b>configure</b> filter <a href="#">redirect-policy</a> <i>string</i>

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **destination** [[destination-address](#)] *reference*

Synopsis	Add a list entry for <b>destination</b>
Context	<b>configure</b> filter <a href="#">redirect-policy-binding</a> <i>string</i> <a href="#">redirect-policy</a> <i>reference</i> <a href="#">destination</a> <i>reference</i>
Tree	<a href="#">destination</a>
Min. Instances	1
Introduced	16.0.R4
Platforms	All

### **[destination-address]** *reference*

Synopsis	IP address of redirect policy destination to binding
Context	<b>configure</b> filter <a href="#">redirect-policy-binding</a> <i>string</i> <a href="#">redirect-policy</a> <i>reference</i> <a href="#">destination</a> <i>reference</i>
Tree	<a href="#">destination</a>
Reference	<b>configure</b> filter <a href="#">redirect-policy</a> <i>string</i> <a href="#">destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **system-filter**

Synopsis	Enter the <b>system-filter</b> context
Context	<b>configure</b> filter <a href="#">system-filter</a>
Tree	<a href="#">system-filter</a>
Introduced	16.0.R1
Platforms	All

**ip [ip-filter] reference**

Synopsis	Add a list entry for <b>ip</b>
Context	<b>configure filter system-filter ip reference</b>
Tree	<a href="#">ip</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[ip-filter] reference**

Synopsis	Active IPv4 system filter policy
Context	<b>configure filter system-filter ip reference</b>
Tree	<a href="#">ip</a>
Reference	<b>configure filter ip-filter string</b>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

**ipv6 [ipv6-filter] reference**

Synopsis	Add a list entry for <b>ipv6</b>
Context	<b>configure filter system-filter ipv6 reference</b>
Tree	<a href="#">ipv6</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[ipv6-filter] reference**

Synopsis	Active IPv6 system filter policy
Context	<b>configure filter system-filter ipv6 reference</b>
Tree	<a href="#">ipv6</a>
Reference	<b>configure filter ipv6-filter string</b>

Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

### 3.18 fwd-path-ext commands

```

configure
- fwd-path-ext
- apply-groups reference
- apply-groups-exclude reference
- fpe number
- application
- pw-port-extension
- interface-a
- qos
- network-policy reference
- interface-b
- qos
- network-policy reference
- srv6
- interface-a
- qos
- network-policy reference
- interface-b
- mtu number
- qos
- network-policy reference
- type keyword
- sub-mgmt-extension boolean
- vxlan
- router-instance string
- apply-groups reference
- apply-groups-exclude reference
- description string
- multi-path
- path number
- apply-groups reference
- apply-groups-exclude reference
- pxc reference
- xc-lag-a reference
- xc-lag-b reference
- path
- pxc reference
- xc-lag-a reference
- xc-lag-b reference
- sdp-id-range
- apply-groups reference
- apply-groups-exclude reference
- end number
- start number

```



### 3.18.1 fwd-path-ext command descriptions

#### fwd-path-ext

Synopsis	Enter the <b>fwd-path-ext</b> context
Context	<b>configure fwd-path-ext</b>
Tree	<a href="#">fwd-path-ext</a>
Description	Commands in this context configure a Forwarding Path Extension (FPE). Some applications that rely on PXC functionality utilize FPE to simplify the configuration of these applications.
Introduced	16.0.R1
Platforms	All

#### fpe [[fpe-id](#)] *number*

Synopsis	Enter the <b>fpe</b> list instance
Context	<b>configure fwd-path-ext fpe <i>number</i></b>
Tree	<a href="#">fpe</a>
Description	Commands in this context configure the Forwarding Path Extension (FPE), which associates an application with a PXC (a paired set of PXC sub-ports or a paired set of PXC-based LAGs).
Introduced	16.0.R1
Platforms	All

#### [\[fpe-id\]](#) *number*

Synopsis	FPE ID
Context	<b>configure fwd-path-ext fpe <i>number</i></b>
Tree	<a href="#">fpe</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## application

Synopsis	Enter the <b>application</b> context
Context	<b>configure fwd-path-ext fpe number application</b>
Tree	<a href="#">application</a>
Description	Commands in this context configure the attributes of the FPE application.
Introduced	16.0.R1
Platforms	All

## pw-port-extension

Synopsis	Enable the <b>pw-port-extension</b> context
Context	<b>configure fwd-path-ext fpe number application pw-port-extension</b>
Tree	<a href="#">pw-port-extension</a>
Description	<p>Commands in this context configure the type of the cross-connect required to terminate an external tunnel to an anchored PW port. The system automatically builds the internal infrastructure required to perform the tunnel termination on a PW port.</p> <p>PW ports support the following types of tunnels:</p> <ul style="list-style-type: none"> <li>• GRE/MPLS PW with SDP of type MPLS or GRE</li> <li>• L2oGRE bridged Ethernet over GRE, where GRE protocol number is 0x6558</li> </ul>
Introduced	22.2.R1
Platforms	All

## interface-a

Synopsis	Enter the <b>interface-a</b> context
Context	<b>configure fwd-path-ext fpe number application pw-port-extension interface-a</b>
Tree	<a href="#">interface-a</a>
Description	Commands in this context configure the command options for network interface-a of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure fwd-path-ext fpe number application pw-port-extension interface-a qos</b>

Tree	<a href="#">qos</a>
Introduced	22.10.R1
Platforms	All

### **network-policy** *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	<b>configure</b> <a href="#">fwd-path-ext fpe number application pw-port-extension interface-a qos network-policy reference</a>
Tree	<a href="#">network-policy</a>
Reference	<b>configure</b> <a href="#">qos network string</a>
Introduced	22.10.R1
Platforms	All

### **interface-b**

Synopsis	Enter the <b>interface-b</b> context
Context	<b>configure</b> <a href="#">fwd-path-ext fpe number application pw-port-extension interface-b</a>
Tree	<a href="#">interface-b</a>
Description	Commands in this context configure command options for network interface-b of the PW port extension FPE.
Introduced	22.10.R1
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">fwd-path-ext fpe number application pw-port-extension interface-b qos</a>
Tree	<a href="#">qos</a>
Introduced	22.10.R1
Platforms	All

### **network-policy** *reference*

Synopsis	Network QoS policy applied to the FPE interface
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Context	<b>configure fwd-path-ext fpe number application pw-port-extension interface-b qos network-policy reference</b>
Tree	<a href="#">network-policy</a>
Reference	<b>configure qos network string</b>
Introduced	22.10.R1
Platforms	All

## srv6

Synopsis	Enable the <b>srv6</b> context
Context	<b>configure fwd-path-ext fpe number application srv6</b>
Tree	<a href="#">srv6</a>
Description	Commands in this context configure the SRv6 FPE application used for origination or termination of SRv6 tunnels.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## interface-a

Synopsis	Enter the <b>interface-a</b> context
Context	<b>configure fwd-path-ext fpe number application srv6 interface-a</b>
Tree	<a href="#">interface-a</a>
Description	Commands in this context configure the parameters of network interface-a of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure fwd-path-ext fpe number application srv6 interface-a qos</b>
Tree	<a href="#">qos</a>
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**network-policy** *reference*

Synopsis	Network QoS policy applied to the FPE interface
Context	<b>configure fwd-path-ext fpe number application srv6 interface-a qos network-policy reference</b>
Tree	<a href="#">network-policy</a>
Reference	<b>configure qos network string</b>
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**interface-b**

Synopsis	Enter the <b>interface-b</b> context
Context	<b>configure fwd-path-ext fpe number application srv6 interface-b</b>
Tree	<a href="#">interface-b</a>
Description	Commands in this context configure the parameters of network interface-b of the SRv6 FPE.
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**mtu** *number*

Synopsis	MTU size of SRv6 origination FPE interface-b
Context	<b>configure fwd-path-ext fpe number application srv6 interface-b mtu number</b>
Tree	<a href="#">mtu</a>
Description	<p>This command configures the Maximum Transfer Unit (MTU) of interface-b of the SRv6 origination FPE.</p> <p>The MTU is used to check if an IPv4 service packet should be fragmented and if an IPv6 service packet should be dropped when tunneled over SRv6.</p> <p>The minimum value is the IPv6 minimum MTU value. The maximum value is set to the maximum Ethernet port MTU (9800) minus 14 bytes for Null Ethernet encapsulation.</p>
Range	0   1280 to 9786
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure fwd-path-ext fpe number application srv6 interface-b qos</b>
Tree	<a href="#">qos</a>
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**network-policy reference**

Synopsis	Network QoS policy applied to the FPE interface
Context	<b>configure fwd-path-ext fpe number application srv6 interface-b qos network-policy reference</b>
Tree	<a href="#">network-policy</a>
Reference	<b>configure qos network string</b>
Introduced	21.5.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**type keyword**

Synopsis	SRv6 FPE application type
Context	<b>configure fwd-path-ext fpe number application srv6 type keyword</b>
Tree	<a href="#">type</a>
Description	<p>This command specifies if the SRv6 FPE application is used for origination or termination of SRv6 tunnels.</p> <p>A dedicated SRv6 FPE is required for origination and termination of SRv6 tunnels on services and they cannot share the same FPE.</p> <p>A single FPE can be configured for SRv6 origination. One or more FPEs can be configured for SRv6 termination, where a termination SRv6 FPE is assigned one or more configured locators.</p> <p>Transit SRv6 routers do not require SRv6 FPEs.</p>
Options	origination, termination
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**sub-mgmt-extension** *boolean*

Synopsis	Enable FPE for subscriber management extensions
Context	<b>configure fwd-path-ext fpe number application sub-mgmt-extension boolean</b>
Tree	<a href="#">sub-mgmt-extension</a>
Description	When configured to <b>true</b> , the FPE is used for subscriber management extensions. The FPE can be used for multiple subscriber management applications, but it cannot be used for other applications.  When configured to <b>false</b> , the FPE is not used for subscriber management extensions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vxlan**

Synopsis	Enable the <b>vxlan</b> context
Context	<b>configure fwd-path-ext fpe number application vxlan</b>
Tree	<a href="#">vxlan</a>
Introduced	22.2.R1
Platforms	All

**router-instance** *string*

Synopsis	Router instance for VXLAN termination
Context	<b>configure fwd-path-ext fpe number application vxlan router-instance string</b>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	22.2.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure fwd-path-ext fpe number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

## multi-path

Synopsis	Enable the <b>multi-path</b> context
Context	<b>configure fwd-path-ext fpe number multi-path</b>
Tree	<a href="#">multi-path</a>
Description	Commands in this context configure a multipath FPE that can contain multiple PXC ports or LAGs of PXC ports.
Notes	The following elements are part of a choice: <b>multi-path</b> or <b>path</b> .
Introduced	21.10.R1
Platforms	All

## path [path-id] number

Synopsis	Enter the <b>path</b> list instance
Context	<b>configure fwd-path-ext fpe number multi-path path number</b>
Tree	<a href="#">path</a>
Description	Commands in this context configure a multipath FPE forwarding path. A single path in a multipath FPE can contain a single PXC port or a LAG of PXC ports.
Introduced	21.10.R1
Platforms	All

## [path-id] number

Synopsis	Multipath FPE forwarding path ID
Context	<b>configure fwd-path-ext fpe number multi-path path number</b>
Tree	<a href="#">path</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All



### **pxc reference**

Synopsis	Dedicated PXC ID used by the FPE path
Context	<b>configure fwd-path-ext fpe number multi-path path number pxc reference</b>
Tree	<a href="#">pxc</a>
Reference	<b>configure port-xc pxc number</b>
Notes	The following elements are part of a choice: <b>pxc</b> or ( <b>xc-lag-a</b> and <b>xc-lag-b</b> ).
Introduced	21.10.R1
Platforms	All

### **xc-lag-a reference**

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	<b>configure fwd-path-ext fpe number multi-path path number xc-lag-a reference</b>
Tree	<a href="#">xc-lag-a</a>
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate <b>xc-lag-a</b> with the LAG containing either supports.a or supports.b. The system does not enforce a match between <b>xc-lag-a</b> and the LAG ID containing supports.a.
Reference	<b>configure lag string</b>
Notes	The following elements are part of a choice: <b>pxc</b> or ( <b>xc-lag-a</b> and <b>xc-lag-b</b> ).
Introduced	21.10.R1
Platforms	All

### **xc-lag-b reference**

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	<b>configure fwd-path-ext fpe number multi-path path number xc-lag-b reference</b>
Tree	<a href="#">xc-lag-b</a>
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate <b>xc-lag-b</b> with the LAG containing either supports.a or supports.b. The system does not enforce a match between <b>xc-lag-b</b> and the LAG ID containing supports.b.
Reference	<b>configure lag string</b>
Notes	The following elements are part of a choice: <b>pxc</b> or ( <b>xc-lag-a</b> and <b>xc-lag-b</b> ).
Introduced	21.10.R1

Platforms All

## path

Synopsis Enter the **path** context

Context **configure fwd-path-ext fpe number path**

Tree [path](#)

Notes The following elements are part of a choice: **multi-path** or **path**.

Introduced 16.0.R1

Platforms All

## pxc reference

Synopsis Dedicated PXC ID used by the FPE path

Context **configure fwd-path-ext fpe number path pxc reference**

Tree [pxc](#)

Reference **configure port-xc pxc number**

Notes The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).

Introduced 16.0.R1

Platforms All

## xc-lag-a reference

Synopsis PXC LAG identifier dedicated to the FPE path

Context **configure fwd-path-ext fpe number path xc-lag-a reference**

Tree [xc-lag-a](#)

Description This command specifies the LAG identifier associated with one side of the PXC. The operator can associate **xc-lag-a** with the LAG containing either supports.a or supports.b. The system does not enforce a match between **xc-lag-a** and the LAG ID containing supports.a.

Reference **configure lag string**

Notes The following elements are part of a choice: **pxc** or (**xc-lag-a** and **xc-lag-b**).

Introduced 16.0.R4

Platforms All

## **xc-lag-b** reference

Synopsis	PXC LAG identifier dedicated to the FPE path
Context	<b>configure fwd-path-ext fpe number path xc-lag-b reference</b>
Tree	<a href="#">xc-lag-b</a>
Description	This command specifies the LAG identifier associated with one side of the PXC. The operator can associate <b>xc-lag-b</b> with the LAG containing either subports.a or subports.b. The system does not enforce a match between <b>xc-lag-b</b> and the LAG ID containing subports.b.
Reference	<b>configure lag string</b>
Notes	The following elements are part of a choice: <b>pxc</b> or ( <b>xc-lag-a</b> and <b>xc-lag-b</b> ).
Introduced	16.0.R4
Platforms	All

## **sdp-id-range**

Synopsis	Enable the <b>sdp-id-range</b> context
Context	<b>configure fwd-path-ext sdp-id-range</b>
Tree	<a href="#">sdp-id-range</a>
Description	<p>Commands in this context configure the SDP ID range used by the FPE based PW port and VXLAN termination applications.</p> <p>Each configured FPE-based PW port is associated with two internal SDPs (one in each direction) whose IDs are allocated from the configured SDP ID range. When the FPE is associated with VXLAN termination, an internal SDP is allocated from the configured SDP ID range and is used for R-VPLS services that terminate VXLAN IPv6. A spoke SDP per VXLAN IPv6 R-VPLS service is created on that SDP for egress processing of the packets. The SDP ID range cannot be modified if any of its IDs are currently in use.</p>
Introduced	16.0.R1
Platforms	All

## **end number**

Synopsis	Upper bound of the SDP ID range
Context	<b>configure fwd-path-ext sdp-id-range end number</b>
Tree	<a href="#">end</a>
Range	1 to 32767
Notes	This element is mandatory.
Introduced	16.0.R1

---

Platforms All

### **start number**

Synopsis Lower bound of the SDP ID range

Context **configure fwd-path-ext sdp-id-range start number**

Tree [start](#)

Range 1 to 32767

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## 3.19 group-encryption commands

```
configure
- group-encryption
  - apply-groups reference
  - apply-groups-exclude reference
  - encryption-keygroup number
    - active-outbound-security-association reference
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-algorithm keyword
    - description string
    - encryption-algorithm keyword
    - keygroup-name string
    - security-association number
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
  - group-encryption-label number
```

### 3.19.1 group-encryption command descriptions

#### group-encryption

Synopsis	Enter the <b>group-encryption</b> context
Context	<b>configure</b> <a href="#">group-encryption</a>
Tree	<a href="#">group-encryption</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### encryption-keygroup [id] number

Synopsis	Enter the <b>encryption-keygroup</b> list instance
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>
Tree	<a href="#">encryption-keygroup</a>
Max. Instances	127
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### [id] number

Synopsis	Encryption key group ID
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>
Tree	<a href="#">encryption-keygroup</a>
Range	1 to 127
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### active-outbound-security-association *reference*

Synopsis	SPI to use for egressing packets for the key group
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">active-outbound-security-association</a> <i>reference</i>

Tree	<a href="#">active-outbound-security-association</a>
Reference	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">security-association</a> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-algorithm** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Hashing algorithm used for the authentication function
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">authentication-algorithm</a> <i>keyword</i>
Tree	<a href="#">authentication-algorithm</a>
Options	sha256, sha512
Default	sha256
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encryption-algorithm** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm for encryption on ESP
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">encryption-algorithm</a> <i>keyword</i>

Tree	<a href="#">encryption-algorithm</a>
Options	aes128, aes256
Default	aes128
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keygroup-name** *string*

Synopsis	Key group name
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">keygroup-name</a> <i>string</i>
Tree	<a href="#">keygroup-name</a>
String Length	0 to 64
Default	
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **security-association** [[security-parameter-index](#)] *number*

Synopsis	Enter the <b>security-association</b> list instance
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">security-association</a> <i>number</i>
Tree	<a href="#">security-association</a>
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[security-parameter-index]** *number*

Synopsis	Security Parameter Index (SPI)
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">security-association</a> <i>number</i>
Tree	<a href="#">security-association</a>
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## authentication-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">security-association</a> <i>number</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 115
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i> <a href="#">security-association</a> <i>number</i> <a href="#">encryption-key</a> <i>string</i>
Tree	<a href="#">encryption-key</a>
String Length	1 to 71
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## group-encryption-label *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Network-wide unique MPLS label for group encryption
Context	<b>configure</b> <a href="#">group-encryption</a> <a href="#">group-encryption-label</a> <i>number</i>

Tree	<a href="#">group-encryption-label</a>
Range	32 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.20 ipsec commands

```

configure
- ipsec
  - apply-groups reference
  - apply-groups-exclude reference
  - cert-profile string
    - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - entry number
    - apply-groups reference
    - apply-groups-exclude reference
    - cert string
    - compare-chain-include reference
    - key string
    - rsa-signature keyword
    - send-chain
      - ca-profile reference
  - client-db string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - client number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - client-name string
      - credential
        - pre-shared-key string
      - identification
      - idi
        - any boolean
        - fqdn string
        - fqdn-suffix string
        - ipv4-prefix string
        - ipv4-prefix-any boolean
        - ipv6-prefix string
        - ipv6-prefix-any boolean
        - rfc822 string
        - rfc822-suffix string
      - peer-ip-prefix
        - ip-prefix (ipv4-prefix | ipv6-prefix)
        - ipv4-only boolean
        - ipv6-only boolean
      - private-interface string
      - private-service-name string
      - ts-list string
      - tunnel-template number
    - description string
    - match-list
      - idi boolean
      - peer-ip-prefix boolean
  - ike-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - dpd
      - interval number
      - max-retries number
      - reply-only boolean

```

## configure ipsec ike-policy ike-transform

- **ike-transform** *reference*
- **ike-version-1**
  - **auth-method** *keyword*
  - **ike-mode** *keyword*
  - **own-auth-method** *keyword*
  - **ph1-responder-delete-notify** *boolean*
- **ike-version-2**
  - **auth-method** *keyword*
  - **auto-eap-method** *keyword*
  - **ikev2-fragment**
    - **mtu** *number*
    - **reassembly-timeout** *number*
  - **own-auth-method** *keyword*
  - **own-auto-eap-method** *keyword*
  - **send-idr-after-eap-success** *boolean*
- **ipsec-lifetime** *number*
- **limit-init-exchange**
  - **admin-state** *keyword*
  - **reduced-max-exchange-timeout** (*number* | *keyword*)
- **lockout**
  - **block** (*number* | *keyword*)
  - **duration** *number*
  - **failed-attempts** *number*
  - **max-port-per-ip** *number*
- **match-peer-id-to-cert** *boolean*
- **nat-traversal**
  - **force** *boolean*
  - **force-keep-alive** *boolean*
  - **keep-alive-interval** *number*
- **pfs**
  - **dh-group** *keyword*
- **relay-unsolicited-cfg-attribute**
  - **internal-ip4-address** *boolean*
  - **internal-ip4-dns** *boolean*
  - **internal-ip4-netmask** *boolean*
  - **internal-ip6-address** *boolean*
  - **internal-ip6-dns** *boolean*
- **ike-transform** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dh-group** *keyword*
  - **ike-auth-algorithm** *keyword*
  - **ike-encryption-algorithm** *keyword*
  - **ike-prf-algorithm** *keyword*
  - **isakmp-lifetime** *number*
- **ipsec-transform** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **esp-auth-algorithm** *keyword*
  - **esp-encryption-algorithm** *keyword*
  - **extended-sequence-number** *boolean*
  - **ipsec-lifetime** *number*
  - **pfs-dh-group** *keyword*
- **ipsec-transport-mode-profile** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **key-exchange**
    - **dynamic**
      - **auto-establish** *boolean*
      - **cert**
        - **cert-profile** *reference*
        - **status-verify**
        - **default-result** *keyword*

configure ipsec ipsec-transport-mode-profile key-exchange dynamic cert status-verify primary

```

    - primary keyword
    - secondary keyword
    - trust-anchor-profile reference
  - id
    - fqdn string
    - ipv4 string
    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - max-history-key-records
    - esp number
    - ike number
  - replay-window number
- radius
  - accounting-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - include-radius-attribute
    - acct-stats boolean
    - called-station-id boolean
    - calling-station-id boolean
    - framed-ip-addr boolean
    - framed-ipv6-prefix boolean
    - nas-identifier boolean
    - nas-ip-addr boolean
    - nas-port-id boolean
  - radius-server-policy reference
  - update-interval
    - jitter number
    - value number
  - authentication-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - include-radius-attribute
    - called-station-id boolean
    - calling-station-id boolean
    - client-cert-subject-key-id boolean
    - nas-identifier boolean
    - nas-ip-addr boolean
    - nas-port-id boolean
  - password string
  - radius-server-policy reference
- show-ipsec-keys boolean
- static-sa string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - algorithm keyword
    - key string
  - description string
  - direction keyword
  - protocol keyword
  - spi number
- trust-anchor-profile string
  - apply-groups reference
  - apply-groups-exclude reference
  - trust-anchor reference
- ts-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - local
    - entry number
    - address

```

configure ipsec ts-list local entry address prefix

```

- prefix (ipv4-prefix | ipv6-prefix)
- range
  - begin (ipv4-address-no-zone | ipv6-address-no-zone)
  - end (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- protocol
  - any
  - id
    - icmp
      - opaque
      - port-range
        - begin-icmp-code number
        - begin-icmp-type number
        - end-icmp-code number
        - end-icmp-type number
      - icmp6
        - opaque
        - port-range
          - begin-icmp-code number
          - begin-icmp-type number
          - end-icmp-code number
          - end-icmp-type number
    - mipv6
      - opaque
      - port-range
        - begin number
        - end number
    - protocol-id-with-any-port (keyword | number)
  - sctp
    - opaque
    - port-range
      - begin number
      - end number
  - tcp
    - opaque
    - port-range
      - begin number
      - end number
  - udp
    - opaque
    - port-range
      - begin number
      - end number
- remote
  - entry number
    - address
      - prefix (ipv4-prefix | ipv6-prefix)
      - range
        - begin (ipv4-address-no-zone | ipv6-address-no-zone)
        - end (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - protocol
      - any
      - id
        - icmp
          - opaque
          - port-range
            - begin-icmp-code number
            - begin-icmp-type number
            - end-icmp-code number
            - end-icmp-type number
          - icmp6

```

configure ipsec ts-list remote entry protocol id icmp6 opaque

- **opaque**
- **port-range**
  - **begin-icmp-code** *number*
  - **begin-icmp-type** *number*
  - **end-icmp-code** *number*
  - **end-icmp-type** *number*
- **mipv6**
  - **opaque**
  - **port-range**
    - **begin** *number*
    - **end** *number*
- **protocol-id-with-any-port** (*keyword* | *number*)
- **sctp**
  - **opaque**
  - **port-range**
    - **begin** *number*
    - **end** *number*
- **tcp**
  - **opaque**
  - **port-range**
    - **begin** *number*
    - **end** *number*
- **udp**
  - **opaque**
  - **port-range**
    - **begin** *number*
    - **end** *number*
- **tunnel-template** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **clear-df-bit** *boolean*
  - **copy-traffic-class-upon-decapsulation** *boolean*
  - **description** *string*
  - **encapsulated-ip-mtu** *number*
  - **icmp-generation**
    - **frag-required**
      - **admin-state** *keyword*
      - **interval** *number*
      - **message-count** *number*
  - **icmp6-generation**
    - **pkt-too-big**
      - **admin-state** *keyword*
      - **interval** *number*
      - **message-count** *number*
  - **ignore-default-route** *boolean*
  - **ip-mtu** *number*
  - **ipsec-transform** *reference*
  - **pmtu-discovery-aging** *number*
  - **private-tcp-mss-adjust** *number*
  - **propagate-pmtu-v4** *boolean*
  - **propagate-pmtu-v6** *boolean*
  - **public-tcp-mss-adjust** (*number* | *keyword*)
  - **replay-window** *number*
  - **sp-reverse-route** *keyword*

### 3.20.1 ipsec command descriptions

#### ipsec

Synopsis	Enter the <b>ipsec</b> context
Context	<b>configure ipsec</b>
Tree	<a href="#">ipsec</a>
Description	Commands in this context configure Internet Protocol Security (IPsec) commands.
Introduced	16.0.R4
Platforms	All

#### cert-profile [[name](#)] *string*

Synopsis	Enter the <b>cert-profile</b> list instance
Context	<b>configure ipsec cert-profile <i>string</i></b>
Tree	<a href="#">cert-profile</a>
Description	Commands in this context configure the certificate profile.
Max. Instances	10200
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### [\[name\]](#) *string*

Synopsis	Certificate profile name
Context	<b>configure ipsec cert-profile <i>string</i></b>
Tree	<a href="#">cert-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### admin-state *keyword*

Synopsis	Administrative state of the certificate profile
----------	---



Context	<b>configure ipsec cert-profile</b> <i>string admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure ipsec cert-profile</b> <i>string entry number</i>
Tree	<b>entry</b>
Description	Commands in this context configure the certificate profile entry.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	Certificate profile entry ID
Context	<b>configure ipsec cert-profile</b> <i>string entry number</i>
Tree	<b>entry</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cert** *string*

Synopsis	File name of the imported certificate for the entry
Context	<b>configure ipsec cert-profile</b> <i>string entry number cert string</i>
Tree	<b>cert</b>
String Length	1 to 95
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **compare-chain-include** *reference*

Synopsis CA profile to include in the compare-chain

Context **configure ipsec cert-profile** *string entry number compare-chain-include reference*

Tree [compare-chain-include](#)

Description This command specifies the Certificate Authority (CA) that needs to be included in the compare-chain for the entry. This configuration is required in instances where the configured root CA is cross-signed by another CA.

Reference **configure system security pki ca-profile** *string*

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **key** *string*

Synopsis File name of the imported key used for authentication

Context **configure ipsec cert-profile** *string entry number key string*

Tree [key](#)

String Length 1 to 95

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rsa-signature** *keyword*

Synopsis Signature scheme for the RSA key

Context **configure ipsec cert-profile** *string entry number rsa-signature keyword*

Tree [rsa-signature](#)

Options pkcs1, pss

Default pkcs1

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **send-chain**

Synopsis Enter the **send-chain** context

Context	<b>configure ipsec cert-profile</b> <i>string entry number send-chain</i>
Tree	<a href="#">send-chain</a>
Description	Commands in this context allow the system to send additional CA certificates to the peer. These additional CA certificates must be in the certificate chain of the certificate specified by the <b>cert</b> command in the same entry.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ca-profile** *reference*

Synopsis	CA certificate to send to the peer
Context	<b>configure ipsec cert-profile</b> <i>string entry number send-chain ca-profile reference</i>
Tree	<a href="#">ca-profile</a>
Reference	<b>configure system security pki ca-profile</b> <i>string</i>
Max. Instances	7
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **client-db** [*name*] *string*

Synopsis	Enter the <b>client-db</b> list instance
Context	<b>configure ipsec client-db</b> <i>string</i>
Tree	<a href="#">client-db</a>
Max. Instances	1000
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	IPsec client database name
Context	<b>configure ipsec client-db</b> <i>string</i>
Tree	<a href="#">client-db</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the client database
Context	<b>configure ipsec client-db</b> <i>string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**client** [[id](#)] *number*

Synopsis	Enter the <b>client</b> list instance
Context	<b>configure ipsec client-db</b> <i>string client number</i>
Tree	<a href="#">client</a>
Description	Commands in this context configure the IPsec client entry in the client database.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	Client ID
Context	<b>configure ipsec client-db</b> <i>string client number</i>
Tree	<a href="#">client</a>
Range	1 to 8000
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the database client
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Context	<b>configure ipsec client-db</b> <i>string client number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### client-name *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Client name
Context	<b>configure ipsec client-db</b> <i>string client number client-name string</i>
Tree	<a href="#">client-name</a>
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### credential



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>credential</b> context
Context	<b>configure ipsec client-db</b> <i>string client number credential</i>
Tree	<a href="#">credential</a>
Description	Commands in this context authenticate peers.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key used to authenticate peers
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">credential</a> <b>pre-shared-key</b> <i>string</i>
Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## identification

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>identification</b> context
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <b>identification</b>
Tree	<a href="#">identification</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## idi

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>idi</b> context
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <b>idi</b>
Tree	<a href="#">idi</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**any boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any IDi value as a match
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <i>any boolean</i>
Tree	<a href="#">any</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fqdn string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the match criteria for the IDi
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <i>fqdn string</i>
Tree	<a href="#">fqdn</a>
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fqdn-suffix string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN suffix used as the match criteria for the IDi
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <i>fqdn-suffix string</i>
Tree	<a href="#">fqdn-suffix</a>
String Length	0 to 255

Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv4-prefix *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 prefix used as the match criteria for the IDi
Context	<b>configure ipsec client-db string client number identification idi ipv4-prefix string</b>
Tree	<a href="#">ipv4-prefix</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv4-prefix-any *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 prefix as a match for the IDi
Context	<b>configure ipsec client-db string client number identification idi ipv4-prefix-any boolean</b>
Tree	<a href="#">ipv4-prefix-any</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## ipv6-prefix *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 prefix used as the match criteria for the IDi
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <a href="#">ipv6-prefix</a> <i>string</i>
Tree	<a href="#">ipv6-prefix</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6-prefix-any *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv6 prefix as a match for the IDi
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <a href="#">ipv6-prefix-any</a> <i>boolean</i>
Tree	<a href="#">ipv6-prefix-any</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rfc822 *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Email address (RFC 822) used as match criteria for IDi
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <a href="#">rfc822</a> <i>string</i>
Tree	<a href="#">rfc822</a>
String Length	0 to 255

Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rfc822-suffix** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Email address domain (RFC 822) as IDi match criteria
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">idi</a> <b>rfc822-suffix</b> <i>string</i>
Tree	<a href="#">rfc822-suffix</a>
String Length	0 to 255
Notes	The following elements are part of a mandatory choice: <b>any</b> , <b>fqdn</b> , <b>fqdn-suffix</b> , <b>ipv4-prefix</b> , <b>ipv4-prefix-any</b> , <b>ipv6-prefix</b> , <b>ipv6-prefix-any</b> , <b>rfc822</b> , or <b>rfc822-suffix</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-ip-prefix**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>peer-ip-prefix</b> context
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <b>peer-ip-prefix</b>
Tree	<a href="#">peer-ip-prefix</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-prefix** (*ipv4-prefix* | *ipv6-prefix*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP prefix used as the match criteria
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">peer-ip-prefix</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">ip-prefix</a>
Notes	The following elements are part of a mandatory choice: <b>ip-prefix</b> , <b>ipv4-only</b> , or <b>ipv6-only</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv4-only *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv4 address as a match
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">peer-ip-prefix</a> <a href="#">ipv4-only</a> <i>boolean</i>
Tree	<a href="#">ipv4-only</a>
Notes	The following elements are part of a mandatory choice: <b>ip-prefix</b> , <b>ipv4-only</b> , or <b>ipv6-only</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv6-only *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept any valid IPv6 address as a match
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <a href="#">identification</a> <a href="#">peer-ip-prefix</a> <a href="#">ipv6-only</a> <i>boolean</i>
Tree	<a href="#">ipv6-only</a>
Notes	The following elements are part of a mandatory choice: <b>ip-prefix</b> , <b>ipv4-only</b> , or <b>ipv6-only</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**private-interface** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private interface name used for tunnel setup
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <b>private-interface</b> <i>string</i>
Tree	<a href="#">private-interface</a>
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**private-service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the private service used for tunnel setup
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <b>private-service-name</b> <i>string</i>
Tree	<a href="#">private-service-name</a>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ts-list** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Traffic selector list used by the tunnel
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">client</a> <i>number</i> <b>ts-list</b> <i>string</i>
Tree	<a href="#">ts-list</a>
String Length	1 to 32
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-template** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Tunnel template ID

Context **configure ipsec client-db string client number tunnel-template number**

Tree [tunnel-template](#)

Range 1 to 2048

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure ipsec client-db string description string**

Tree [description](#)

String Length 1 to 80

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **match-list**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **match-list** context

Context **configure ipsec client-db string match-list**

Tree [match-list](#)

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**idi** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use IDi type in the IPsec client matching process
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">match-list</a> <b>idi</b> <i>boolean</i>
Tree	<a href="#">idi</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-ip-prefix** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the peer tunnel IP address in the matching process
Context	<b>configure</b> <a href="#">ipsec client-db</a> <i>string</i> <a href="#">match-list</a> <b>peer-ip-prefix</b> <i>boolean</i>
Tree	<a href="#">peer-ip-prefix</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ike-policy** [[id](#)] *number*

Synopsis	Enter the <b>ike-policy</b> list instance
Context	<b>configure</b> <a href="#">ipsec</a> <b>ike-policy</b> <i>number</i>
Tree	<a href="#">ike-policy</a>
Description	Commands in this context configure an Internet Key Exchange (IKE) policy.
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	IKE policy ID
Context	<b>configure ipsec ike-policy number</b>
Tree	<a href="#">ike-policy</a>
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure ipsec ike-policy number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dpd**

Synopsis	Enable the <b>dpd</b> context
Context	<b>configure ipsec ike-policy number dpd</b>
Tree	<a href="#">dpd</a>
Description	Commands in this context configure the dead peer detection mechanism.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interval number**

Synopsis	DPD interval
Context	<b>configure ipsec ike-policy number dpd interval number</b>
Tree	<a href="#">interval</a>
Description	This command specifies the DPD interval.

Because more time is necessary to determine if there is incoming traffic, the actual time needed to bring down the tunnel is larger than the DPD interval multiplied by the value configured for maximum retry attempts.

Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-retries** *number*

Synopsis	Maximum number of retries before the tunnel is removed
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">dpd max-retries</a> <i>number</i>
Tree	<a href="#">max-retries</a>
Range	2 to 5
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reply-only** *boolean*

Synopsis	Initiate DPD request for incoming ESP or IKE packets
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">dpd reply-only</a> <i>boolean</i>
Tree	<a href="#">reply-only</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-transform** *reference*

Synopsis	IKE transform instance associated with the IKE policy
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-transform</a> <i>reference</i>
Tree	<a href="#">ike-transform</a>
Description	This command specifies the IKE transform instance associated with the IKE policy. If multiple IDs are specified, the system selects an IKE transform based on the proposal of the peer. If the system is a tunnel initiator, it uses the configured IKE transform to generate the SA payload.



Reference	<b>configure ipsec ike-transform</b> <i>number</i>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ike-version-1

Synopsis	Enter the <b>ike-version-1</b> context
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>ike-version-1</b>
Tree	<a href="#">ike-version-1</a>
Description	Commands in this context configure the IKE version 1 mode of operation that the IKE policy uses.
Notes	The following elements are part of a choice: <b>ike-version-1</b> or <b>ike-version-2</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## auth-method *keyword*

Synopsis	Authentication method used with the IKE policy
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>ike-version-1</b> <b>auth-method</b> <i>keyword</i>
Tree	<a href="#">auth-method</a>
Options	psk, plain-psk-xauth
Default	psk
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ike-mode *keyword*

Synopsis	Mode of operation
Context	<b>configure ipsec ike-policy</b> <i>number</i> <b>ike-version-1</b> <b>ike-mode</b> <i>keyword</i>
Tree	<a href="#">ike-mode</a>
Options	main, aggressive
Default	main
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **own-auth-method** *keyword*

Synopsis Authentication method used with policy on its own side

Context **configure** [ipsec ike-policy](#) *number* [ike-version-1](#) **own-auth-method** *keyword*

Tree [own-auth-method](#)

Options symmetric

Default symmetric

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ph1-responder-delete-notify** *boolean*

Synopsis Send delete notification for IKEv1 phase 1 removal

Context **configure** [ipsec ike-policy](#) *number* [ike-version-1](#) **ph1-responder-delete-notify** *boolean*

Tree [ph1-responder-delete-notify](#)

Description When configured to **true**, a delete notification is sent to the peer when deleting an IKEv1 phase 1 SA for which it was the responder.  
When configured to **false**, no notification is sent.

Default true

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-version-2**

Synopsis Enable the **ike-version-2** context

Context **configure** [ipsec ike-policy](#) *number* [ike-version-2](#)

Tree [ike-version-2](#)

Description Commands in this context configure the IKE version 2 mode of operation that the IKE policy uses.

Notes The following elements are part of a choice: **ike-version-1** or **ike-version-2**.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **auth-method** *keyword*

Synopsis	Authentication method used with the IKE policy
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <b>auth-method</b> <i>keyword</i>
Tree	<a href="#">auth-method</a>
Options	psk, cert, psk-radius, cert-radius, eap, auto-eap-radius, auto-eap
Default	psk
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **auto-eap-method** *keyword*

Synopsis	Authentication method used for the remote peer
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <b>auto-eap-method</b> <i>keyword</i>
Tree	<a href="#">auto-eap-method</a>
Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the remote peer.
Options	psk, cert, psk-or-cert
Default	cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ikev2-fragment**

Synopsis	Enable the <b>ikev2-fragment</b> context
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <b>ikev2-fragment</b>
Tree	<a href="#">ikev2-fragment</a>
Description	Commands in this context configure IKEv2 protocol level fragmentation (RFC 7383).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu** *number*

Synopsis	Maximum size of the IKEv2 packet
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <b>ikev2-fragment</b> <b>mtu</b> <i>number</i>

Tree	<a href="#">mtu</a>
Range	512 to 9000
Units	octets
Default	1500
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reassemble-timeout** *number*

Synopsis	Timeout for reassembly of IKEv2 message fragments
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">ikev2-fragment</a> <a href="#">reassemble-timeout</a> <i>number</i>
Tree	<a href="#">reassemble-timeout</a>
Range	1 to 5
Units	seconds
Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **own-auth-method** *keyword*

Synopsis	Authentication method used with IKE policy on own side
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">own-auth-method</a> <i>keyword</i>
Tree	<a href="#">own-auth-method</a>
Options	symmetric, psk, cert, eap-only
Default	symmetric
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **own-auto-eap-method** *keyword*

Synopsis	Authentication method used on its own side
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">own-auto-eap-method</a> <i>keyword</i>
Tree	<a href="#">own-auto-eap-method</a>

Description	This command specifies the behavior for the IKEv2 remote-access tunnel when the authentication method uses EAP or potentially another method to authenticate the peer.
Options	psk, cert
Default	cert
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **send-idr-after-eap-success** *boolean*

Synopsis	Send IDr payload in last IKE authentication response
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ike-version-2</a> <a href="#">send-idr-after-eap-success</a> <i>boolean</i>
Tree	<a href="#">send-idr-after-eap-success</a>
Description	When configured to <b>true</b> , the Identification Responder (IDr) payload is added in the last IKE authentication response after an Extensible Authentication Protocol (EAP) Success packet is received. When configured to <b>false</b> , the IDr payload is not included in the last IKE.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-lifetime** *number*

Synopsis	Lifetime of the Phase 2 IKE key
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">ipsec-lifetime</a> <i>number</i>
Tree	<a href="#">ipsec-lifetime</a>
Range	1200 to 31536000
Units	seconds
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **limit-init-exchange**

Synopsis	Enter the <b>limit-init-exchange</b> context
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">limit-init-exchange</a>
Tree	<a href="#">limit-init-exchange</a>

Description	Commands in this context limit the number of ongoing IKEv2 initial exchanges per tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of limiting initial IKE exchanges
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">limit-init-exchange</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reduced-max-exchange-timeout** (*number* | *keyword*)

Synopsis	Maximum timeout for in-progress initial IKE exchange
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">limit-init-exchange</a> <a href="#">reduced-max-exchange-timeout</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">reduced-max-exchange-timeout</a>
Description	This command configures the maximum timeout for the in-progress initial IKE exchange. If a new IKEv2 IKE_SA_INIT request is received when there is an ongoing IKEv2 initial exchange from the same peer, the timeout value of the existing exchange is set to this specified value. If the <b>none</b> option is configured for this command, the timeout value remains unchanged.
Range	2 to 60
Units	seconds
Options	none
Default	2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lockout**

Synopsis	Enable the <b>lockout</b> context
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">lockout</a>

Tree	<a href="#">lockout</a>
Description	Commands in this context specify the lockout mechanism for the IPsec tunnel. These commands apply only when the system acts as a tunnel responder.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **block** (*number* | *keyword*)

Synopsis	Time a client is blocked for failed authentications
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">lockout block</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">block</a>
Description	This command configures the time the client is blocked if the number of failed authentications exceeds the configured value within the specified duration.
Range	1 to 1440
Units	minutes
Options	infinite
Default	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	Time interval for failed attempts threshold
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">lockout duration</a> <i>number</i>
Tree	<a href="#">duration</a>
Description	This command specifies the time interval in which the configured failed authentication count must be exceeded to trigger a lockout.
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **failed-attempts** *number*

Synopsis	Maximum failed authentications allowed in the duration
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Context	<b>configure ipsec ike-policy number lockout failed-attempts number</b>
Tree	<a href="#">failed-attempts</a>
Range	1 to 64
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-port-per-ip number**

Synopsis	Maximum number of ports allowed under same IP address
Context	<b>configure ipsec ike-policy number lockout max-port-per-ip number</b>
Tree	<a href="#">max-port-per-ip</a>
Description	This command configures the maximum number of ports allowed under the same IP address. When the threshold is exceeded and the client is locked out, all ports behind the IP address are blocked.
Range	1 to 32000
Default	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **match-peer-id-to-cert boolean**

Synopsis	Check IKE peer ID during certificate authentication
Context	<b>configure ipsec ike-policy number match-peer-id-to-cert boolean</b>
Tree	<a href="#">match-peer-id-to-cert</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-traversal**

Synopsis	Enable the <b>nat-traversal</b> context
Context	<b>configure ipsec ike-policy number nat-traversal</b>
Tree	<a href="#">nat-traversal</a>
Description	Commands in this context configure the Network Address Translation Traversal (NAT-T) functionality.



Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **force boolean**

Synopsis	Enable NAT-T in forced mode
Context	<b>configure ipsec ike-policy number nat-traversal force boolean</b>
Tree	<a href="#">force</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **force-keep-alive boolean**

Synopsis	Continue sending keepalive packets (no expiry)
Context	<b>configure ipsec ike-policy number nat-traversal force-keep-alive boolean</b>
Tree	<a href="#">force-keep-alive</a>
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keep-alive-interval number**

Synopsis	Keepalive interval for NAT-T
Context	<b>configure ipsec ike-policy number nat-traversal keep-alive-interval number</b>
Tree	<a href="#">keep-alive-interval</a>
Range	120 to 600
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pfs**

Synopsis	Enable the <b>pfs</b> context
Context	<b>configure ipsec ike-policy number pfs</b>

Tree	<a href="#">pfs</a>
Description	Commands in this context configure perfect forward secrecy on the IPsec tunnel using the policy. PFS provides for a new Diffie-Hellman (DH) key exchange each time the Security Association (SA) key is renegotiated. When the SA key expires, another key is generated (if the SA remains up).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dh-group** *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">pfs</a> <b>dh-group</b> <i>keyword</i>
Tree	<a href="#">dh-group</a>
Description	This command specifies which DH group to use for calculating session keys. More bits provide a higher level of security, but require more processing.
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Default	group-2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **relay-unsolicited-cfg-attribute**

Synopsis	Enter the <b>relay-unsolicited-cfg-attribute</b> context
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">relay-unsolicited-cfg-attribute</a>
Tree	<a href="#">relay-unsolicited-cfg-attribute</a>
Description	Commands in this context configure attributes returned from the source (such as a RADIUS server) that are returned to the IKEv2 remote-access tunnel client regardless if the client has requested the attribute in the CFG_REQUEST payload.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **internal-ip4-address** *boolean*

Synopsis	Return the IPv4 address from the source to the client
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">relay-unsolicited-cfg-attribute</a> <a href="#">internal-ip4-address</a> <i>boolean</i>
Tree	<a href="#">internal-ip4-address</a>

Description	When configured to <b>true</b> , the system returns the IPv4 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **internal-ip4-dns** *boolean*

Synopsis	Return IPv4 DNS server address from source to client
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">relay-unsolicited-cfg-attribute</a> <a href="#">internal-ip4-dns</a> <i>boolean</i>
Tree	<a href="#">internal-ip4-dns</a>
Description	When configured to <b>true</b> , the system returns the IPv4 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **internal-ip4-netmask** *boolean*

Synopsis	Return the IPv4 netmask from the source to the client
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">relay-unsolicited-cfg-attribute</a> <a href="#">internal-ip4-netmask</a> <i>boolean</i>
Tree	<a href="#">internal-ip4-netmask</a>
Description	When configured to <b>true</b> , the system returns the IPv4 netmask from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the netmask in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **internal-ip6-address** *boolean*

Synopsis	Return the IPv6 address from the source to the client
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">relay-unsolicited-cfg-attribute</a> <a href="#">internal-ip6-address</a> <i>boolean</i>

Tree	<a href="#">internal-ip6-address</a>
Description	When configured to <b>true</b> , the system returns the IPv6 address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **internal-ip6-dns** *boolean*

Synopsis	Return IPv6 DNS server address from source to client
Context	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i> <a href="#">relay-unsolicited-cfg-attribute</a> <a href="#">internal-ip6-dns</a> <i>boolean</i>
Tree	<a href="#">internal-ip6-dns</a>
Description	When configured to <b>true</b> , the system returns the IPv6 DNS server address from the source (such as a RADIUS server) to the IKEv2 remote-access tunnel client regardless if the client has requested the address in the CFG_REQUEST payload.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-transform** [*id*] *number*

Synopsis	Enter the <b>ike-transform</b> list instance
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i>
Tree	<a href="#">ike-transform</a>
Max. Instances	4096
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	IKE transform instance ID
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i>
Tree	<a href="#">ike-transform</a>
Range	1 to 4096

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dh-group** *keyword*

Synopsis	Diffie-Helman group used to calculate session keys
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i> <a href="#">dh-group</a> <i>keyword</i>
Tree	<a href="#">dh-group</a>
Options	group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Default	group-2
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-auth-algorithm** *keyword*

Synopsis	IKE authentication algorithm for IKE transform instance
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i> <a href="#">ike-auth-algorithm</a> <i>keyword</i>
Tree	<a href="#">ike-auth-algorithm</a>
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption
Default	sha-1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-encryption-algorithm** *keyword*

Synopsis	IKE encryption algorithm for the IKE transform instance
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i> <a href="#">ike-encryption-algorithm</a> <i>keyword</i>
Tree	<a href="#">ike-encryption-algorithm</a>
Options	des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm16, aes256-gcm8, aes256-gcm16
Default	aes-128
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ike-prf-algorithm** *keyword*

Synopsis	PRF algorithm for the IKE transform instance
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i> <a href="#">ike-prf-algorithm</a> <i>keyword</i>
Tree	<a href="#">ike-prf-algorithm</a>
Description	This command specifies the pseudo-random function algorithm used for IKE security association.  If an encrypted algorithm such as AES-GCM is used for the IKE encryption algorithm, <b>same-as-auth</b> cannot be used for the IKE PRF algorithm.
Options	md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, same-as-auth
Default	same-as-auth
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isakmp-lifetime** *number*

Synopsis	Phase 1 lifetime for the IKE transform instance
Context	<b>configure</b> <a href="#">ipsec ike-transform</a> <i>number</i> <a href="#">isakmp-lifetime</a> <i>number</i>
Tree	<a href="#">isakmp-lifetime</a>
Range	1200 to 31536000
Units	seconds
Default	86400
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipsec-transform** [*id*] *number*

Synopsis	Enter the <b>ipsec-transform</b> list instance
Context	<b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>
Tree	<a href="#">ipsec-transform</a>
Description	Commands in this context create an IPsec transform policy. IPsec transform policies can be shared. A change to the IPsec transform is allowed at any time. The change does not impact tunnels that have been established until they are renegotiated. If the change is required immediately, the tunnel must be cleared (reset) for force renegotiation.
Max. Instances	2048
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [id] *number*

Synopsis IPsec transform policy ID

Context **configure ipsec ipsec-transform** *number*

Tree [ipsec-transform](#)

Range 1 to 2048

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esp-auth-algorithm** *keyword*

Synopsis Encapsulating Security Payload (ESP) authentication

Context **configure ipsec ipsec-transform** *number esp-auth-algorithm* *keyword*

Tree [esp-auth-algorithm](#)

Description This command specifies the hashing algorithm used for the authentication function. Both ends of a manually configured tunnel must share the same configuration for the IPsec tunnel to enter the operational state.

Options null, md-5, sha-1, sha-256, sha-384, sha-512, aes-xcbc, auth-encryption

Default sha-1

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esp-encryption-algorithm** *keyword*

Synopsis Encryption algorithm for the IPsec transform session

Context **configure ipsec ipsec-transform** *number esp-encryption-algorithm* *keyword*

Tree [esp-encryption-algorithm](#)

Description This command specifies the encryption algorithm used for the IPsec session. Encryption applies only to ESP configurations. If encryption is not defined, ESP is not used.

Both ends of a manually configured tunnel must share the same encryption algorithm for the IPsec tunnel to enter the operational state.

When AES-GCM or AES-GMAC is configured:

- the authentication encryption must be set to **auth-encryption**

- the system does not include the authentication algorithm in the ESP proposal of the SA payload
- IPsec transform cannot be used for manual keying

Options	null, des, des-3, aes-128, aes-192, aes-256, aes128-gcm8, aes128-gcm12, aes128-gcm16, aes192-gcm8, aes192-gcm12, aes192-gcm16, aes256-gcm8, aes256-gcm12, aes256-gcm16, null-aes128-gmac, null-aes192-gmac, null-aes256-gmac
Default	aes-128
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **extended-sequence-number** *boolean*

Synopsis	Enable extended sequence numbering support
Context	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i> <a href="#">extended-sequence-number</a> <i>boolean</i>
Tree	<a href="#">extended-sequence-number</a>
Description	When configured to <b>true</b> , this command enables 64-bit extended sequence numbering support. This numbering is used for high throughput CHILD_SA to avoid frequent re-keying caused by sequence numbering wrap around.  When configured to <b>false</b> , only 32-bit sequence numbering is supported.
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-lifetime** *number*

Synopsis	Phase 2 lifetime for the IPsec transform session
Context	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i> <a href="#">ipsec-lifetime</a> <i>number</i>
Tree	<a href="#">ipsec-lifetime</a>
Description	This command configures the lifetime of the Phase 2 IKE key.  When unconfigured, the value is inherited from the IPsec lifetime configured in the corresponding IKE policy configured for the same IPsec gateway or IPsec tunnel.
Range	1200 to 31536000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**pfs-dh-group** *keyword*

Synopsis	Diffie-Hellman group used for PFS compilation
Context	<b>configure ipsec ipsec-transform</b> <i>number pfs-dh-group keyword</i>
Tree	<a href="#">pfs-dh-group</a>
Description	This command specifies the DH group used for Perfect Forward Secrecy (PFS) compilation during CHILD_SA rekeying.  When unconfigured, the value is inherited from the DH group value from the IPsec gateway or IPsec tunnel.
Options	none, group-1, group-2, group-5, group-14, group-15, group-19, group-20, group-21
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipsec-transport-mode-profile** [*name*] *string*

Synopsis	Enter the <b>ipsec-transport-mode-profile</b> list instance
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i>
Tree	<a href="#">ipsec-transport-mode-profile</a>
Description	Commands in this context configure IPsec-specific attributes that allow an IP tunnel (for example, GRE) to be protected by using IPsec transport mode.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	IPsec transport mode profile name string
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i>
Tree	<a href="#">ipsec-transport-mode-profile</a>
Description	This command specifies the name of the IPsec transport mode profile.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">ipsec ipsec-transport-mode-profile</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**key-exchange**

Synopsis	Enter the <b>key-exchange</b> context
Context	<b>configure</b> <a href="#">ipsec ipsec-transport-mode-profile</a> <i>string</i> <a href="#">key-exchange</a>
Tree	<a href="#">key-exchange</a>
Description	Commands in this context configure the key exchange used each time the Security Association (SA) key is renegotiated.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dynamic**

Synopsis	Enter the <b>dynamic</b> context
Context	<b>configure</b> <a href="#">ipsec ipsec-transport-mode-profile</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a>
Tree	<a href="#">dynamic</a>
Description	Commands in this context configure dynamic keying for the transport mode profile.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**auto-establish** *boolean*

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	<b>configure</b> <a href="#">ipsec ipsec-transport-mode-profile</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">auto-establish</a> <i>boolean</i>
Tree	<a href="#">auto-establish</a>
Default	false
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cert

Synopsis Enter the **cert** context

Context **configure ipsec ipsec-transport-mode-profile** *string* *key-exchange* *dynamic* *cert*

Tree [cert](#)

Description Commands in this context configure the attributes of the dynamic keying certificate.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cert-profile *reference*

Synopsis Certificate profile name

Context **configure ipsec ipsec-transport-mode-profile** *string* *key-exchange* *dynamic* *cert* *cert-profile* *reference*

Tree [cert-profile](#)

Reference **configure ipsec cert-profile** *string*

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## status-verify

Synopsis Enter the **status-verify** context

Context **configure ipsec ipsec-transport-mode-profile** *string* *key-exchange* *dynamic* *cert* *status-verify*

Tree [status-verify](#)

Description Commands in this context configure attributes of Certificate Status Verification (CSV).

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-result *keyword*

Synopsis Default result for Certificate Status Verification

Context **configure ipsec ipsec-transport-mode-profile** *string* *key-exchange* *dynamic* *cert* *status-verify* *default-result* *keyword*

Tree	<a href="#">default-result</a>
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **primary keyword**

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure</b> <a href="#">ipsec ipsec-transport-mode-profile</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert status-verify</a> <b>primary keyword</b>
Tree	<a href="#">primary</a>
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsrp
Default	crl
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **secondary keyword**

Synopsis	Secondary method used to verify certificate revocation
Context	<b>configure</b> <a href="#">ipsec ipsec-transport-mode-profile</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert status-verify</a> <b>secondary keyword</b>
Tree	<a href="#">secondary</a>
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsrp
Default	none
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**trust-anchor-profile** *reference*

Synopsis	Trust anchor profile name
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange dynamic cert trust-anchor-profile</a> <i>reference</i>
Tree	<a href="#">trust-anchor-profile</a>
Reference	<b>configure ipsec trust-anchor-profile</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id**

Synopsis	Enter the <b>id</b> context
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange dynamic id</a>
Tree	<a href="#">id</a>
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> <li>• Psk: local tunnel IP address</li> <li>• Cert-auth: subject of the local certificate</li> </ul>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fqdn** *string*

Synopsis	FQDN used as the local ID IKE type
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <a href="#">key-exchange dynamic id fqdn</a> <i>string</i>
Tree	<a href="#">fqdn</a>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv4** *string*

Synopsis	IPv4 as the local ID type
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Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <i>key-exchange</i> <i>dynamic id ipv4 string</i>
Tree	<a href="#">ipv4</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv6 used as the local IKE ID type
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <i>key-exchange</i> <i>dynamic id ipv6</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ipv6</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-policy** *reference*

Synopsis	IKE policy ID
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <i>key-exchange</i> <i>dynamic ike-policy reference</i>
Tree	<a href="#">ike-policy</a>
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.
Reference	<b>configure ipsec ike-policy</b> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-transform** *reference*

Synopsis	IPsec transform IDs used by the dynamic key
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <i>key-exchange</i> <i>dynamic ipsec-transform reference</i>
Tree	<a href="#">ipsec-transform</a>
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.

Reference	<b>configure ipsec ipsec-transform</b> <i>number</i>
Max. Instances	4
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pre-shared-key** *string*

Synopsis	Pre-shared key for IKE authentication
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>key-exchange dynamic pre-shared-key</b> <i>string</i>
Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-history-key-records**

Synopsis	Enter the <b>max-history-key-records</b> context
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>max-history-key-records</b>
Tree	<a href="#">max-history-key-records</a>
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esp** *number*

Synopsis	Maximum number of recent records
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string</i> <b>max-history-key-records esp</b> <i>number</i>
Tree	<a href="#">esp</a>
Range	1 to 48
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ike number**

Synopsis	Maximum number of historical IKE key records
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string max-history-key-records ike number</i>
Tree	<a href="#">ike</a>
Range	1 to 3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**replay-window number**

Synopsis	Anti-replay window size
Context	<b>configure ipsec ipsec-transport-mode-profile</b> <i>string replay-window number</i>
Tree	<a href="#">replay-window</a>
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32   64   128   256   512
Units	packets
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius**

Synopsis	Enter the <b>radius</b> context
Context	<b>configure ipsec radius</b>
Tree	<a href="#">radius</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy [name] string**

Synopsis	Enter the <b>accounting-policy</b> list instance
Context	<b>configure ipsec radius accounting-policy</b> <i>string</i>
Tree	<a href="#">accounting-policy</a>
Description	Commands in this context configure RADIUS accounting policies to collect accounting statistics.



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Max. Instances	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	RADIUS accounting policy name
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i>
Tree	<a href="#">accounting-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**include-radius-attribute**

Synopsis	Enter the <b>include-radius-attribute</b> context
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a>
Tree	<a href="#">include-radius-attribute</a>
Description	Commands in this context specify the RADIUS attributes that are to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**acct-stats** *boolean*

Synopsis	Include accounting attributes in RADIUS packets
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">acct-stats</a> <i>boolean</i>
Tree	<a href="#">acct-stats</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**called-station-id** *boolean*

Synopsis	Include the Called-Station-Id attribute
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">called-station-id</a> <i>boolean</i>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**calling-station-id** *boolean*

Synopsis	Include the Calling-Station-Id attribute
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a> <i>boolean</i>
Tree	<a href="#">calling-station-id</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**framed-ip-addr** *boolean*

Synopsis	Include the Framed-IP-Address attribute
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">framed-ip-addr</a> <i>boolean</i>
Tree	<a href="#">framed-ip-addr</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**framed-ipv6-prefix** *boolean*

Synopsis	Include the Framed-IPv6-Prefix attribute
Context	<b>configure</b> <a href="#">ipsec radius accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">framed-ipv6-prefix</a> <i>boolean</i>
Tree	<a href="#">framed-ipv6-prefix</a>
Default	false

Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-identifier** *boolean*

Synopsis Include the NAS-Identifier attribute  
Context **configure** [ipsec](#) [radius](#) [accounting-policy](#) *string* [include-radius-attribute](#) [nas-identifier](#) *boolean*  
Tree [nas-identifier](#)  
Default false  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-ip-addr** *boolean*

Synopsis Include the NAS-IP-Address attribute  
Context **configure** [ipsec](#) [radius](#) [accounting-policy](#) *string* [include-radius-attribute](#) [nas-ip-addr](#) *boolean*  
Tree [nas-ip-addr](#)  
Default false  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id** *boolean*

Synopsis Include the NAS-Port-Id attribute  
Context **configure** [ipsec](#) [radius](#) [accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#) *boolean*  
Tree [nas-port-id](#)  
Default false  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy** *reference*

Synopsis Referenced RADIUS server policy

Context	<b>configure ipsec radius accounting-policy</b> <i>string</i> <b>radius-server-policy</b> <i>reference</i>
Tree	<a href="#">radius-server-policy</a>
Reference	<b>configure aaa radius server-policy</b> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## update-interval

Synopsis	Enter the <b>update-interval</b> context
Context	<b>configure ipsec radius accounting-policy</b> <i>string</i> <b>update-interval</b>
Tree	<a href="#">update-interval</a>
Description	Commands in this context determine how RADIUS interim-update packets are sent for IKEv2 remote-access tunnels.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **jitter** *number*

Synopsis	Jitter interval for sending each interim-update packet
Context	<b>configure ipsec radius accounting-policy</b> <i>string</i> <b>update-interval</b> <b>jitter</b> <i>number</i>
Tree	<a href="#">jitter</a>
Description	This command specifies the jitter interval for the RADIUS interim-update packets. When unconfigured, the system uses 10% of the update interval value.
Range	0 to 3600
Units	seconds
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **value** *number*

Synopsis	Update interval of the RADIUS accounting data
Context	<b>configure ipsec radius accounting-policy</b> <i>string</i> <b>update-interval</b> <b>value</b> <i>number</i>
Tree	<a href="#">value</a>
Description	This command configures the update interval of the RADIUS accounting data. If a value of 0 is configured, no intermediate updates are sent.

Range	0   5 to 259200
Units	minutes
Default	10
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-policy** [*name*] *string*

Synopsis	Enter the <b>authentication-policy</b> list instance
Context	<b>configure ipsec radius authentication-policy</b> <i>string</i>
Tree	<a href="#">authentication-policy</a>
Description	Commands in this context configure the RADIUS authentication policy associated with the IPsec gateway.
Max. Instances	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	RADIUS authentication policy name
Context	<b>configure ipsec radius authentication-policy</b> <i>string</i>
Tree	<a href="#">authentication-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **include-radius-attribute**

Synopsis	Enter the <b>include-radius-attribute</b> context
Context	<b>configure ipsec radius authentication-policy</b> <i>string</i> <b>include-radius-attribute</b>
Tree	<a href="#">include-radius-attribute</a>
Description	Commands in this context specify the RADIUS attributes to be included in the RADIUS Authentication-Request messages.
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **called-station-id** *boolean*

Synopsis Include the Called-Station-Id attribute

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute called-station-id** *boolean*

Tree [called-station-id](#)

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **calling-station-id** *boolean*

Synopsis Include the Calling-Station-Id attribute

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute calling-station-id** *boolean*

Tree [calling-station-id](#)

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **client-cert-subject-key-id** *boolean*

Synopsis Include the Subject Key Identifier

Context **configure ipsec radius authentication-policy** *string* **include-radius-attribute client-cert-subject-key-id** *boolean*

Tree [client-cert-subject-key-id](#)

Description When configured to **true**, the Subject Key Identifier of the certificate of the peer is included in the RADIUS Access-Request packet as VSA: Alc-Subject-Key-Identifier. See the *7450 ESS, 7750 SR, 7950 XRS, and VSR RADIUS Attributes Reference Guide* for more information.

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-identifier** *boolean*

Synopsis	Include the NAS-Identifier attribute
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-ip-addr** *boolean*

Synopsis	Include the NAS-IP-Address attribute
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-ip-addr</a> <i>boolean</i>
Tree	<a href="#">nas-ip-addr</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-port-id** *boolean*

Synopsis	Include the NAS-Port-Id attribute
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a> <i>boolean</i>
Tree	<a href="#">nas-port-id</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**password** *string*

Synopsis	Password used in RADIUS access requests
Context	<b>configure</b> <a href="#">ipsec radius authentication-policy</a> <i>string</i> <a href="#">password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy** *reference*

Synopsis Referenced RADIUS server policy  
 Context **configure** [ipsec radius authentication-policy](#) *string* [radius-server-policy](#) *reference*  
 Tree [radius-server-policy](#)  
 Reference **configure** [aaa radius server-policy](#) *string*  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **show-ipsec-keys** *boolean*

Synopsis Show IPsec IKE and ESP keys in the output  
 Context **configure** [ipsec show-ipsec-keys](#) *boolean*  
 Tree [show-ipsec-keys](#)  
 Description When configured to **true**, this command allows IPsec keys to be (optionally) included in the display output of certain **debug** and **admin** commands.  
 When configured to **false**, the key display is disabled.  
 Default false  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **static-sa** [[name](#)] *string*

Synopsis Enter the **static-sa** list instance  
 Context **configure** [ipsec static-sa](#) *string*  
 Tree [static-sa](#)  
 Max. Instances 1000  
 Introduced 16.0.R6  
 Platforms All

### **[name]** *string*

Synopsis Static SA name



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Context	<b>configure ipsec static-sa string</b>
Tree	<a href="#">static-sa</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R6
Platforms	All

## authentication

Synopsis	Enable the <b>authentication</b> context
Context	<b>configure ipsec static-sa string authentication</b>
Tree	<a href="#">authentication</a>
Introduced	16.0.R6
Platforms	All

## algorithm *keyword*

Synopsis	Authentication algorithm used for an IPsec manual SA
Context	<b>configure ipsec static-sa string authentication algorithm keyword</b>
Tree	<a href="#">algorithm</a>
Options	md5, sha1
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

## key *string*

Synopsis	Key used for the authentication algorithm
Context	<b>configure ipsec static-sa string authentication key string</b>
Tree	<a href="#">key</a>
String Length	1 to 54
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure ipsec static-sa string description string</b>
Tree	<b>description</b>
String Length	1 to 32
Introduced	16.0.R6
Platforms	All

**direction keyword**

Synopsis	Direction to which the static SA entry can be applied
Context	<b>configure ipsec static-sa string direction keyword</b>
Tree	<b>direction</b>
Options	inbound, outbound, bidirectional
Default	bidirectional
Introduced	16.0.R6
Platforms	All

**protocol keyword**

Synopsis	IPsec protocol used with the static SA
Context	<b>configure ipsec static-sa string protocol keyword</b>
Tree	<b>protocol</b>
Options	ah, esp
Default	esp
Introduced	16.0.R6
Platforms	All

**spi number**

Synopsis	Security Parameter Index (SPI) for the static SA
Context	<b>configure ipsec static-sa string spi number</b>
Tree	<b>spi</b>
Description	This command specifies the SPI for the static SA.

When the **direction** command is set to **inbound**, the SPI is used to look up the instruction to verify and decrypt the incoming IPsec packets. When the **direction** command is set to **outbound**, the SPI is used in the encoding of the outgoing packets. The remote node can use the SPI to look up the instruction to verify and decrypt the packet.

When unconfigured, the static SA cannot be used.

Range	256 to 16383
Introduced	16.0.R6
Platforms	All

### **trust-anchor-profile** [[name](#)] *string*

Synopsis	Enter the <b>trust-anchor-profile</b> list instance
Context	<b>configure ipsec trust-anchor-profile</b> <i>string</i>
Tree	<a href="#">trust-anchor-profile</a>
Max. Instances	10128
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Trust anchor profile name for IPsec tunnel or gateway
Context	<b>configure ipsec trust-anchor-profile</b> <i>string</i>
Tree	<a href="#">trust-anchor-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **trust-anchor** [[ca-profile](#)] *reference*

Synopsis	Add a list entry for <b>trust-anchor</b>
Context	<b>configure ipsec trust-anchor-profile</b> <i>string</i> <b>trust-anchor</b> <i>reference</i>
Tree	<a href="#">trust-anchor</a>
Description	Commands in this context configure a CA profile as a trust anchor CA.

Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ca-profile]** *reference*

Synopsis	Name of the CA profile as a trust anchor profile
Context	<b>configure ipsec trust-anchor-profile</b> <i>string trust-anchor reference</i>
Tree	<a href="#">trust-anchor</a>
Reference	<b>configure system security pki ca-profile</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ts-list** [[name](#)] *string*

Synopsis	Enter the <b>ts-list</b> list instance
Context	<b>configure ipsec ts-list</b> <i>string</i>
Tree	<a href="#">ts-list</a>
Description	Commands in this context configure Traffic Selector (TS) settings.
Max. Instances	32768
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Traffic Selector (TS) list name
Context	<b>configure ipsec ts-list</b> <i>string</i>
Tree	<a href="#">ts-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## local

Synopsis	Enter the <b>local</b> context
Context	<b>configure ipsec ts-list string local</b>
Tree	<b>local</b>
Description	Commands in this context configure a local TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## entry [id] number

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure ipsec ts-list string local entry number</b>
Tree	<b>entry</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [id] number

Synopsis	TS list entry ID
Context	<b>configure ipsec ts-list string local entry number</b>
Tree	<b>entry</b>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Enable the <b>address</b> context
Context	<b>configure ipsec ts-list string local entry number address</b>
Tree	<b>address</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	<b>configure ipsec ts-list</b> <i>string local entry number address prefix</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	The following elements are part of a mandatory choice: <b>prefix</b> or <b>range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number address range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a mandatory choice: <b>prefix</b> or <b>range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Lower bound of the IP address range for the entry
Context	<b>configure ipsec ts-list</b> <i>string local entry number address range begin</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">begin</a>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Upper bound of the IP address range
Context	<b>configure ipsec ts-list</b> <i>string local entry number address range end</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">end</a>
Notes	This element is mandatory.

Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## protocol

Synopsis Enable the **protocol** context  
Context **configure ipsec ts-list string local entry number protocol**  
Tree [protocol](#)  
Description Commands in this context specify the protocol settings for the IKEv2 traffic selector.  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## any

Synopsis Match any protocol ID  
Context **configure ipsec ts-list string local entry number protocol any**  
Tree [any](#)  
Notes The following elements are part of a mandatory choice: **any** or **id**.  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## id

Synopsis Enable the **id** context  
Context **configure ipsec ts-list string local entry number protocol id**  
Tree [id](#)  
Notes The following elements are part of a mandatory choice: **any** or **id**.  
Introduced 19.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis Enter the **icmp** context  
Context **configure ipsec ts-list string local entry number protocol id icmp**  
Tree [icmp](#)

Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id icmp opaque</b>
Tree	<b>opaque</b>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id icmp port-range</b>
Tree	<b>port-range</b>
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id icmp port-range begin-icmp-code</b> <i>number</i>
Tree	<b>begin-icmp-code</b>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin-icmp-type** *number*

Synopsis Lower bound of the ICMP type range

Context **configure ipsec ts-list** *string local entry number protocol id icmp port-range begin-icmp-type number*

Tree [begin-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-code** *number*

Synopsis Upper bound of the ICMP code range

Context **configure ipsec ts-list** *string local entry number protocol id icmp port-range end-icmp-code number*

Tree [end-icmp-code](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-type** *number*

Synopsis Upper bound of the ICMP type range

Context **configure ipsec ts-list** *string local entry number protocol id icmp port-range end-icmp-type number*

Tree [end-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp6

Synopsis	Enter the <b>icmp6</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp6</i>
Tree	<a href="#">icmp6</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp6 opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp6 port-range</i>
Tree	<a href="#">port-range</a>
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin-icmp-code *number*

Synopsis	Lower bound of the ICMP code range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id icmp6 port-range begin-icmp-code number</i>

Tree	<a href="#">begin-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin-icmp-type** *number*

Synopsis	Lower bound of the ICMP type range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">local entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">begin-icmp-type</a> <i>number</i>
Tree	<a href="#">begin-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-code** *number*

Synopsis	Upper bound of the ICMP code range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">local entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">end-icmp-code</a> <i>number</i>
Tree	<a href="#">end-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-type** *number*

Synopsis	Upper bound of the ICMP type range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">local entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">end-icmp-type</a> <i>number</i>
Tree	<a href="#">end-icmp-type</a>
Range	0 to 255

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mipv6

Synopsis	Enter the <b>mipv6</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id mipv6</b>
Tree	<b>mipv6</b>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id mipv6 opaque</b>
Tree	<b>opaque</b>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id mipv6 port-range</b>
Tree	<b>port-range</b>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin *number***

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id mipv6 port-range begin</b> <i>number</i>
Tree	<b>begin</b>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end *number***

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id mipv6 port-range end</b> <i>number</i>
Tree	<b>end</b>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**protocol-id-with-any-port (*keyword* | *number*)**

Synopsis	Protocol ID that accepts any port value
Context	<b>configure ipsec ts-list</b> <i>string local entry number</i> <b>protocol id protocol-id-with-any-port</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>protocol-id-with-any-port</b>
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sctp

Synopsis	Enter the <b>sctp</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp</i>
Tree	<a href="#">sctp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin *number*

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp port-range begin number</i>
Tree	<a href="#">begin</a>

Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id sctp port-range end number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp**

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id tcp</i>
Tree	<a href="#">tcp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **opaque**

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id tcp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list string local entry number protocol id tcp port-range</b>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin number

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list string local entry number protocol id tcp port-range begin number</b>
Tree	<a href="#">begin</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list string local entry number protocol id tcp port-range end number</b>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## udp

Synopsis	Enter the <b>udp</b> context
Context	<b>configure ipsec ts-list string local entry number protocol id udp</b>
Tree	<a href="#">udp</a>



Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin *number*

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp port-range begin number</i>
Tree	<a href="#">begin</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string local entry number protocol id udp port-range end number</i>
Tree	<b>end</b>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remote**

Synopsis	Enter the <b>remote</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote</i>
Tree	<b>remote</b>
Description	Commands in this context configure a remote TS list, a traffic selector, such as TSr, when the system acts as an IKEv2 responder.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure ipsec ts-list</b> <i>string remote entry number</i>
Tree	<b>entry</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	TS list entry ID
Context	<b>configure ipsec ts-list</b> <i>string remote entry number</i>
Tree	<b>entry</b>
Range	1 to 32
Notes	This element is part of a list key.

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Enable the <b>address</b> context
Context	<b>configure ipsec ts-list string remote entry number address</b>
Tree	<a href="#">address</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix for address range in IKEv2 traffic selector
Context	<b>configure ipsec ts-list string remote entry number address prefix (<i>ipv4-prefix   ipv6-prefix</i>)</b>
Tree	<a href="#">prefix</a>
Notes	The following elements are part of a mandatory choice: <b>prefix</b> or <b>range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure ipsec ts-list string remote entry number address range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a mandatory choice: <b>prefix</b> or <b>range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Lower bound of the IP address range for the entry
Context	<b>configure ipsec ts-list string remote entry number address range begin (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</b>
Tree	<a href="#">begin</a>

Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Upper bound of the IP address range
Context	<b>configure ipsec ts-list</b> <i>string remote entry number address range end</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">end</a>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **protocol**

Synopsis	Enable the <b>protocol</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol</i>
Tree	<a href="#">protocol</a>
Description	Commands in this context specify the protocol settings for the IKEv2 traffic selector.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **any**

Synopsis	Match any protocol ID
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol any</i>
Tree	<a href="#">any</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> or <b>id</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **id**

Synopsis	Enable the <b>id</b> context
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Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id</i>
Tree	<a href="#">id</a>
Notes	The following elements are part of a mandatory choice: <b>any</b> or <b>id</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp</i>
Tree	<a href="#">icmp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp port-range</i>
Tree	<a href="#">port-range</a>
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin-icmp-code** *number*

Synopsis Lower bound of the ICMP code range

Context **configure ipsec ts-list** *string* **remote entry** *number* **protocol id icmp port-range begin-icmp-code** *number*

Tree [begin-icmp-code](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin-icmp-type** *number*

Synopsis Lower bound of the ICMP type range

Context **configure ipsec ts-list** *string* **remote entry** *number* **protocol id icmp port-range begin-icmp-type** *number*

Tree [begin-icmp-type](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-code** *number*

Synopsis Upper bound of the ICMP code range

Context **configure ipsec ts-list** *string* **remote entry** *number* **protocol id icmp port-range end-icmp-code** *number*

Tree [end-icmp-code](#)

Range 0 to 255

Notes This element is mandatory.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end-icmp-type** *number*

Synopsis	Upper bound of the ICMP type range
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp port-range end-icmp-type number</i>
Tree	<a href="#">end-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**icmp6**

Synopsis	Enter the <b>icmp6</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp6</i>
Tree	<a href="#">icmp6</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**opaque**

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp6 opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-range**

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id icmp6 port-range</i>

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Tree	<a href="#">port-range</a>
Description	Commands in this context configure port range information for the protocol.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin-icmp-code** *number*

Synopsis	Lower bound of the ICMP code range
Context	<b>configure ipsec ts-list</b> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">begin-icmp-code</a> <i>number</i>
Tree	<a href="#">begin-icmp-code</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin-icmp-type** *number*

Synopsis	Lower bound of the ICMP type range
Context	<b>configure ipsec ts-list</b> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">begin-icmp-type</a> <i>number</i>
Tree	<a href="#">begin-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-code** *number*

Synopsis	Upper bound of the ICMP code range
Context	<b>configure ipsec ts-list</b> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <a href="#">end-icmp-code</a> <i>number</i>
Tree	<a href="#">end-icmp-code</a>
Range	0 to 255



Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end-icmp-type** *number*

Synopsis	Upper bound of the ICMP type range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id icmp6</a> <a href="#">port-range</a> <b>end-icmp-type</b> <i>number</i>
Tree	<a href="#">end-icmp-type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mipv6**

Synopsis	Enter the <b>mipv6</b> context
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id mipv6</a>
Tree	<a href="#">mipv6</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **opaque**

Synopsis	Support OPAQUE ports
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id mipv6</a> <b>opaque</b>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list string remote entry number protocol id mipv6 port-range</b>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## begin number

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list string remote entry number protocol id mipv6 port-range begin number</b>
Tree	<a href="#">begin</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list string remote entry number protocol id mipv6 port-range end number</b>
Tree	<a href="#">end</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## protocol-id-with-any-port (keyword | number)

Synopsis	Protocol ID that accepts any port value
Context	<b>configure ipsec ts-list string remote entry number protocol id protocol-id-with-any-port (keyword   number)</b>

Tree	<a href="#">protocol-id-with-any-port</a>
Range	1 to 255
Options	icmp, tcp, udp, icmp6, sctp, mipv6
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sctp

Synopsis	Enter the <b>sctp</b> context
Context	<b>configure ipsec ts-list</b> <i>string</i> <i>remote entry number protocol id sctp</i>
Tree	<a href="#">sctp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string</i> <i>remote entry number protocol id sctp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string</i> <i>remote entry number protocol id sctp port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **begin** *number*

Synopsis	Lower bound of the port range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id</a> <a href="#">sctp</a> <a href="#">port-range</a> <b>begin</b> <i>number</i>
Tree	<a href="#">begin</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis	Upper bound of the port range
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id</a> <a href="#">sctp</a> <a href="#">port-range</a> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp**

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure</b> <a href="#">ipsec ts-list</a> <i>string</i> <a href="#">remote entry</a> <i>number</i> <a href="#">protocol id</a> <b>tcp</b>
Tree	<a href="#">tcp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mipv6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**opaque**

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id tcp</i> <b>opaque</b>
Tree	<b>opaque</b>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-range**

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id tcp</i> <b>port-range</b>
Tree	<b>port-range</b>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin number**

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id tcp port-range</i> <b>begin number</b>
Tree	<b>begin</b>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string remote entry number protocol id tcp port-range</i> <b>end number</b>
Tree	<b>end</b>

Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## udp

Synopsis	Enter the <b>udp</b> context
Context	<b>configure ipsec ts-list</b> <i>string</i> <i>remote entry number protocol id udp</i>
Tree	<a href="#">udp</a>
Notes	The following elements are part of a mandatory choice: <b>icmp</b> , <b>icmp6</b> , <b>mip6</b> , <b>protocol-id-with-any-port</b> , <b>sctp</b> , <b>tcp</b> , or <b>udp</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## opaque

Synopsis	Support OPAQUE ports
Context	<b>configure ipsec ts-list</b> <i>string</i> <i>remote entry number protocol id udp opaque</i>
Tree	<a href="#">opaque</a>
Description	This command allows the protocol ID to be accepted even when the port information is not available.
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-range

Synopsis	Enable the <b>port-range</b> context
Context	<b>configure ipsec ts-list</b> <i>string</i> <i>remote entry number protocol id udp port-range</i>
Tree	<a href="#">port-range</a>
Notes	The following elements are part of a choice: <b>opaque</b> or <b>port-range</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**begin *number***

Synopsis	Lower bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string</i> <b>remote entry</b> <i>number</i> <b>protocol id udp port-range begin</b> <i>number</i>
Tree	<b>begin</b>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end *number***

Synopsis	Upper bound of the port range
Context	<b>configure ipsec ts-list</b> <i>string</i> <b>remote entry</b> <i>number</i> <b>protocol id udp port-range end</b> <i>number</i>
Tree	<b>end</b>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tunnel-template [*id*] *number***

Synopsis	Enter the <b>tunnel-template</b> list instance
Context	<b>configure ipsec tunnel-template</b> <i>number</i>
Tree	<b>tunnel-template</b>
Max. Instances	2048
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[*id*] *number***

Synopsis	Tunnel template ID
Context	<b>configure ipsec tunnel-template</b> <i>number</i>

Tree	<a href="#">tunnel-template</a>
Range	1 to 2048
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **clear-df-bit** *boolean*

Synopsis	Clear the Do-not-Fragment (DF) bit
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">clear-df-bit</a> <i>boolean</i>
Tree	<a href="#">clear-df-bit</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **copy-traffic-class-upon-decapsulation** *boolean*

Synopsis	Enable traffic class copy upon decapsulation
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">copy-traffic-class-upon-decapsulation</a> <i>boolean</i>
Tree	<a href="#">copy-traffic-class-upon-decapsulation</a>
Description	When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).  When configured to <b>false</b> , the system does not copy the traffic class from the outer IP packet to the payload IP packet header upon decapsulation.
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encapsulated-ip-mtu** *number*

Synopsis Maximum size of the encapsulated tunnel packet

Context **configure ipsec tunnel-template** *number* **encapsulated-ip-mtu** *number*

Tree [encapsulated-ip-mtu](#)

Description This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.

Range 512 to 9000

Units octets

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp-generation**

Synopsis Enter the **icmp-generation** context

Context **configure ipsec tunnel-template** *number* **icmp-generation**

Tree [icmp-generation](#)

Description Commands in this context configure settings for ICMPv4 message generation.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **frag-required**

Synopsis Enter the **frag-required** context

Context **configure ipsec tunnel-template** *number* **icmp-generation frag-required**

Tree [frag-required](#)

Description Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of sending ICMP messages
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interval** *number*

Synopsis	Interval for sending ICMP messages
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**message-count** *number*

Synopsis	Maximum number of ICMP messages that can be sent
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">message-count</a> <i>number</i>
Tree	<a href="#">message-count</a>
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.

Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp6-generation

Synopsis	Enter the <b>icmp6-generation</b> context
Context	<b>configure ipsec tunnel-template number icmp6-generation</b>
Tree	<a href="#">icmp6-generation</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pkt-too-big

Synopsis	Enter the <b>pkt-too-big</b> context
Context	<b>configure ipsec tunnel-template number icmp6-generation pkt-too-big</b>
Tree	<a href="#">pkt-too-big</a>
Description	Commands in this context configure values for the ICMPv6 Packet Too Big (PTB) messages. The system sends PTB messages if an IPv6 packet is received on the private side that is larger than 1280 bytes and also exceeds the private MTU of the tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure ipsec tunnel-template number icmp6-generation pkt-too-big admin-state <i>keyword</i></b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interval** *number*

Synopsis	Maximum interval during which PTB messages can be sent
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp6-generation</a> <a href="#">pkt-too-big</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**message-count** *number*

Synopsis	Max ICMPv6 messages that can be sent during interval
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">icmp6-generation</a> <a href="#">pkt-too-big</a> <a href="#">message-count</a> <i>number</i>
Tree	<a href="#">message-count</a>
Range	10 to 1000
Default	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ignore-default-route** *boolean*

Synopsis	Ignore any full range traffic selector in TSi
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">ignore-default-route</a> <i>boolean</i>
Tree	<a href="#">ignore-default-route</a>
Description	When configured to <b>true</b> , any full range traffic selector is ignored when creating a reverse route.  When configured to <b>false</b> , no CHILD_SA is created if any full range traffic selector is included in TSi.
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-mtu** *number*

Synopsis	Maximum size of the IP MTU for the payload packets
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipsec-transform** *reference*

Synopsis	IPsec transform ID for the tunnel template
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pmtu-discovery-aging** *number*

Synopsis	Aging out time of the learned path MTU
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">pmtu-discovery-aging</a> <i>number</i>
Tree	<a href="#">pmtu-discovery-aging</a>
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**private-tcp-mss-adjust** *number*

Synopsis	New TCP MSS value on the private side
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">private-tcp-mss-adjust</a> <i>number</i>
Tree	<a href="#">private-tcp-mss-adjust</a>
Description	This command specifies the new (adjusted) TCP MSS value of TCP SYN packets on the private side.  When unconfigured, the MSS value is derived from the received TCP SYN packet on the private side.
Range	512 to 9000
Units	octets
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**propagate-pmtu-v4** *boolean*

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">propagate-pmtu-v4</a> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**propagate-pmtu-v6** *boolean*

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">propagate-pmtu-v6</a> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v6</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**public-tcp-mss-adjust** (*number | keyword*)

Synopsis	New TCP MSS value on the public side
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">public-tcp-mss-adjust</a> ( <i>number   keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Description	This command specifies the new (adjusted) TCP MSS value for the TCP traffic in an IPsec tunnel which is sent from the public network to the private network. The system can use this value to adjust or insert the MSS option in the TCP SYN packet.  When unconfigured, the MSS value is derived from the public MTU and IPsec overhead.
Range	512 to 9000
Units	octets
Options	auto
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**replay-window** *number*

Synopsis	Anti-replay window size for the tunnel template
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">replay-window</a> <i>number</i>
Tree	<a href="#">replay-window</a>
Range	32   64   128   256   512
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sp-reverse-route** *keyword*

Synopsis	Reverse route creation method in private service
Context	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i> <a href="#">sp-reverse-route</a> <i>keyword</i>
Tree	<a href="#">sp-reverse-route</a>
Description	This command allows the system to automatically create a reverse route based on dynamic LAN-to-LAN tunnel's TSi in private service.
Options	none, use-security-policy
Default	none
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.21 isa commands

```

configure
- isa
  - application-assurance-group number
  - aa-sub-scale keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup
    - esa number vm number
    - isa string
  - description string
  - divert-fc keyword
  - failure-mode keyword
  - flow-attribute string
  - http-enrich-max-packet-size number
  - isa-capacity-cost-high-threshold number
  - isa-capacity-cost-low-threshold number
  - minimum-isa-generation number
  - overload-cut-through boolean
  - overload-sub-quarantine
    - admin-state keyword
  - primary
    - esa number vm number
    - isa string
  - qos
    - egress
      - from-subscriber
        - buffer-pool
          - name string
          - resv-cbs number
          - slope-policy reference
        - port-scheduler-policy reference
        - queue-policy reference
        - wa-shared-high-wmark (number | keyword)
        - wa-shared-low-wmark number
      - to-subscriber
        - buffer-pool
          - name string
          - resv-cbs number
          - slope-policy reference
        - port-scheduler-policy reference
        - queue-policy reference
        - wa-shared-high-wmark (number | keyword)
        - wa-shared-low-wmark number
    - shared-resources
      - gtp-tunnel-database number
      - tcp-advanced-functions number
      - url-filter-web-service-cache number
  - statistics
    - stats-type keyword
    - accounting-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
  - transit-prefix-limits
    - ipv4-entries number
    - ipv4-remote-entries number
    - ipv6-entries number
    - ipv6-remote-entries number

```



configure isa application-assurance-group vm-traffic-distribute-by-ip

```

- vm-traffic-distribute-by-ip boolean
- vm-traffic-distribute-by-teid boolean
- apply-groups reference
- apply-groups-exclude reference
- lms-group number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - esa reference vm reference
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
  - mda string
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
  - port-policy reference
- nat-group number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - esa reference vm reference
  - log
    - suppress-lsn-events boolean
    - suppress-lsn-sub-blocks-free boolean
  - mda string
  - radius-accounting-policy reference
  - redundancy
    - active-mda-limit number
  - inter-chassis
    - flow-timeout-on-switchover number
    - ip-mtu number
    - keepalive
      - dropcount number
      - interval number
    - local-ip-range-start string
    - monitor-oper-group reference
      - apply-groups reference
      - apply-groups-exclude reference
      - health-drop number
    - monitor-port string
      - apply-groups reference
      - apply-groups-exclude reference
      - health-drop number
    - preferred boolean
    - remote-ip-range-start string
    - replication-threshold number
    - router-instance string
    - sync boolean
  - intra-chassis
    - active-active
      - failed-mda-limit number
    - active-standby
    - l2aware-bypass
  - scaling-profile keyword
  - session-limits
    - reserved number
    - upnp-mappings number
    - watermarks
      - high number
      - low number
- tunnel-group number

```

## configure isa tunnel-group admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **backup** *string*
- **description** *string*
- **ipsec-responder-only** *boolean*
- **isa-scale-mode** *keyword*
- **multi-active**
  - **active-isa-number** *number*
  - **esa** *reference* **vm** *reference*
  - **isa** *string*
  - **member-pool** *reference*
- **primary** *string*
- **reassembly**
  - **max-wait-time** *number*
- **stats-collection**
  - **isa-dp-cpu-usage** *boolean*
  - **strict-esp-sequence-number-ordering** *boolean*
- **tunnel-member-pool** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **esa** *reference* **vm** *reference*
  - **high-availability** *keyword*
  - **isa** *string*
- **video-group** *number*
  - **admin-state** *keyword*
  - **analyzer** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **fcc-server** *boolean*
  - **local-rt-server** *boolean*
  - **mda** *string*
  - **resv-ret** *number*
  - **stream-selection** *boolean*
  - **vapp** *reference* **vapp-id** *reference*
  - **watermark**
    - **bandwidth**
      - **fcc** *number*
      - **ret** *number*
      - **total** *number*
    - **session**
      - **fcc** *number*
      - **ret** *number*
      - **total** *number*
- **wlan-gw-group** *number*
  - **active-iom-limit** *number*
  - **active-mda-limit** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **distributed-sub-mgmt**
    - **isa-aa-group** *reference*
    - **isa-aa-oversubscription-factor** *number*
  - **esa** *reference* **vm** *reference*
  - **iom** *reference*
  - **mda** *string*
  - **nat**
    - **log**
      - **suppress-lsn-events** *boolean*
      - **suppress-lsn-sub-blocks-free** *boolean*
  - **lsn** *boolean*

---

configure isa wlan-gw-group nat radius-accounting-policy

- **radius-accounting-policy** *reference*
- **session-limits**
  - **reserved** *number*
  - **upnp-mappings** *number*
  - **watermarks**
    - **high** *number*
    - **low** *number*
- **port-policy** *reference*
- **redundancy** *keyword*
- **scaling-profile** *keyword*
- **tunnel-port-policy** *reference*
- **watermarks**
  - **mark** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **high** *number*
    - **low** *number*

### 3.21.1 isa command descriptions

#### isa

Synopsis	Enter the <b>isa</b> context
Context	<b>configure isa</b>
Tree	<a href="#">isa</a>
Description	Commands in this context configure the Integrated Services Adapter (ISA).
Introduced	16.0.R1
Platforms	All

#### application-assurance-group [[aa-group-id](#)] *number*

Synopsis	Enter the <b>application-assurance-group</b> list instance
Context	<b>configure isa</b> <a href="#">application-assurance-group</a> <i>number</i>
Tree	<a href="#">application-assurance-group</a>
Max. Instances	7
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### [\[aa-group-id\]](#) *number*

Synopsis	AA group ID
Context	<b>configure isa</b> <a href="#">application-assurance-group</a> <i>number</i>
Tree	<a href="#">application-assurance-group</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-sub-scale** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AA group sub-scale
Context	<b>configure</b> isa application-assurance-group number aa-sub-scale keyword
Tree	aa-sub-scale
Options	residential, vpn, mobile-gateway, lightweight-internet, residential-8k, residential-16k, residential-32k, residential-64k, vpn-1k, vpn-2k, vpn-4k, vpn-8k, mobile-gateway-1m, mobile-gateway-2m, lightweight-internet-512k, firewall-32
Default	residential
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of this AA group
Context	<b>configure</b> isa application-assurance-group number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**backup**

Synopsis	Enter the <b>backup</b> context
Context	<b>configure</b> isa application-assurance-group number backup
Tree	backup
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esa** [esa-id] number vm number

Synopsis	Add a list entry for <b>esa</b>
----------	---------------------------------

Context	<b>configure isa application-assurance-group number backup esa number vm number</b>
Tree	<a href="#">esa</a>
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[esa-id] number**

Synopsis	ESA ID
Context	<b>configure isa application-assurance-group number backup esa number vm number</b>
Tree	<a href="#">esa</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vm number**

Synopsis	VM ID within the ESA
Context	<b>configure isa application-assurance-group number backup esa number vm number</b>
Tree	<a href="#">esa</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isa [mda-id] string**

Synopsis	Add a list entry for <b>isa</b>
Context	<b>configure isa application-assurance-group number backup isa string</b>
Tree	<a href="#">isa</a>
Max. Instances	1
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[mda-id]** *string*

Synopsis MDA/ISA ID  
 Context **configure** isa application-assurance-group number backup isa string  
 Tree isa  
 Notes This element is part of a list key.  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** isa application-assurance-group number description string  
 Tree description  
 String Length 1 to 80  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **divert-fc** *keyword*

Synopsis Diverted traffic forwarding class  
 Context **configure** isa application-assurance-group number divert-fc keyword  
 Tree divert-fc  
 Options be, l2, af, l1, h2, ef, h1, nc  
 Max. 8  
 Instances  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **failure-mode** *keyword*

Synopsis Mode of operation when no ISA-AA cards are available  
 Context **configure** isa application-assurance-group number failure-mode keyword

Tree	<a href="#">failure-mode</a>
Options	fail-to-open
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-attribute** [\[flow-attribute-name\]](#) *string*

Synopsis	Add a list entry for <b>flow-attribute</b>
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">flow-attribute</a> <i>string</i>
Tree	<a href="#">flow-attribute</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[flow-attribute-name]** *string*

Synopsis	Flow attribute name
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">flow-attribute</a> <i>string</i>
Tree	<a href="#">flow-attribute</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-enrich-max-packet-size** *number*

Synopsis	Maximum HTTP enriched packet size
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">http-enrich-max-packet-size</a> <i>number</i>
Tree	<a href="#">http-enrich-max-packet-size</a>
Range	576 to 9212
Units	octets
Default	1500
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**isa-capacity-cost-high-threshold** *number*

Synopsis	Capacity cost high threshold for the ISA-AA group
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">isa-capacity-cost-high-threshold</a> <i>number</i>
Tree	<a href="#">isa-capacity-cost-high-threshold</a>
Range	0 to 4294967294
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isa-capacity-cost-low-threshold** *number*

Synopsis	Capacity cost low threshold for the ISA-AA group
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">isa-capacity-cost-low-threshold</a> <i>number</i>
Tree	<a href="#">isa-capacity-cost-low-threshold</a>
Range	1 to 4294967295
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**minimum-isa-generation** *number*

Synopsis	Minimum ISA generation for this AA group
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">minimum-isa-generation</a> <i>number</i>
Tree	<a href="#">minimum-isa-generation</a>
Range	1 to 2
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**overload-cut-through** *boolean*

Synopsis	Enable cut-through of traffic if ISA is in overload
Context	<b>configure</b> <a href="#">isa application-assurance-group</a> <i>number</i> <a href="#">overload-cut-through</a> <i>boolean</i>
Tree	<a href="#">overload-cut-through</a>
Default	false
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### overload-sub-quarantine

Synopsis Enter the **overload-sub-quarantine** context

Context **configure isa application-assurance-group number overload-sub-quarantine**

Tree [overload-sub-quarantine](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### admin-state *keyword*

Synopsis Administrative state of overload subscriber quarantine

Context **configure isa application-assurance-group number overload-sub-quarantine admin-state *keyword***

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### primary

Synopsis Enter the **primary** context

Context **configure isa application-assurance-group number primary**

Tree [primary](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### esa [*esa-id*] *number vm number*

Synopsis Add a list entry for **esa**

Context **configure isa application-assurance-group number primary esa *number vm number***

Tree [esa](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[esa-id]** *number*

Synopsis ESA ID

Context **configure** isa application-assurance-group number primary esa number vm number

Tree esa

Range 1 to 16

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vm** *number*

Synopsis VM ID within the ESA

Context **configure** isa application-assurance-group number primary esa number vm number

Tree esa

Range 1 to 4

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **isa** [**mda-id**] *string*

Synopsis Add a list entry for **isa**

Context **configure** isa application-assurance-group number primary isa string

Tree isa

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[mda-id]** *string*

Synopsis MDA/ISA ID

Context **configure** isa application-assurance-group number primary isa string

Tree isa

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure isa application-assurance-group number qos</b>
Tree	<a href="#">qos</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure isa application-assurance-group number qos egress</b>
Tree	<a href="#">egress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## from-subscriber

Synopsis	Enter the <b>from-subscriber</b> context
Context	<b>configure isa application-assurance-group number qos egress from-subscriber</b>
Tree	<a href="#">from-subscriber</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## buffer-pool

Synopsis	Enter the <b>buffer-pool</b> context
Context	<b>configure isa application-assurance-group number qos egress from-subscriber buffer-pool</b>
Tree	<a href="#">buffer-pool</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Name of the buffer pool used for this ISA group

Context **configure isa application-assurance-group number qos egress from-subscriber buffer-pool name string**

Tree [name](#)

String Length 1 to 32

Default default

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **resv-cbs number**

Synopsis Reserved CBS for this ISA group

Context **configure isa application-assurance-group number qos egress from-subscriber buffer-pool resv-cbs number**

Tree [resv-cbs](#)

Range 0 to 100

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **slope-policy reference**

Synopsis Slope policy name

Context **configure isa application-assurance-group number qos egress from-subscriber buffer-pool slope-policy reference**

Tree [slope-policy](#)

Reference **configure qos slope-policy string**

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-scheduler-policy** *reference*

Synopsis	Port scheduler policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress from-subscriber port-scheduler-policy <i>reference</i>
Tree	port-scheduler-policy
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**queue-policy** *reference*

Synopsis	Queue policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress from-subscriber queue-policy <i>reference</i>
Tree	queue-policy
Reference	<b>configure</b> qos network-queue <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wa-shared-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for weighted average utilization
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress from-subscriber wa-shared-high-wmark ( <i>number</i>   <i>keyword</i> )
Tree	wa-shared-high-wmark
Range	1 to 100
Units	percent
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wa-shared-low-wmark** *number*

Synopsis	Low watermark for the weighted average utilization
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Context	<b>configure isa application-assurance-group number qos egress from-subscriber wa-shared-low-wmark number</b>
Tree	<a href="#">wa-shared-low-wmark</a>
Range	0 to 99
Units	percent
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### to-subscriber

Synopsis	Enter the <b>to-subscriber</b> context
Context	<b>configure isa application-assurance-group number qos egress to-subscriber</b>
Tree	<a href="#">to-subscriber</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### buffer-pool

Synopsis	Enter the <b>buffer-pool</b> context
Context	<b>configure isa application-assurance-group number qos egress to-subscriber buffer-pool</b>
Tree	<a href="#">buffer-pool</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### name *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the buffer pool used for this ISA group
Context	<b>configure isa application-assurance-group number qos egress to-subscriber buffer-pool name <i>string</i></b>
Tree	<a href="#">name</a>
String Length	1 to 32

Default	default
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **resv-cbs** *number*

Synopsis	Reserved CBS for this ISA group
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool <b>resv-cbs</b> <i>number</i>
Tree	<a href="#">resv-cbs</a>
Range	0 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **slope-policy** *reference*

Synopsis	Slope policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber buffer-pool <b>slope-policy</b> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> qos <b>slope-policy</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-scheduler-policy** *reference*

Synopsis	Port scheduler policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber port-scheduler-policy <b>reference</b>
Tree	<a href="#">port-scheduler-policy</a>
Reference	<b>configure</b> qos <b>port-scheduler-policy</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**queue-policy** *reference*

Synopsis	Queue policy name
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber queue-policy <i>reference</i>
Tree	queue-policy
Reference	<b>configure</b> qos network-queue <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wa-shared-high-wmark** (*number* | *keyword*)

Synopsis	High watermark for weighted average utilization
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber wa-shared-high-wmark ( <i>number</i>   <i>keyword</i> )
Tree	wa-shared-high-wmark
Range	1 to 100
Units	percent
Options	max
Default	max
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wa-shared-low-wmark** *number*

Synopsis	Low watermark for the weighted average utilization
Context	<b>configure</b> isa application-assurance-group <i>number</i> qos egress to-subscriber wa-shared-low-wmark <i>number</i>
Tree	wa-shared-low-wmark
Range	0 to 99
Units	percent
Default	0
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## shared-resources

Synopsis	Enter the <b>shared-resources</b> context
Context	<b>configure isa application-assurance-group number shared-resources</b>
Tree	<a href="#">shared-resources</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gtp-tunnel-database *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Percentage of allocated memory resources
Context	<b>configure isa application-assurance-group number shared-resources gtp-tunnel-database number</b>
Tree	<a href="#">gtp-tunnel-database</a>
Range	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tcp-advanced-functions *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation of resources for TCP advanced functions
Context	<b>configure isa application-assurance-group number shared-resources tcp-advanced-functions number</b>
Tree	<a href="#">tcp-advanced-functions</a>
Range	1 to 100
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**url-filter-web-service-cache** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of shared memory as a percentage
Context	<b>configure</b> isa application-assurance-group <i>number</i> shared-resources url-filter-web-service-cache <i>number</i>
Tree	url-filter-web-service-cache
Range	1 to 100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**statistics**

Synopsis	Enter the <b>statistics</b> context
Context	<b>configure</b> isa application-assurance-group <i>number</i> statistics
Tree	statistics
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**stats-type** [isa-aa-group-stats-type] *keyword*

Synopsis	Enter the <b>stats-type</b> list instance
Context	<b>configure</b> isa application-assurance-group <i>number</i> statistics stats-type <i>keyword</i>
Tree	stats-type
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[isa-aa-group-stats-type]** *keyword*

Synopsis	Group performance statistics type
Context	<b>configure</b> isa application-assurance-group <i>number</i> statistics stats-type <i>keyword</i>
Tree	stats-type
Options	aa-performance
Notes	This element is part of a list key.

Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis Accounting policy ID used by AA  
 Context **configure** isa application-assurance-group number statistics stats-type keyword accounting-policy reference  
 Tree accounting-policy  
 Reference **configure** log accounting-policy number  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis Enable the collection of statistics  
 Context **configure** isa application-assurance-group number statistics stats-type keyword collect-stats boolean  
 Tree collect-stats  
 Default false  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transit-prefix-limits**

Synopsis Enter the **transit-prefix-limits** context  
 Context **configure** isa application-assurance-group number transit-prefix-limits  
 Tree transit-prefix-limits  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-entries** *number*

Synopsis Limit of transit prefix IPv4 entries per AA group  
 Context **configure** isa application-assurance-group number transit-prefix-limits ipv4-entries number

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Tree	<a href="#">ipv4-entries</a>
Range	1 to 16383
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-remote-entries** *number*

Synopsis	Limit of transit prefix IPv4 remote entries per group
Context	<b>configure isa application-assurance-group</b> <i>number</i> <b>transit-prefix-limits ipv4-remote-entries</b> <i>number</i>
Tree	<a href="#">ipv4-remote-entries</a>
Range	1 to 2047
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-entries** *number*

Synopsis	Limit of transit prefix IPv6 entries per AA group
Context	<b>configure isa application-assurance-group</b> <i>number</i> <b>transit-prefix-limits ipv6-entries</b> <i>number</i>
Tree	<a href="#">ipv6-entries</a>
Range	1 to 8191
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-remote-entries** *number*

Synopsis	Limit of transit prefix IPv6 remote entries per group
Context	<b>configure isa application-assurance-group</b> <i>number</i> <b>transit-prefix-limits ipv6-remote-entries</b> <i>number</i>
Tree	<a href="#">ipv6-remote-entries</a>
Range	1 to 1023
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vm-traffic-distribute-by-ip** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow packet distribution by IP address for virtual AA
Context	<b>configure</b> isa application-assurance-group <i>number</i> vm-traffic-distribute-by-ip <i>boolean</i>
Tree	vm-traffic-distribute-by-ip
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vm-traffic-distribute-by-teid** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable load balancing of the traffic using TEID
Context	<b>configure</b> isa application-assurance-group <i>number</i> vm-traffic-distribute-by-teid <i>boolean</i>
Tree	vm-traffic-distribute-by-teid
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**Ins-group** [*id*] *number*

Synopsis	Enter the <b>Ins-group</b> list instance
Context	<b>configure</b> isa Ins-group <i>number</i>
Tree	Ins-group
Description	Commands in this context configure the ISA L2TP Network Server (LNS) group.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	LNS group ID
Context	<b>configure isa lns-group number</b>
Tree	<a href="#">lns-group</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the ISA LNS group
Context	<b>configure isa lns-group number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure isa lns-group number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esa [esa-id] reference vm reference**

Synopsis	Enter the <b>esa</b> list instance
Context	<b>configure isa lns-group number esa reference vm reference</b>
Tree	<a href="#">esa</a>
Max. Instances	6

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**[esa-id] reference**

Synopsis	ESA ID
Context	<b>configure</b> <a href="#">isa lns-group</a> <a href="#">number</a> <a href="#">esa reference</a> <a href="#">vm reference</a>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <a href="#">number</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**vm reference**

Synopsis	VM ID
Context	<b>configure</b> <a href="#">isa lns-group</a> <a href="#">number</a> <a href="#">esa reference</a> <a href="#">vm reference</a>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <a href="#">number</a> <a href="#">vm</a> <a href="#">number</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**drain boolean**

Synopsis	Redirect subscribers to other ESA VMs
Context	<b>configure</b> <a href="#">isa lns-group</a> <a href="#">number</a> <a href="#">esa reference</a> <a href="#">vm reference</a> <a href="#">drain boolean</a>
Tree	<a href="#">drain</a>
Description	<p>When configured to <b>true</b>, the ESA VM redirects new subscribers to use other ESA VMs.</p> <p>The drain function gracefully redirects subscribers to other ESA VMs and does not allow new subscribers to use the ESA VM. As the existing subscribers terminate their sessions, the ESA VM no longer services any subscribers and can be decommissioned gracefully.</p> <p>When configured to <b>false</b>, the ESA VM is set to the normal working operational state and accepts new LNS subscribers.</p>
Default	false



Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **mda** [*mda-id*] *string*

Synopsis	Enter the <b>mda</b> list instance
Context	<b>configure isa lns-group</b> <i>number mda string</i>
Tree	<b>mda</b>
Description	Commands in this context configure an ISA LNS group MDA.
Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[mda-id]** *string*

Synopsis	MDA ID for the ISA LNS group
Context	<b>configure isa lns-group</b> <i>number mda string</i>
Tree	<b>mda</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **drain** *boolean*

Synopsis	Prevent new L2TP sessions from associating with ISA
Context	<b>configure isa lns-group</b> <i>number mda string drain boolean</i>
Tree	<b>drain</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Port policy for the ISA LNS group
Context	<b>configure</b> <i>isa lns-group number port-policy reference</i>
Tree	<i>port-policy</i>
Reference	<b>configure</b> <i>port-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group** [*id*] *number*

Synopsis	Enter the <b>nat-group</b> list instance
Context	<b>configure</b> <i>isa nat-group number</i>
Tree	<i>nat-group</i>
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	NAT group ID
Context	<b>configure</b> <i>isa nat-group number</i>
Tree	<i>nat-group</i>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the NAT group
Context	<b>configure</b> <i>isa nat-group number admin-state keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esa** [[esa-id](#)] *reference* [vm](#) *reference*

Synopsis	Add a list entry for <b>esa</b>
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[esa-id]** *reference*

Synopsis	Provisioned ESA ID
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**vm reference**

Synopsis	VM ID for the provisioned BB ISA
Context	<b>configure isa nat-group number esa reference vm reference</b>
Tree	<a href="#">esa</a>
Reference	<b>configure esa number vm number</b>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**log**

Synopsis	Enter the <b>log</b> context
Context	<b>configure isa nat-group number log</b>
Tree	<a href="#">log</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**suppress-lsn-events *boolean***

Synopsis	Suppress LSN events when RADIUS accounting is enabled
Context	<b>configure isa nat-group number log suppress-lsn-events <i>boolean</i></b>
Tree	<a href="#">suppress-lsn-events</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**suppress-lsn-sub-blocks-free *boolean***

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	<b>configure isa nat-group number log suppress-lsn-sub-blocks-free <i>boolean</i></b>
Tree	<a href="#">suppress-lsn-sub-blocks-free</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mda** [[mda-id](#)] *string*

Synopsis	Add a list entry for <b>mda</b>
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">mda</a> <i>string</i>
Tree	<a href="#">mda</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[mda-id]** *string*

Synopsis	MDA ID for ISA NAT group
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">mda</a> <i>string</i>
Tree	<a href="#">mda</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">radius-accounting-policy</a> <i>reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius</a> <a href="#">isa-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**redundancy**

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy</a>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**active-mda-limit** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of active MS-ISAs in the NAT group
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy</a> <a href="#">active-mda-limit</a> <i>number</i>
Tree	<a href="#">active-mda-limit</a>
Range	1 to 14
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inter-chassis**

Synopsis	Enable the <b>inter-chassis</b> context
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy</a> <a href="#">inter-chassis</a>
Tree	<a href="#">inter-chassis</a>
Notes	The following elements are part of a choice: <b>inter-chassis</b> or <b>intra-chassis</b> .
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-timeout-on-switchover** *number*

Synopsis	Flow timeout immediately following a switchover
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy</a> <a href="#">inter-chassis</a> <a href="#">flow-timeout-on-switchover</a> <i>number</i>
Tree	<a href="#">flow-timeout-on-switchover</a>
Description	<p>This command configures the initial flow timeout on the newly active node for the NAT group after a switchover. The timeout is in effect only if there is no traffic present over the flow; otherwise, the first packet over the flow resets the flow timeout to the originally configured value (under the NAT policy configuration).</p> <p>This command configuration restricts the flow timeout to a portion of the originally configured value.</p>
Range	1 to 50

Units	percent
Default	50
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis	IP MTU for ISA-to-ISA communication
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy inter-chassis ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP MTU size used to transport flow synchronization records between the ISAs. Multiple flow synchronization events can be packed into a single frame up to the IP MTU size.
Range	512 to 9000
Default	1500
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy inter-chassis keepalive</a>
Tree	<a href="#">keepalive</a>
Description	Commands in this context configure keepalive messages between the CPMs residing on different chassis and are used to detect the presence of the peering node. If the redundant peer connectivity is lost beyond the limit defined by the keepalive messages, each node in the redundant pair transitions to standalone mode. Keepalive messages use UDP transport.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dropcount** *number*

Synopsis	Threshold for lost consecutive keepalive messages
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy inter-chassis keepalive dropcount</a> <i>number</i>
Tree	<a href="#">dropcount</a>

Description	This command configures the threshold for the number of consecutive keepalive messages that are lost between the redundant nodes before the connection is declared down. When the peer is considered unreachable, each node transitions to standalone mode.
Range	2 to 20
Default	2
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Interval between two consecutive keepalive messages
Context	<b>configure</b> isa nat-group <i>number</i> redundancy inter-chassis keepalive interval <i>number</i>
Tree	interval
Description	This command configures the interval at which the keepalive messages are periodically sent between the redundant nodes (CPMs) to verify the presence of the peer. If peer connectivity is lost, each node transitions to standalone mode.
Range	2 to 250
Units	deciseconds
Default	30
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local-ip-range-start** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Starting IP address for ISAs in the NAT group
Context	<b>configure</b> isa nat-group <i>number</i> redundancy inter-chassis local-ip-range-start <i>string</i>
Tree	local-ip-range-start
Description	This command configures the initial IP address for the ISAs in the NAT group. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the



purpose of flow synchronization. Traffic from the member ISA with the initial IP address is sent to the initial IP address from the remote IP range.

Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **monitor-oper-group** [[oper-group](#)] *reference*

Synopsis	Enter the <b>monitor-oper-group</b> list instance
Context	<b>configure</b> <a href="#">isa nat-group number redundancy inter-chassis monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Description	Commands in this context specify monitoring settings for objects in an operational group, such as SAPs, BFD sessions, or VRRP sessions, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of the objects in the operational group influences the health of a NAT node in a redundant configuration.
Max. Instances	4
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[oper-group]** *reference*

Synopsis	Operational group name
Context	<b>configure</b> <a href="#">isa nat-group number redundancy inter-chassis monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group string</a>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **health-drop** *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	<b>configure</b> <a href="#">isa nat-group number redundancy inter-chassis monitor-oper-group reference health-drop number</a>
Tree	<a href="#">health-drop</a>
Range	1 to 255

Default	1
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **monitor-port** [*port-id*] *string*

Synopsis	Enter the <b>monitor-port</b> list instance
Context	<b>configure</b> isa nat-group number redundancy inter-chassis monitor-port <i>string</i>
Tree	<a href="#">monitor-port</a>
Description	Commands in this context specify monitoring settings for a port carrying NAT traffic, in order to adjust the overall health of the node in a redundant inter-chassis NAT system. A state change of a monitored port influences the health of a NAT node in a redundant configuration.
Max. Instances	16
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[port-id]** *string*

Synopsis	Port ID
Context	<b>configure</b> isa nat-group number redundancy inter-chassis monitor-port <i>string</i>
Tree	<a href="#">monitor-port</a>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **health-drop** *number*

Synopsis	Overall health drop of the NAT group on a state change
Context	<b>configure</b> isa nat-group number redundancy inter-chassis monitor-port <i>string</i> health-drop <i>number</i>
Tree	<a href="#">health-drop</a>
Range	1 to 255
Default	1
Introduced	20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### preferred *boolean*

Synopsis Set the preferred activity status for the node

Context **configure isa nat-group number redundancy inter-chassis preferred boolean**

Tree [preferred](#)

Description When configured to **true**, the system designates the node in a redundant NAT system with the preferred activity status. The preferred status comes into consideration only when both redundant nodes have equal health values. If the peer traffic-serving node has an equal health value but does not have the preferred designation, a switch of activity occurs to route traffic to the preferred node. The switchover could cause a brief interruption in traffic flow.

When configured to **false**, the preferred designation is not set for the node.

Default false

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### remote-ip-range-start *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Starting IP address for ISAs on the remote node

Context **configure isa nat-group number redundancy inter-chassis remote-ip-range-start string**

Tree [remote-ip-range-start](#)

Description This command configures the initial IP address for the ISAs in the NAT group on the remote node. Consecutive IP addresses are automatically assigned for the remaining ISAs. The IP addresses are used to communicate between the ISAs on redundant nodes for the purpose of flow synchronization. Traffic from the member ISA with the initial local IP address is sent to the initial IP address from the remote IP range.

Introduced 20.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**replication-threshold** *number*

Synopsis	Minimum time to wait before a NAT flow is synchronized
Context	<b>configure isa nat-group</b> <i>number</i> <b>redundancy inter-chassis replication-threshold</b> <i>number</i>
Tree	<b>replication-threshold</b>
Description	This command configures the minimum time to wait before a NAT flow is replicated (synchronized) to the standby node.
Range	0 to 300
Units	seconds
Default	20
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router instance for the ISA-to-ISA communication
Context	<b>configure isa nat-group</b> <i>number</i> <b>redundancy inter-chassis router-instance</b> <i>string</i>
Tree	<b>router-instance</b>
Description	This command specifies the routing instance through which ISAs on redundant nodes communicate with each other and synchronize their flow state.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sync** *boolean*

Synopsis	Synchronize NAT flows between nodes
Context	<b>configure isa nat-group</b> <i>number</i> <b>redundancy inter-chassis sync</b> <i>boolean</i>
Tree	<b>sync</b>
Default	true
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## intra-chassis

Synopsis Enter the **intra-chassis** context

Context **configure** [isa nat-group number redundancy intra-chassis](#)

Tree [intra-chassis](#)

Notes The following elements are part of a choice: **inter-chassis** or **intra-chassis**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## active-active

Synopsis Enter the **active-active** context

Context **configure** [isa nat-group number redundancy intra-chassis active-active](#)

Tree [active-active](#)

Notes The following elements are part of a choice: **active-active**, **active-standby**, or **I2aware-bypass**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## failed-mda-limit *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Maximum failed MDAs allowed in ICR for the NAT group

Context **configure** [isa nat-group number redundancy intra-chassis active-active failed-mda-limit number](#)

Tree [failed-mda-limit](#)

Range 1 to 2

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## active-standby



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Active-standby intra-chassis NAT redundancy model
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy intra-chassis active-standby</a>
Tree	<a href="#">active-standby</a>
Notes	The following elements are part of a choice: <b>active-active</b> , <b>active-standby</b> , or <b>l2aware-bypass</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## l2aware-bypass



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	L2-aware-bypass NAT redundancy model
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">redundancy intra-chassis l2aware-bypass</a>
Tree	<a href="#">l2aware-bypass</a>
Notes	The following elements are part of a choice: <b>active-active</b> , <b>active-standby</b> , or <b>l2aware-bypass</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**scaling-profile** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Scaling profile for the NAT group
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">scaling-profile</a> <i>keyword</i>
Tree	<a href="#">scaling-profile</a>
Description	This command determines profiles for NAT scaling. Lower profile numbers allocate less resources, thus supporting lower scaling.  Contact your Nokia representative for more information about NAT scaling figures in each profile.
Options	profile1, profile2, profile3
Default	profile1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-limits**

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">session-limits</a>
Tree	<a href="#">session-limits</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reserved** *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i> <a href="#">session-limits</a> <a href="#">reserved</a> <i>number</i>
Tree	<a href="#">reserved</a>
Range	1 to 6291456
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## upnp-mappings *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	<b>configure isa nat-group</b> <i>number</i> <a href="#">session-limits upnp-mappings</a> <i>number</i>
Tree	<a href="#">upnp-mappings</a>
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure isa nat-group</b> <i>number</i> <a href="#">session-limits watermarks</a>
Tree	<a href="#">watermarks</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high *number*

Synopsis	Session limit high watermark for each MDA in the group
Context	<b>configure isa nat-group</b> <i>number</i> <a href="#">session-limits watermarks high</a> <i>number</i>
Tree	<a href="#">high</a>
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low** *number*

Synopsis Session limit low watermark for each MDA in the group

Context **configure** [isa nat-group](#) *number* [session-limits](#) [watermarks](#) **low** *number*

Tree [low](#)

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-group** [*id*] *number*

Synopsis Enter the **tunnel-group** list instance

Context **configure** [isa tunnel-group](#) *number*

Tree [tunnel-group](#)

Description Commands in this context create or edit a tunnel group. A tunnel group is a set of one or more MS-ISAs that support the origination and termination of IPsec and IP/GRE tunnels. On a VSR, the **isa-scale-mode** command must be specified, which defines the maximum number of tunnels on each ISA.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [*id*] *number*

Synopsis Tunnel group ID

Context **configure** [isa tunnel-group](#) *number*

Tree [tunnel-group](#)

Range 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the ISA tunnel group
Context	<b>configure isa tunnel-group number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**backup** *string*

Synopsis	IPsec module configured in the slot to the IPsec group
Context	<b>configure isa tunnel-group number backup string</b>
Tree	<a href="#">backup</a>
Notes	The following elements are part of a choice: <b>multi-active</b> or ( <b>backup</b> and <b>primary</b> ).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure isa tunnel-group number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipsec-responder-only** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Act as an IKE responder except upon MC-IPsec switchover
Context	<b>configure isa tunnel-group number ipsec-responder-only boolean</b>
Tree	<a href="#">ipsec-responder-only</a>

Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **isa-scale-mode** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tunnel limit on each ISA for the tunnel group
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">isa-scale-mode</a> <i>keyword</i>
Tree	<a href="#">isa-scale-mode</a>
Options	tunnel-limit-2k, tunnel-limit-32k, tunnel-limit-64k, tunnel-limit-8, tunnel-limit-32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-active**

Synopsis	Enable the <b>multi-active</b> context
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a>
Tree	<a href="#">multi-active</a>
Notes	The following elements are part of a choice: <b>multi-active</b> or ( <b>backup</b> and <b>primary</b> ).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active-isa-number** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of active MS-ISAs in the tunnel group
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">active-isa-number</a> <i>number</i>
Tree	<a href="#">active-isa-number</a>

Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esa** [[esa-id](#)] *reference* [vm](#) *reference*

Synopsis	Add a list entry for <b>esa</b>
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Notes	The following elements are part of a choice: <b>esa</b> , <b>isa</b> , or <b>member-pool</b> .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[esa-id]** *reference*

Synopsis	ESA ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **vm** *reference*

Synopsis	ESM-VM ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i> <a href="#">multi-active</a> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i> <a href="#">vm</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**isa** [*isa-id*] *string*

Synopsis	Add a list entry for <b>isa</b>
Context	<b>configure isa tunnel-group</b> <i>number</i> <b>multi-active isa</b> <i>string</i>
Tree	<a href="#">isa</a>
Notes	The following elements are part of a choice: <b>esa</b> , <b>isa</b> , or <b>member-pool</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[isa-id]** *string*

Synopsis	ISA ID associated with the tunnel member pool
Context	<b>configure isa tunnel-group</b> <i>number</i> <b>multi-active isa</b> <i>string</i>
Tree	<a href="#">isa</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**member-pool** *reference*

Synopsis	Tunnel-member pool name
Context	<b>configure isa tunnel-group</b> <i>number</i> <b>multi-active member-pool</b> <i>reference</i>
Tree	<a href="#">member-pool</a>
Reference	<b>configure isa tunnel-member-pool</b> <i>string</i>
Notes	The following elements are part of a choice: <b>esa</b> , <b>isa</b> , or <b>member-pool</b> .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**primary** *string*

Synopsis	Primary ISA IPsec module assigned for the tunnel group
Context	<b>configure isa tunnel-group</b> <i>number</i> <b>primary</b> <i>string</i>
Tree	<a href="#">primary</a>
Notes	The following elements are part of a choice: <b>multi-active</b> or ( <b>backup</b> and <b>primary</b> ).
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## reassemble

Synopsis Enter the **reassemble** context  
Context **configure isa tunnel-group number reassemble**  
Tree [reassemble](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-wait-time *number*

Synopsis Maximum time to receive fragments for packet reassembly  
Context **configure isa tunnel-group number reassemble max-wait-time number**  
Tree [max-wait-time](#)  
Range 1 to 5000  
Units milliseconds  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## stats-collection

Synopsis Enter the **stats-collection** context  
Context **configure isa tunnel-group number stats-collection**  
Tree [stats-collection](#)  
Description Commands in this context configure the ISA statistics collection.  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## isa-dp-cpu-usage *boolean*

Synopsis Collect statistics used to derive ISA DP CPU usage  
Context **configure isa tunnel-group number stats-collection isa-dp-cpu-usage boolean**  
Tree [isa-dp-cpu-usage](#)  
Description When configured to **true**, this command collects statistics used to derive ISA CPU DP usage and impacts the ISA performance.

	When configured to <b>false</b> , statistics are not collected.
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **strict-esp-sequence-number-ordering** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict ESP sequence number ordering
Context	<b>configure</b> <i>isa tunnel-group number</i> <b>strict-esp-sequence-number-ordering</b> <i>boolean</i>
Tree	<a href="#">strict-esp-sequence-number-ordering</a>
Description	When configured to <b>true</b> , the router enables strict ESP sequence number ordering. When ESP sequence number ordering is enabled, the outbound ESP sequence number of a CHILD_SA must be in the same order as when clear packets are received by the same CHILD_SA.
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **tunnel-member-pool** [[name](#)] *string*

Synopsis	Enter the <b>tunnel-member-pool</b> list instance
Context	<b>configure</b> <i>isa tunnel-member-pool</i> <i>string</i>
Tree	<a href="#">tunnel-member-pool</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **[name]** *string*

Synopsis	ISA tunnel-member pool name
Context	<b>configure</b> <i>isa tunnel-member-pool</i> <i>string</i>
Tree	<a href="#">tunnel-member-pool</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-member-pool</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **esa** [[esa-id](#)] *reference* [vm](#) *reference*

Synopsis	Add a list entry for <b>esa</b>
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-member-pool</a> <i>string</i> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Description	Commands in this context add specified ESA-VMs to the pool.
Max. Instances	16
Notes	The following elements are part of a choice: <b>esa</b> or <b>isa</b> .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **[esa-id]** *reference*

Synopsis	ESA ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-member-pool</a> <i>string</i> <a href="#">esa</a> <i>reference</i> <a href="#">vm</a> <i>reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s



**vm reference**

Synopsis	ESM-VM ID
Context	<b>configure isa tunnel-member-pool</b> <i>string</i> <b>esa reference vm reference</b>
Tree	<b>esa</b>
Reference	<b>configure esa number vm number</b>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**high-availability keyword**

Synopsis	High availability scale mode
Context	<b>configure isa tunnel-member-pool</b> <i>string</i> <b>high-availability keyword</b>
Tree	<b>high-availability</b>
Description	This command configures the high availability (HA) mode for a pool. The specified scale mode is the maximum number of all tunnel groups associated with the pool.
Options	none, tunnel-limit-system, tunnel-limit-32k, tunnel-limit-64k, tunnel-limit-128k, tunnel-limit-256k
Default	none
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isa [isa-id] string**

Synopsis	Add a list entry for <b>isa</b>
Context	<b>configure isa tunnel-member-pool</b> <i>string</i> <b>isa string</b>
Tree	<b>isa</b>
Max. Instances	16
Notes	The following elements are part of a choice: <b>esa</b> or <b>isa</b> .
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[isa-id]** *string*

Synopsis	ISA ID associated with the tunnel member pool
Context	<b>configure isa tunnel-member-pool</b> <i>string isa string</i>
Tree	<a href="#">isa</a>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**video-group** [[video-group-id](#)] *number*

Synopsis	Enter the <b>video-group</b> list instance
Context	<b>configure isa video-group</b> <i>number</i>
Tree	<a href="#">video-group</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[video-group-id]** *number*

Synopsis	Video group identifier
Context	<b>configure isa video-group</b> <i>number</i>
Tree	<a href="#">video-group</a>
Range	1 to 4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**admin-state** *keyword*

Synopsis	Administrative state of the video group
Context	<b>configure isa video-group</b> <i>number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**analyzer** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the analyzer for all streams on the video group
Context	<b>configure</b> <i>isa video-group number analyzer boolean</i>
Tree	<i>analyzer</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>isa video-group number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-server** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow FCC server capability for the group
Context	<b>configure</b> isa video-group number fcc-server boolean
Tree	fcc-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-rt-server** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable the local RET server for the group
Context	<b>configure</b> isa video-group number local-rt-server boolean
Tree	local-rt-server
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mda** [*mda-id*] *string*

Synopsis	Add a list entry for <b>mda</b>
Context	<b>configure</b> isa video-group number mda string
Tree	mda
Max. Instances	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[mda-id]** *string*

Synopsis	MDA identifier
Context	<b>configure</b> <i>isa video-group number mda string</i>
Tree	<i>mda</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**resv-ret** *number*

Synopsis	Egress bandwidth reserved for retransmission
Context	<b>configure</b> <i>isa video-group number resv-ret number</i>
Tree	<i>resv-ret</i>
Range	0 to 10500
Units	megabps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**stream-selection** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allow stream selection for the group
Context	<b>configure</b> <i>isa video-group number stream-selection boolean</i>
Tree	<i>stream-selection</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**vapp [esa-id] reference vapp-id reference**

Synopsis	Add a list entry for <b>vapp</b>
Context	<b>configure isa video-group number vapp reference vapp-id reference</b>
Tree	<b>vapp</b>
Description	This command adds a list entry for the ESA and VM ID to the list of video group member ESA virtual applications.
Max. Instances	6
Introduced	21.5.R1
Platforms	7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[esa-id] reference**

Synopsis	ESA ID
Context	<b>configure isa video-group number vapp reference vapp-id reference</b>
Tree	<b>vapp</b>
Reference	<b>configure esa number</b>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**vapp-id reference**

Synopsis	Virtual application ID
Context	<b>configure isa video-group number vapp reference vapp-id reference</b>
Tree	<b>vapp</b>
Reference	<b>configure esa number vm number</b>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**watermark**

Synopsis	Enter the <b>watermark</b> context
Context	<b>configure isa video-group number watermark</b>

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Tree	<a href="#">watermark</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">isa video-group</a> <i>number</i> <a href="#">watermark</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **fcc number**

Synopsis	FCC watermark parameters based on the bandwidth
Context	<b>configure</b> <a href="#">isa video-group</a> <i>number</i> <a href="#">watermark</a> <a href="#">bandwidth</a> <a href="#">fcc</a> <i>number</i>
Tree	<a href="#">fcc</a>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **ret number**

Synopsis	RET watermark parameters based on the bandwidth
Context	<b>configure</b> <a href="#">isa video-group</a> <i>number</i> <a href="#">watermark</a> <a href="#">bandwidth</a> <a href="#">ret</a> <i>number</i>
Tree	<a href="#">ret</a>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**total number**

Synopsis	Total watermark parameters based on the bandwidth
Context	<b>configure</b> <a href="#">isa video-group</a> <i>number</i> <a href="#">watermark bandwidth total</a> <i>number</i>
Tree	<a href="#">total</a>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**session**

Synopsis	Enter the <b>session</b> context
Context	<b>configure</b> <a href="#">isa video-group</a> <i>number</i> <a href="#">watermark session</a>
Tree	<a href="#">session</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc number**

Synopsis	FCC watermark parameters based on the session
Context	<b>configure</b> <a href="#">isa video-group</a> <i>number</i> <a href="#">watermark session fcc</a> <i>number</i>
Tree	<a href="#">fcc</a>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ret number**

Synopsis	RET watermark parameters based on the session
Context	<b>configure</b> <a href="#">isa video-group</a> <i>number</i> <a href="#">watermark session ret</a> <i>number</i>
Tree	<a href="#">ret</a>
Range	1 to 99



Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**total number**

Synopsis	Total watermark parameters based on the session
Context	<b>configure</b> <a href="#">isa</a> <a href="#">video-group</a> <a href="#">number</a> <a href="#">watermark</a> <a href="#">session</a> <a href="#">total</a> <a href="#">number</a>
Tree	<a href="#">total</a>
Range	1 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**wlan-gw-group [id] number**

Synopsis	Enter the <b>wlan-gw-group</b> list instance
Context	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <a href="#">number</a>
Tree	<a href="#">wlan-gw-group</a>
Description	Commands in this context configure a WLAN-gateway group that contains a set of ISAs used in WLAN-gateway functionality. A WLAN-gateway group can also be used where a NAT group is expected. The WLAN-gateway group ID shares the same number space with the NAT group.
Max. Instances	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	WLAN-GW ISA group ID
Context	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <a href="#">number</a>
Tree	<a href="#">wlan-gw-group</a>
Range	1 to 4

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active-iom-limit** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Number of WLAN-GW IOMs used as active IOMs
Context	<b>configure</b> <i>isa wlan-gw-group number active-iom-limit number</i>
Tree	<a href="#">active-iom-limit</a>
Range	1 to 7
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active-mda-limit** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of ISA MDAs in active use by the group
Context	<b>configure</b> <i>isa wlan-gw-group number active-mda-limit number</i>
Tree	<a href="#">active-mda-limit</a>
Range	1 to 14
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

**admin-state** *keyword*

Synopsis	Administrative state of the WLAN Gateway group
Context	<b>configure</b> <i>isa wlan-gw-group number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>isa wlan-gw-group number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**distributed-sub-mgmt**

Synopsis	Enter the <b>distributed-sub-mgmt</b> context
Context	<b>configure</b> <i>isa wlan-gw-group number distributed-sub-mgmt</i>
Tree	<a href="#">distributed-sub-mgmt</a>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isa-aa-group** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA AA group for WLAN-GW DSM subscribers
Context	<b>configure</b> <i>isa wlan-gw-group number distributed-sub-mgmt isa-aa-group reference</i>
Tree	<a href="#">isa-aa-group</a>
Reference	<b>configure</b> <i>isa application-assurance-group number</i>

Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **isa-aa-oversubscription-factor** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of WLAN GW ISAs that a single ISA can serve
Context	<b>configure</b> <i>isa wlan-gw-group number distributed-sub-mgmt isa-aa-oversubscription-factor number</i>
Tree	<a href="#">isa-aa-oversubscription-factor</a>
Range	1 to 10
Default	1
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### **esa** [[esa-id](#)] *reference vm reference*

Synopsis	Add a list entry for <b>esa</b>
Context	<b>configure</b> <i>isa wlan-gw-group number esa reference vm reference</i>
Tree	<a href="#">esa</a>
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### **[esa-id]** *reference*

Synopsis	ESA ID
Context	<b>configure</b> <i>isa wlan-gw-group number esa reference vm reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <i>esa number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### **vm** *reference*

Synopsis	VM ID
Context	<b>configure</b> <i>isa wlan-gw-group number esa reference vm reference</i>
Tree	<a href="#">esa</a>
Reference	<b>configure</b> <a href="#">esa</a> <i>number vm number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### **iom** [[slot-number](#)] *reference*

Synopsis	Add a list entry for <b>iom</b>
Context	<b>configure</b> <i>isa wlan-gw-group number iom reference</i>
Tree	<a href="#">iom</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[slot-number]** *reference*

Synopsis	IOM slot to use in the WLAN-GW group
Context	<b>configure</b> <i>isa wlan-gw-group number iom reference</i>
Tree	<a href="#">iom</a>
Reference	<b>configure</b> <a href="#">card</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mda** [[mda-id](#)] *string*

Synopsis	Add a list entry for <b>mda</b>
Context	<b>configure</b> <i>isa wlan-gw-group number mda string</i>
Tree	<a href="#">mda</a>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s

### **[mda-id]** *string*

Synopsis MDA slot value  
 Context **configure** *isa wlan-gw-group number mda string*  
 Tree [mda](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s

### **nat**

Synopsis Enter the **nat** context  
 Context **configure** *isa wlan-gw-group number nat*  
 Tree [nat](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **log**

Synopsis Enter the **log** context  
 Context **configure** *isa wlan-gw-group number nat log*  
 Tree [log](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **suppress-lsn-events** *boolean*

Synopsis Suppress LSN events when RADIUS accounting is enabled  
 Context **configure** *isa wlan-gw-group number nat log suppress-lsn-events boolean*  
 Tree [suppress-lsn-events](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**suppress-lsn-sub-blocks-free** *boolean*

Synopsis	Suppress LSN Free block and NAT pool block notification
Context	<b>configure</b> <i>isa wlan-gw-group number nat log suppress-lsn-sub-blocks-free boolean</i>
Tree	<a href="#">suppress-lsn-sub-blocks-free</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lsn** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use Large Scale NAT
Context	<b>configure</b> <i>isa wlan-gw-group number nat lsn boolean</i>
Tree	<a href="#">lsn</a>
Default	true
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy for ISA group
Context	<b>configure</b> <i>isa wlan-gw-group number nat radius-accounting-policy reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <i>aaa radius isa-policy string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-limits**

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure</b> <i>isa wlan-gw-group number nat session-limits</i>
Tree	<a href="#">session-limits</a>

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reserved** *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	<b>configure isa wlan-gw-group</b> <i>number nat session-limits reserved number</i>
Tree	<a href="#">reserved</a>
Range	1 to 6291456
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upnp-mappings** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of UPnP mappings per member
Context	<b>configure isa wlan-gw-group</b> <i>number nat session-limits upnp-mappings number</i>
Tree	<a href="#">upnp-mappings</a>
Description	This command specifies the maximum number of Universal Plug and Play (UPnP) mappings per member.
Range	1 to 524288
Default	524288
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **watermarks**

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure isa wlan-gw-group</b> <i>number nat session-limits watermarks</i>
Tree	<a href="#">watermarks</a>
Introduced	16.0.R1



Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high** *number*

Synopsis Session limit high watermark for each MDA in the group

Context **configure** *isa wlan-gw-group number nat session-limits watermarks high number*

Tree [high](#)

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low** *number*

Synopsis Session limit low watermark for each MDA in the group

Context **configure** *isa wlan-gw-group number nat session-limits watermarks low number*

Tree [low](#)

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-policy** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Port policy used to configure ports for the ISA group

Context **configure** *isa wlan-gw-group number port-policy reference*

Tree [port-policy](#)

Reference **configure** *port-policy string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### redundancy *keyword*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Hardware unit subject to redundancy  
 Context **configure** isa wlan-gw-group number redundancy keyword  
 Tree redundancy  
 Options iom, mda  
 Default iom  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### scaling-profile *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis ISA scaling profile identifier  
 Context **configure** isa wlan-gw-group number scaling-profile keyword  
 Tree scaling-profile  
 Options profile1, profile2, profile3  
 Default profile1  
 Introduced 20.5.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s

## tunnel-port-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel port policy for per-tunnel QoS processing
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">tunnel-port-policy</a> <i>reference</i>
Tree	<a href="#">tunnel-port-policy</a>
Reference	<b>configure</b> <a href="#">port-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enter the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks</a>
Tree	<a href="#">watermarks</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mark [[entity](#)] *keyword*

Synopsis	Enter the <b>mark</b> list instance
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks</a> <a href="#">mark</a> <i>keyword</i>
Tree	<a href="#">mark</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[entity](#)] *keyword*

Synopsis	Entity to be monitored
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks</a> <a href="#">mark</a> <i>keyword</i>
Tree	<a href="#">mark</a>
Options	user-equipment, bridge-domain, radius-proxy-client
Notes	This element is part of a list key.

---

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high** *number*

Synopsis	High watermark for the WLAN-GW group
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks mark</a> <i>keyword</i> <b>high</b> <i>number</i>
Tree	<a href="#">high</a>
Range	1 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low** *number*

Synopsis	Low watermark for the WLAN-GW group
Context	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i> <a href="#">watermarks mark</a> <i>keyword</i> <b>low</b> <i>number</i>
Tree	<a href="#">low</a>
Range	0 to 99
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.22 lag commands

```

configure
- lag string
  - access
    - adapt-qos
      - include-egr-hash-cfg boolean
      - mode keyword
    - bandwidth number
    - booking-factor number
    - per-fp-egr-queuing boolean
    - per-fp-ing-queuing boolean
    - per-fp-sap-instance boolean
  - adaptive-load-balancing
    - bandwidth-threshold number
    - interval number
    - tolerance number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - ipv4
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-on-distributing-only boolean
      - local-ip-address string
      - max-admin-down-time (number | keyword)
      - max-setup-time (number | keyword)
      - multiplier number
      - receive-interval number
      - remote-ip-address string
      - transmit-interval number
    - ipv6
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-on-distributing-only boolean
      - local-ip-address string
      - max-admin-down-time (number | keyword)
      - max-setup-time (number | keyword)
      - multiplier number
      - receive-interval number
      - remote-ip-address string
      - transmit-interval number
  - soft-reset-extension boolean
  - description string
  - dynamic-cost boolean
  - encap-type keyword
  - eth-cfm
    - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
    - ais
      - client-meg-level number
      - interface-support boolean
      - interval number
      - low-priority-defect keyword
      - priority number
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number

```

## configure lag eth-cfm mep apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ccm** *boolean*
- **ccm-ltm-priority** *number*
- **ccm-padding-size** *number*
- **ccm-tlv-ignore** *keyword*
- **collect-lmm-stats** *boolean*
- **csf**
  - **multiplier** *decimal-number*
- **description** *string*
- **eth-test**
  - **bit-error-threshold** *number*
  - **test-pattern**
    - **crc-tlv** *boolean*
    - **pattern** *keyword*
- **facility-fault** *boolean*
- **grace**
  - **eth-ed**
    - **max-rx-defect-window** *number*
    - **priority** *number*
    - **rx-eth-ed** *boolean*
    - **tx-eth-ed** *boolean*
  - **eth-vsm-grace**
    - **rx-eth-vsm-grace** *boolean*
    - **tx-eth-vsm-grace** *boolean*
- **low-priority-defect** *keyword*
- **mac-address** *string*
- **one-way-delay-threshold** *number*
- **vlan** (*number* | *keyword*)
- **hash-weight-threshold**
  - **action** *keyword*
  - **cost** *number*
  - **value** *number*
- **hold-time-down** *number*
- **lACP**
  - **administrative-key** *number*
  - **mode** *keyword*
  - **system-id** *string*
  - **system-priority** *number*
- **lACP-mux-control** *keyword*
- **lACP-xmit-interval** *keyword*
- **lACP-xmit-stdby** *boolean*
- **link-map-profile** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **failure-mode** *keyword*
  - **link** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **port-type** *keyword*
- **mac-address** *string*
- **max-ports** *number*
- **mode** *keyword*
- **monitor-oper-group** *reference*
- **per-link-hash**
  - **weighted**
    - **auto-rebalance** *boolean*
    - **sap-hash-mode** *keyword*
    - **subscriber-hash-mode** *keyword*
- **port** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hash-weight** (*number* | *keyword*)

---

**configure lag port priority**

- **priority** *number*
- **sub-group** (*number* | *keyword*)
- **port-threshold**
  - **action** *keyword*
  - **cost** *number*
  - **value** *number*
- **port-type** *keyword*
- **selection-criteria**
  - **mode** *keyword*
  - **slave-to-partner** *boolean*
  - **subgroup-hold-time** (*number* | *keyword*)
- **standby-signaling** *keyword*

### 3.22.1 lag command descriptions

#### **lag** [**lag-name**] *string*

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure lag</b> <i>string</i>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

#### **[lag-name]** *string*

Synopsis	LAG name
Context	<b>configure lag</b> <i>string</i>
Tree	<a href="#">lag</a>
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

#### **access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure lag</b> <i>string</i> <b>access</b>
Tree	<a href="#">access</a>
Introduced	16.0.R1
Platforms	All

#### **adapt-qos**

Synopsis	Enter the <b>adapt-qos</b> context
Context	<b>configure lag</b> <i>string</i> <b>access</b> <b>adapt-qos</b>
Tree	<a href="#">adapt-qos</a>
Introduced	16.0.R1



Platforms All

### **include-egr-hash-cfg** *boolean*

Synopsis Factor egress hashing into buffer and rate distribution  
 Context **configure lag** *string* **access adapt-qos include-egr-hash-cfg** *boolean*  
 Tree [include-egr-hash-cfg](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **mode** *keyword*

Synopsis QoS adaptation mode  
 Context **configure lag** *string* **access adapt-qos mode** *keyword*  
 Tree [mode](#)  
 Options link, distribute, port-fair  
 Introduced 16.0.R1  
 Platforms All

### **bandwidth** *number*

Synopsis Administrative bandwidth applied to this LAG  
 Context **configure lag** *string* **access bandwidth** *number*  
 Tree [bandwidth](#)  
 Range 1 to 6400000000  
 Units bps  
 Introduced 16.0.R1  
 Platforms All

### **booking-factor** *number*

Synopsis Booking factor against the administrative bandwidth  
 Context **configure lag** *string* **access booking-factor** *number*  
 Tree [booking-factor](#)

---

Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **per-fp-egr-queuing** *boolean*

Synopsis	Per FP egress queuing
Context	<b>configure lag</b> <i>string</i> <a href="#">access per-fp-egr-queuing</a> <i>boolean</i>
Tree	<a href="#">per-fp-egr-queuing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **per-fp-ing-queuing** *boolean*

Synopsis	Enable ingress queuing per forwarding port
Context	<b>configure lag</b> <i>string</i> <a href="#">access per-fp-ing-queuing</a> <i>boolean</i>
Tree	<a href="#">per-fp-ing-queuing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **per-fp-sap-instance** *boolean*

Synopsis	SAP instance allocation on a LAG
Context	<b>configure lag</b> <i>string</i> <a href="#">access per-fp-sap-instance</a> <i>boolean</i>
Tree	<a href="#">per-fp-sap-instance</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **adaptive-load-balancing**

Synopsis	Enable the <b>adaptive-load-balancing</b> context
----------	---

Context	<b>configure lag string adaptive-load-balancing</b>
Tree	<a href="#">adaptive-load-balancing</a>
Description	Commands in this context configure adaptive load balancing between LAG links.
Introduced	20.10.R1
Platforms	All

### **bandwidth-threshold *number***

Synopsis	Minimum bandwidth for adaptive load balancing
Context	<b>configure lag string adaptive-load-balancing bandwidth-threshold <i>number</i></b>
Tree	<a href="#">bandwidth-threshold</a>
Range	0 to 100
Units	percent
Introduced	22.10.R1
Platforms	All

### **interval *number***

Synopsis	The statistics pooling interval for the LAG ports
Context	<b>configure lag string adaptive-load-balancing interval <i>number</i></b>
Tree	<a href="#">interval</a>
Range	15   30   60   120
Units	seconds
Default	30
Introduced	21.5.R1
Platforms	All

### **tolerance *number***

Synopsis	Threshold that triggers link utilization optimization
Context	<b>configure lag string adaptive-load-balancing tolerance <i>number</i></b>
Tree	<a href="#">tolerance</a>
Description	This command configures the threshold value that is based on the difference between the most-loaded and least-loaded links in a LAG. When the threshold value is exceeded, the adaptive load balancing operation attempts to optimize traffic distribution between LAG links.

Range	1 to 100
Units	percent
Default	20
Introduced	20.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the LAG
Context	<b>configure lag</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **bfd-liveness**

Synopsis	Enter the <b>bfd-liveness</b> context
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness</b>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness</b> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
----------	---

Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4 admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **bfd-on-distributing-only** *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4 bfd-on-distributing-only</b> <i>boolean</i>
Tree	<b>bfd-on-distributing-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **local-ip-address** *string*

Synopsis	BFD source address
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4 local-ip-address</b> <i>string</i>
Tree	<b>local-ip-address</b>
Introduced	16.0.R1
Platforms	All

### **max-admin-down-time** (*number* | *keyword*)

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4 max-admin-down-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-admin-down-time</b>
Range	0 to 3600
Units	seconds
Options	infinite
Default	0
Introduced	16.0.R1
Platforms	All

**max-setup-time** (*number* | *keyword*)

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4</b> <b>max-setup-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-setup-time</b>
Range	0 to 60000
Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4</b> <b>multiplier</b> <i>number</i>
Tree	<b>multiplier</b>
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

**receive-interval** *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv4</b> <b>receive-interval</b> <i>number</i>
Tree	<b>receive-interval</b>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**remote-ip-address** *string*

Synopsis	BFD destination address
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <a href="#">remote-ip-address</a> <i>string</i>
Tree	<a href="#">remote-ip-address</a>
Introduced	16.0.R1
Platforms	All

**transmit-interval** *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <a href="#">transmit-interval</a> <i>number</i>
Tree	<a href="#">transmit-interval</a>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of micro-BFD session for IP family
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**bfd-on-distributing-only** *boolean*

Synopsis	Restrict micro-BFD sessions to LACP state distributing
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">bfd-on-distributing-only</a> <i>boolean</i>
Tree	<a href="#">bfd-on-distributing-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

**local-ip-address** *string*

Synopsis	BFD source address
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">local-ip-address</a> <i>string</i>
Tree	<a href="#">local-ip-address</a>
Introduced	16.0.R1
Platforms	All

**max-admin-down-time** (*number* | *keyword*)

Synopsis	Maximum time to forward traffic after micro-BFD is down
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">max-admin-down-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-admin-down-time</a>
Range	0 to 3600
Units	seconds
Options	infinite
Default	0
Introduced	16.0.R1
Platforms	All

**max-setup-time** (*number* | *keyword*)

Synopsis	Maximum time to forward traffic during micro-BFD setup
Context	<b>configure lag</b> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">max-setup-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-setup-time</a>
Range	0 to 60000



Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Interval multiplier to detect BFD packets not received
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6 multiplier</b> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **receive-interval** *number*

Synopsis	Receive timer for micro-BFD session over the LAG links
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6 receive-interval</b> <i>number</i>
Tree	<a href="#">receive-interval</a>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **remote-ip-address** *string*

Synopsis	BFD destination address
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6 remote-ip-address</b> <i>string</i>
Tree	<a href="#">remote-ip-address</a>
Introduced	16.0.R1
Platforms	All

**transmit-interval** *number*

Synopsis	Transmit timer for micro-BFD session over the LAG links
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness ipv6</b> <b>transmit-interval</b> <i>number</i>
Tree	<b>transmit-interval</b>
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**soft-reset-extension** *boolean*

Synopsis	Extend BFD timers during soft reset
Context	<b>configure lag</b> <i>string</i> <b>bfd-liveness</b> <b>soft-reset-extension</b> <i>boolean</i>
Tree	<b>soft-reset-extension</b>
Default	true
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure lag</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**dynamic-cost** *boolean*

Synopsis	Allow LAG costing using operational aggregate bandwidth
Context	<b>configure lag</b> <i>string</i> <b>dynamic-cost</b> <i>boolean</i>
Tree	<b>dynamic-cost</b>
Default	false

Introduced 16.0.R1  
 Platforms All

### **encap-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Encapsulation type  
 Context **configure lag** *string* **encap-type** *keyword*  
 Tree [encap-type](#)  
 Options null, dot1q, qinq  
 Introduced 16.0.R1  
 Platforms All

### **eth-cfm**

Synopsis Enter the **eth-cfm** context  
 Context **configure lag** *string* **eth-cfm**  
 Tree [eth-cfm](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*

Synopsis Enter the **mep** list instance  
 Context **configure lag** *string* **eth-cfm mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*  
 Tree [mep](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<b>mep</b>
Reference	<b>configure eth-cfm domain string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<b>mep</b>
Reference	<b>configure eth-cfm domain string association string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id number**

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<b>mep</b>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure lag</b> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ais**

Synopsis	Enable the <b>ais</b> context
Context	<b>configure lag</b> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b>
Tree	<a href="#">ais</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**client-meg-level** *number*

Synopsis	Client MEG level for AIS message generation
Context	<b>configure lag</b> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <b>client-meg-level</b> <i>number</i>
Tree	<a href="#">client-meg-level</a>
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interface-support** *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure lag</b> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <b>interface-support</b> <i>boolean</i>

Tree	<a href="#">interface-support</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*

Synopsis	Transmission interval for AIS messages
Context	<b>configure lag</b> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1   60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure lag</b> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis	Priority of the AIS messages generated by the node
Context	<b>configure lag</b> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## alarm-notification

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</b>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</b>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number</b>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm boolean**

Synopsis Generate CCM messages

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean**

Tree **ccm**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority number**

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number**

Tree **ccm-ltm-priority**

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size number**

Synopsis Number of octets of padding to insert in CCM packets

Context **configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number**

Tree **ccm-padding-size**

Description This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range 3 to 1500

Introduced 16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-tlv-ignore** *keyword*

Synopsis TLV to ignore on reception

Context **configure lag** *string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-tlv-ignore keyword*

Tree [ccm-tlv-ignore](#)

Description This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.

When unconfigured, the MEP processes all the recognized TLVs.

Options interface-status, port-status

Max. Instances 2

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis Collect statistics for loss measurement message tests

Context **configure lag** *string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-stats boolean*

Tree [collect-lmm-stats](#)

Description When configured to **true**, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **csf**

Synopsis Enable the **csf** context

Context	<b>configure lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf</b>
Tree	<b>csf</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf multiplier</b> <i>decimal-number</i>
Tree	<b>multiplier</b>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b>
Tree	<b>eth-test</b>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test bit-error-threshold](#) *number*

Tree [bit-error-threshold](#)

Range 0 to 11840

Units bit errors

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **test-pattern**

Synopsis Enter the **test-pattern** context

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test test-pattern](#)

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **crc-tlv** *boolean*

Synopsis Generate a CRC checksum

Context **configure lag** *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test test-pattern](#) [crc-tlv](#) *boolean*

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**facility-fault** *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">facility-fault</a> <i>boolean</i>
Tree	<a href="#">facility-fault</a>
Description	When configured to <b>true</b> , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition.  When configured to <b>false</b> , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-ed

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</b>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</b>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</b>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rx-eth-ed *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure lag string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</b>

Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">lag</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to <b>false</b> , the router disables the Nokia Grace function.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <b>lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace tx-eth-vsm-grace</b> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <b>lag</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
----------	------------------------

Context	<b>configure lag</b> <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure lag</b> <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vlan** (*number* | *keyword*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outer VLAN ID of the tunnel
Context	<b>configure lag</b> <i>string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number vlan (number   keyword)</i>
Tree	<a href="#">vlan</a>
Range	1 to 4094
Options	none
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## hash-weight-threshold

Synopsis	Enter the <b>hash-weight-threshold</b> context
Context	<b>configure lag string hash-weight-threshold</b>
Tree	<a href="#">hash-weight-threshold</a>
Introduced	19.10.R1
Platforms	All

## action keyword

Synopsis	Action when the sum of the hash weight is not exceeded
Context	<b>configure lag string hash-weight-threshold action keyword</b>
Tree	<a href="#">action</a>
Options	down, dynamic-cost, static-cost
Default	down
Introduced	19.10.R1
Platforms	All

## cost number

Synopsis	Static cost of the LAG
Context	<b>configure lag string hash-weight-threshold cost number</b>
Tree	<a href="#">cost</a>
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

## value number

Synopsis	Sum of the hash weight values of all active LAG ports
Context	<b>configure lag string hash-weight-threshold value number</b>
Tree	<a href="#">value</a>
Range	1 to 6400000
Introduced	19.10.R1
Platforms	All

**hold-time-down** *number*

Synopsis	Delay time for reporting the LAG is down
Context	<b>configure lag</b> <i>string</i> <b>hold-time-down</b> <i>number</i>
Tree	<a href="#">hold-time-down</a>
Range	1 to 2000
Units	deciseconds
Introduced	16.0.R1
Platforms	All

**lacp**

Synopsis	Enable the <b>lacp</b> context
Context	<b>configure lag</b> <i>string</i> <b>lacp</b>
Tree	<a href="#">lacp</a>
Introduced	16.0.R1
Platforms	All

**administrative-key** *number*

Synopsis	Key to identify the channel group on each LACP port
Context	<b>configure lag</b> <i>string</i> <b>lacp administrative-key</b> <i>number</i>
Tree	<a href="#">administrative-key</a>
Description	This command configures the administrative key that identifies the channel group on each port configured to use LACP.  In an MC-LAG configuration, both redundant nodes must be configured with the same key values. In any other case, the key is only locally significant.
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**mode** *keyword*

Synopsis	Mode in which LACP operates
----------	-----------------------------

Context	<b>configure lag string lacp mode keyword</b>
Tree	<b>mode</b>
Options	passive, active
Default	passive
Introduced	16.0.R1
Platforms	All

### **system-id string**

Synopsis	System ID
Context	<b>configure lag string lacp system-id string</b>
Tree	<b>system-id</b>
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

### **system-priority number**

Synopsis	System priority value
Context	<b>configure lag string lacp system-priority number</b>
Tree	<b>system-priority</b>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **lacp-mux-control keyword**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MUX machine control for LACP LAG in active/passive mode
Context	<b>configure lag string lacp-mux-control keyword</b>
Tree	<b>lacp-mux-control</b>
Options	coupled, independent
Default	coupled

Introduced 16.0.R1  
Platforms All

### **lacp-xmit-interval** *keyword*

Synopsis Time for periodic transmission  
Context **configure lag** *string lacp-xmit-interval keyword*  
Tree [lacp-xmit-interval](#)  
Options slow, fast  
Default fast  
Introduced 16.0.R1  
Platforms All

### **lacp-xmit-stdby** *boolean*

Synopsis Allow LACP message transmission on standby links  
Context **configure lag** *string lacp-xmit-stdby boolean*  
Tree [lacp-xmit-stdby](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **link-map-profile** [[link-map-profile-id](#)] *number*

Synopsis Enter the **link-map-profile** list instance  
Context **configure lag** *string link-map-profile number*  
Tree [link-map-profile](#)  
Introduced 16.0.R1  
Platforms All

### **[link-map-profile-id]** *number*

Synopsis Link map profile to control LAG ports  
Context **configure lag** *string link-map-profile number*  
Tree [link-map-profile](#)

Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure lag</b> <i>string link-map-profile number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **failure-mode** *keyword*

Synopsis	Failure mode of LAG link profile
Context	<b>configure lag</b> <i>string link-map-profile number failure-mode keyword</i>
Tree	<a href="#">failure-mode</a>
Options	per-link-hash, discard
Default	per-link-hash
Introduced	16.0.R1
Platforms	All

### **link** [[port-id](#)] *reference*

Synopsis	Enter the <b>link</b> list instance
Context	<b>configure lag</b> <i>string link-map-profile number link reference</i>
Tree	<a href="#">link</a>
Introduced	16.0.R1
Platforms	All

### **[port-id]** *reference*

Synopsis	Port associated with the link map profile
----------	---

Context	<b>configure lag</b> <i>string link-map-profile number link reference</i>
Tree	<a href="#">link</a>
Reference	<b>configure lag</b> <i>string port reference</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **port-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the associated port for this entry
Context	<b>configure lag</b> <i>string link-map-profile number link reference port-type keyword</i>
Tree	<a href="#">port-type</a>
Options	primary, secondary
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **mac-address** *string*

Synopsis	MAC address of the LAG
Context	<b>configure lag</b> <i>string mac-address string</i>
Tree	<a href="#">mac-address</a>
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

### **max-ports** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ports allowed in the LAG
Context	<b>configure lag</b> <i>string</i> <b>max-ports</b> <i>number</i>
Tree	<b>max-ports</b>
Description	This command configures the maximum number of ports allowed in the LAG.  This command must be configured to 64 when the LAG name is a numeric identifier in the range of 1 to 64. If the LAG name is a numeric identifier in the range of 65 to 800, this command must be configured to 32.
Range	32   64
Introduced	21.2.R1
Platforms	All

### **mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operation mode of the LAG
Context	<b>configure lag</b> <i>string</i> <b>mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	access, network, hybrid
Default	network
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group** *reference*

Synopsis	Operational group to monitor
Context	<b>configure lag</b> <i>string</i> <b>monitor-oper-group</b> <i>reference</i>
Tree	<b>monitor-oper-group</b>
Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	19.5.R1
Platforms	All

## per-link-hash

Synopsis	Enable the <b>per-link-hash</b> context
Context	<b>configure lag string per-link-hash</b>
Tree	<a href="#">per-link-hash</a>
Introduced	16.0.R1
Platforms	All

## weighted

Synopsis	Enable the <b>weighted</b> context
Context	<b>configure lag string per-link-hash weighted</b>
Tree	<a href="#">weighted</a>
Introduced	16.0.R1
Platforms	All

## auto-rebalance *boolean*

Synopsis	Auto-rebalance SAPs, users, or interfaces for new links
Context	<b>configure lag string per-link-hash weighted auto-rebalance <i>boolean</i></b>
Tree	<a href="#">auto-rebalance</a>
Default	false
Introduced	16.0.R1
Platforms	All

## sap-hash-mode *keyword*

Synopsis	SAP traffic load balance over LAG member links
Context	<b>configure lag string per-link-hash weighted sap-hash-mode <i>keyword</i></b>
Tree	<a href="#">sap-hash-mode</a>
Options	sap, vport
Default	sap
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**subscriber-hash-mode** *keyword*

Synopsis	Subscriber traffic load balance over LAG member links
Context	<b>configure lag</b> <i>string</i> <b>per-link-hash weighted subscriber-hash-mode</b> <i>keyword</i>
Tree	<b>subscriber-hash-mode</b>
Description	This command configures weighted subscriber traffic to be load balanced over LAG member links. Traffic hashing can be performed based on SAPs or Vports.  SAP-based hashing supports weights configured at the subscriber level in the subscriber profile. The SAP hashing mode supports only SAP to subscriber (1:1) deployment models.  Vport-based load balancing supports SAP to subscriber (1:1) and SAP to service (N:1) deployment models.
Options	sap, vport
Default	sap
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**port** [*port-id*] *reference*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure lag</b> <i>string</i> <b>port</b> <i>reference</i>
Tree	<b>port</b>
Introduced	16.0.R1
Platforms	All

**[port-id]** *reference*

Synopsis	Identifier to uniquely identify the port in the LAG
Context	<b>configure lag</b> <i>string</i> <b>port</b> <i>reference</i>
Tree	<b>port</b>
Reference	<b>configure port</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**hash-weight** (*number* | *keyword*)

Synopsis	Flow hashing distribution between LAG ports
Context	<b>configure lag</b> <i>string</i> <b>port</b> <i>reference</i> <b>hash-weight</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>hash-weight</b>
Range	1 to 100000
Options	port-speed
Introduced	19.5.R1
Platforms	All

**priority** *number*

Synopsis	Priority of the port in the LAG
Context	<b>configure lag</b> <i>string</i> <b>port</b> <i>reference</i> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	1 to 65535
Default	32768
Introduced	16.0.R1
Platforms	All

**sub-group** (*number* | *keyword*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subgroup of the port in the LAG
Context	<b>configure lag</b> <i>string</i> <b>port</b> <i>reference</i> <b>sub-group</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>sub-group</b>
Range	1 to 8
Options	auto-iom, auto-mda
Default	1
Introduced	16.0.R1
Platforms	All

## port-threshold

Synopsis	Enter the <b>port-threshold</b> context
Context	<b>configure lag string port-threshold</b>
Tree	<a href="#">port-threshold</a>
Introduced	16.0.R1
Platforms	All

## action keyword

Synopsis	Action when the active links are at or below threshold
Context	<b>configure lag string port-threshold action keyword</b>
Tree	<a href="#">action</a>
Options	down, dynamic-cost, static-cost
Default	down
Introduced	16.0.R1
Platforms	All

## cost number

Synopsis	Static cost of the LAG
Context	<b>configure lag string port-threshold cost number</b>
Tree	<a href="#">cost</a>
Range	1 to 16777215
Introduced	16.0.R3
Platforms	All

## value number

Synopsis	Active link threshold at which action is taken
Context	<b>configure lag string port-threshold value number</b>
Tree	<a href="#">value</a>
Range	0 to 63
Introduced	16.0.R1
Platforms	All

### **port-type** *keyword*

Synopsis	Port type of the LAG
Context	<b>configure lag</b> <i>string</i> <b>port-type</b> <i>keyword</i>
Tree	<b>port-type</b>
Options	standard, hs
Default	standard
Introduced	16.0.R1
Platforms	All

### **selection-criteria**

Synopsis	Enter the <b>selection-criteria</b> context
Context	<b>configure lag</b> <i>string</i> <b>selection-criteria</b>
Tree	<b>selection-criteria</b>
Introduced	16.0.R1
Platforms	All

### **mode** *keyword*

Synopsis	Criteria to select the active subgroup
Context	<b>configure lag</b> <i>string</i> <b>selection-criteria mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	highest-count, highest-weight, best-port
Default	highest-count
Introduced	16.0.R1
Platforms	All

### **slave-to-partner** *boolean*

Synopsis	Use slave-to-partner for selection criteria
Context	<b>configure lag</b> <i>string</i> <b>selection-criteria slave-to-partner</b> <i>boolean</i>
Tree	<b>slave-to-partner</b>
Default	false
Introduced	16.0.R1

---

Platforms All

### **subgroup-hold-time** (*number* | *keyword*)

Synopsis Delay time when switching to a new active subgroup

Context **configure lag string selection-criteria subgroup-hold-time** (*number* | *keyword*)

Tree [subgroup-hold-time](#)

Range 0 to 2000

Units deciseconds

Options infinite

Default 0

Introduced 16.0.R1

Platforms All

### **standby-signaling** *keyword*

Synopsis Way of signaling a member port to the remote side

Context **configure lag string standby-signaling** *keyword*

Tree [standby-signaling](#)

Options lacp, power-off

Default lacp

Introduced 16.0.R1

Platforms All

## 3.23 li commands

```

li
- li-filter
- associations
  - li-ip-filter reference
  - ip-filter string
  - li-ipv6-filter reference
  - ipv6-filter string
  - li-mac-filter reference
  - mac-filter string
- li-ip-filter string
- description string
- entry number
- description string
- match
  - dst-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - fragment keyword
  - protocol (number | keyword)
  - src-ip
    - address (ipv4-prefix-with-host-bits | ipv4-address)
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
- li-ipv6-filter string
- description string
- entry number
- description string
- match
  - dst-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - mask string
  - dst-port
    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
  - next-header (number | keyword)
  - src-ip
    - address (ipv6-prefix-with-host-bits | ipv6-address)
    - mask string
  - src-port
    - eq number
    - gt number
    - lt number

```

## li li-filter li-ipv6-filter entry match src-port range

```

    - range
      - end number
      - start number
- li-mac-filter string
- description string
- entry number
  - description string
  - match
    - dst-mac
      - address string
      - mask string
    - frame-type keyword
    - outer-tag number
    - sap string
    - src-mac
      - address string
      - mask string
- lock-filter keyword
- reserved-block string
- description string
- entry-range
  - end number
  - start number
- ip-filter string
- ipv6-filter string
- mac-filter string
- li-source string
- admin-state keyword
- li-ip-filter reference
  - entry reference
    - intercept-id number
    - session-id number
- li-ipv6-filter reference
  - entry reference
    - intercept-id number
    - session-id number
- li-mac-filter reference
  - entry reference
    - intercept-id number
    - session-id number
- nat
  - dslite string b4 string
  - intercept-id number
  - session-id number
  - ethernet-header
    - destination-address string
    - source-address string
    - type number
  - l2-aware string
  - intercept-id number
  - session-id number
  - nat44 string ip string
  - intercept-id number
  - session-id number
  - nat64 string ip string
  - intercept-id number
  - session-id number
- port string
  - egress boolean
  - ingress boolean
- sap string
  - egress boolean
  - ingress boolean
  - intercept-id number

```

## li li-source sap session-id

```

- session-id number
- subscriber string
- egress boolean
- fc keyword
- host-type keyword
- ingress boolean
- intercept-id number
- ip-address string
- ip-family keyword
- mac-address string
- sap-id string
- session-id number
- sla-profile string
- wlan-gw-dsm-ue string
- intercept-id number
- session-id number
- log
- log-id string
- admin-state keyword
- description string
- destination
  - memory
    - max-entries number
  - netconf
    - max-entries number
  - snmp
    - max-entries number
    - send-using-vprn string
- filter string
- netconf-stream string
- source
  - li boolean
- time-format keyword
- mirror-dest-reservation
- end number
- start number
- mirror-dest-template string
- layer-3-encap
  - direction-bit boolean
  - encap-type keyword
  - ip-source string
  - router-instance string
  - udp
    - destination number
    - source number
- type keyword
- nat
- use-outside-ip-address boolean
- radius
- mirror-dest-template reference
- sci
- pfc-p-li-shared-key string
- x-interfaces
- admin-state keyword
- correlation-id
  - ipoe keyword
  - pppoe keyword
- ine-identifier string
- lic string
- authentication
  - password string
  - private-ki string
  - sequence-group string
- description string

```



## li x-interfaces lic identifier

```

- identifier string
- ipv4
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- port number
- router-instance string
- user-db string
- x1
  - ipv4
    - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - lic-peer reference
    - local-tcp-port number
    - timeouts
      - message-timeout number
  - x2
    - ipv4
      - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - lic-peer reference
    - timeouts
      - keep-alive number
      - request number
  - x3
    - alarms
      - cpu-alarm
        - high-threshold number
        - low-threshold number
      - memory-alarm
        - high-threshold number
        - low-threshold number
      - throughput-alarm
        - high-threshold number
        - low-threshold number
    - ipv4
      - local-address-range
        - end string
        - start string
    - li-group number
    - lic-peers reference
    - session-limit number
    - timeouts
      - keep-alive number
      - request number
      - target-retry-wait number

```

### 3.23.1 li command descriptions

#### li

Synopsis	Configure lawful intercept
Context	<a href="#">li</a>
Tree	<a href="#">li</a>
Introduced	19.10.R1
Platforms	All

#### li-filter

Synopsis	Enter the <b>li-filter</b> context
Context	<a href="#">li li-filter</a>
Tree	<a href="#">li-filter</a>
Introduced	19.10.R1
Platforms	All

#### associations

Synopsis	Enter the <b>associations</b> context
Context	<a href="#">li li-filter associations</a>
Tree	<a href="#">associations</a>
Introduced	19.10.R1
Platforms	All

#### li-ip-filter [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-ip-filter</b> list instance
Context	<a href="#">li li-filter associations li-ip-filter reference</a>
Tree	<a href="#">li-ip-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name] reference**

Synopsis	Name of an existing LI IP filter
Context	<a href="#">li li-filter associations li-ip-filter reference</a> <i>reference</i>
Tree	<a href="#">li-ip-filter</a>
Reference	<a href="#">li li-filter li-ip-filter string</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**ip-filter [filter-name] string**

Synopsis	Add a list entry for <b>ip-filter</b>
Context	<a href="#">li li-filter associations li-ip-filter reference ip-filter string</a> <i>string</i>
Tree	<a href="#">ip-filter</a>
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[filter-name] string**

Synopsis	IP filter to be associated with specified LI IP filter
Context	<a href="#">li li-filter associations li-ip-filter reference ip-filter string</a> <i>string</i>
Tree	<a href="#">ip-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**li-ipv6-filter [li-filter-name] reference**

Synopsis	Enter the <b>li-ipv6-filter</b> list instance
Context	<a href="#">li li-filter associations li-ipv6-filter reference</a> <i>reference</i>

Tree	<a href="#">li-ipv6-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name]** *reference*

Synopsis	LI IPv6 filter name
Context	<a href="#">li li-filter associations li-ipv6-filter reference</a>
Tree	<a href="#">li-ipv6-filter</a>
Reference	<a href="#">li li-filter li-ipv6-filter string</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**ipv6-filter** [[filter-name](#)] *string*

Synopsis	Add a list entry for <b>ipv6-filter</b>
Context	<a href="#">li li-filter associations li-ipv6-filter reference ipv6-filter string</a>
Tree	<a href="#">ipv6-filter</a>
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[filter-name]** *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	<a href="#">li li-filter associations li-ipv6-filter reference ipv6-filter string</a>
Tree	<a href="#">ipv6-filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**li-mac-filter** [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-mac-filter</b> list instance
Context	<a href="#">li li-filter associations</a> <a href="#">li-mac-filter reference</a>
Tree	<a href="#">li-mac-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name]** *reference*

Synopsis	LI MAC filter name
Context	<a href="#">li li-filter associations</a> <a href="#">li-mac-filter reference</a>
Tree	<a href="#">li-mac-filter</a>
Reference	<a href="#">li li-filter</a> <a href="#">li-mac-filter string</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**mac-filter** [[filter-name](#)] *string*

Synopsis	Add a list entry for <b>mac-filter</b>
Context	<a href="#">li li-filter associations</a> <a href="#">li-mac-filter reference</a> <a href="#">mac-filter string</a>
Tree	<a href="#">mac-filter</a>
Max. Instances	1
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[filter-name]** *string*

Synopsis	IP filter to be associated with specified LI IP filter
Context	<a href="#">li li-filter associations</a> <a href="#">li-mac-filter reference</a> <a href="#">mac-filter string</a>
Tree	<a href="#">mac-filter</a>

String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **li-ip-filter** [[li-filter-name](#)] *string*

Synopsis	Enter the <b>li-ip-filter</b> list instance
Context	<a href="#">li li-filter li-ip-filter</a> <i>string</i>
Tree	<a href="#">li-ip-filter</a>
Description	<p>Commands in this context create LI IPv4 filter lists, which can be used to create confidential IPv4 filter based LI source entries.</p> <p>The LI IPv4 filter entries are merged into normal IPv4 filters configured with the <b>li li-filter associations</b> and <b>li li-filter reserved-block</b> commands. The LI IPv4 filter entries are visible only to users with LI permissions.</p>
Introduced	19.10.R1
Platforms	All

### **[li-filter-name]** *string*

Synopsis	LI filter name
Context	<a href="#">li li-filter li-ip-filter</a> <i>string</i>
Tree	<a href="#">li-ip-filter</a>
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li li-filter li-ip-filter</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	19.10.R1
Platforms	All

### **entry** [*li-entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Description Commands in this context configure an entry for the LI filter.

Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.

The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.

Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.

Introduced	19.10.R1
Platforms	All

### **[li-entry-id]** *number*

Synopsis	LI filter entry ID
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Range 1 to 65535

Notes This element is part of a list key.

Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <b>entry</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>

String Length 1 to 80

Introduced	19.10.R1
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

## dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a>
Tree	<a href="#">dst-ip</a>
Introduced	19.10.R1
Platforms	All

## address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IP address to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">address</a> ( <i>ipv4-prefix-with-host-bits</i>   <i>ipv4-address</i> )
Tree	<a href="#">address</a>
Introduced	19.10.R1
Platforms	All

## mask *string*

Synopsis	Mask that is applied as an AND to the IP address
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Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match dst-ip mask string</i>
Tree	<a href="#">mask</a>
Introduced	19.10.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match dst-port</i>
Tree	<a href="#">dst-port</a>
Introduced	19.10.R1
Platforms	All

### **eq number**

Synopsis	Condition on equality to specified value
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match dst-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **gt number**

Synopsis	Condition on being greater than the specified value
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match dst-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **lt number**

Synopsis	Condition on being less than the specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <b>lt</b> <i>number</i>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <b>range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **end number**

Synopsis	Upper bound port to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <b>range</b> <b>end</b> <i>number</i>
Tree	<b>end</b>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **start number**

Synopsis	Lower bound port to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <b>range</b> <b>start</b> <i>number</i>
Tree	<b>start</b>
Range	0 to 65534

Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **fragment** *keyword*

Synopsis	Fragmentation state as the match criterion
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">fragment</a> <i>keyword</i>
Tree	<a href="#">fragment</a>
Options	false, true
Introduced	20.2.R1
Platforms	All

### **protocol** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">protocol</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a>
Tree	<a href="#">src-ip</a>
Introduced	19.10.R1
Platforms	All

### **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IP address to match
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Context	<a href="#">li li-filter li-ip-filter string entry number match src-ip address (ipv4-prefix-with-host-bits   ipv4-address)</a>
Tree	<a href="#">address</a>
Introduced	19.10.R1
Platforms	All

### **mask string**

Synopsis	Mask that is applied as an AND to the IP address
Context	<a href="#">li li-filter li-ip-filter string entry number match src-ip mask string</a>
Tree	<a href="#">mask</a>
Introduced	19.10.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<a href="#">li li-filter li-ip-filter string entry number match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	19.10.R1
Platforms	All

### **eq number**

Synopsis	Condition on equality to specified value
Context	<a href="#">li li-filter li-ip-filter string entry number match src-port eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **gt number**

Synopsis	Condition on being greater than the specified value
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Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **lt** *number*

Synopsis	Condition on being less than the specified value
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **range**

Synopsis	Enable the <b>range</b> context
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound port to match
Context	<a href="#">li li-filter li-ip-filter</a> <i>string entry number match src-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1

Platforms All

### **start number**

Synopsis Lower bound port to match

Context [li li-filter li-ip-filter](#) *string entry number match src-port range start number*

Tree [start](#)

Range 0 to 65534

Notes This element is mandatory.

Introduced 19.10.R1

Platforms All

### **li-ipv6-filter** [[li-filter-name](#)] *string*

Synopsis Enter the **li-ipv6-filter** list instance

Context [li li-filter li-ipv6-filter](#) *string*

Tree [li-ipv6-filter](#)

Description Commands in this context create LI IPv6 filter lists, which can be used to create confidential IPv6 filter based LI source entries.

The LI IPv6 filter entries are merged into normal IPv6 filters configured with the **li li-filter associations** and **li li-filter reserved-block** commands. However, the LI IPv6 filter entries are visible only to users with LI permissions.

Introduced 19.10.R1

Platforms All

### **[li-filter-name]** *string*

Synopsis LI filter name

Context [li li-filter li-ipv6-filter](#) *string*

Tree [li-ipv6-filter](#)

Description This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “\_my-filter”) and cannot use the name “default”.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

**description string**

Synopsis	Text description
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

**entry [[li-entry-id](#)] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	<p>Commands in this context configure an entry for the LI filter.</p> <p>Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.</p> <p>The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.</p> <p>Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.</p>
Introduced	19.10.R1
Platforms	All

**[[li-entry-id](#)] number**

Synopsis	LI filter entry ID
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match</i>
Tree	<a href="#">match</a>
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) are configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match dst-ip</i>
Tree	<a href="#">dst-ip</a>
Introduced	19.10.R1
Platforms	All

**address** (*ipv6-prefix-with-host-bits | ipv6-address*)

Synopsis	IP address to match
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match dst-ip address (ipv6-prefix-with-host-bits   ipv6-address)</i>
Tree	<a href="#">address</a>



Introduced	19.10.R1
Platforms	All

**mask string**

Synopsis	Mask that is applied as an AND to the IPv6 address
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-ip mask string</i>
Tree	<a href="#">mask</a>
Introduced	19.10.R1
Platforms	All

**dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port</i>
Tree	<a href="#">dst-port</a>
Introduced	19.10.R1
Platforms	All

**eq number**

Synopsis	Condition on equality to specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

**gt number**

Synopsis	Condition on being greater than the specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534

Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

**lt number**

Synopsis	Condition on being less than the specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

**end number**

Synopsis	Upper bound port to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string entry number match dst-port range end number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**start number**

Synopsis	Lower bound port to match
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match dst-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**next-header** (*number | keyword*)

Synopsis	IP protocol to match
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match next-header (number   keyword)</i>
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	19.10.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match src-ip</i>
Tree	<a href="#">src-ip</a>
Introduced	19.10.R1
Platforms	All

**address** (*ipv6-prefix-with-host-bits | ipv6-address*)

Synopsis	IP address to match
Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match src-ip address (ipv6-prefix-with-host-bits   ipv6-address)</i>
Tree	<a href="#">address</a>
Introduced	19.10.R1

Platforms All

### **mask string**

Synopsis Mask that is applied as an AND to the IPv6 address  
 Context [li li-filter li-ipv6-filter string entry number match src-ip mask string](#)  
 Tree [mask](#)  
 Introduced 19.10.R1  
 Platforms All

### **src-port**

Synopsis Enter the **src-port** context  
 Context [li li-filter li-ipv6-filter string entry number match src-port](#)  
 Tree [src-port](#)  
 Introduced 19.10.R1  
 Platforms All

### **eq number**

Synopsis Condition on equality to specified value  
 Context [li li-filter li-ipv6-filter string entry number match src-port eq number](#)  
 Tree [eq](#)  
 Range 0 to 65535  
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 19.10.R1  
 Platforms All

### **gt number**

Synopsis Condition on being greater than the specified value  
 Context [li li-filter li-ipv6-filter string entry number match src-port gt number](#)  
 Tree [gt](#)  
 Range 0 to 65534  
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced	19.10.R1
Platforms	All

**lt number**

Synopsis	Condition on being less than the specified value
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">lt</a> <i>number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

**range**

Synopsis	Enable the <b>range</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	19.10.R1
Platforms	All

**end number**

Synopsis	Upper bound port to match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**start number**

Synopsis	Lower bound port to match
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Context	<a href="#">li li-filter li-ipv6-filter</a> <i>string entry number match src-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65534
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **li-mac-filter** [[li-filter-name](#)] *string*

Synopsis	Enter the <b>li-mac-filter</b> list instance
Context	<a href="#">li li-filter li-mac-filter</a> <i>string</i>
Tree	<a href="#">li-mac-filter</a>
Description	<p>Commands in this context configure LI MAC filter lists, which can be used to create confidential MAC filter based LI source entries.</p> <p>The LI MAC filter entries are merged into normal MAC filters as configured using the <b>li-filter associations</b> and <b>li-filter reserved-block</b> commands. The LI MAC filter entries are visible only to users with LI permissions.</p>
Introduced	19.10.R1
Platforms	All

### **[li-filter-name]** *string*

Synopsis	LI filter name
Context	<a href="#">li li-filter li-mac-filter</a> <i>string</i>
Tree	<a href="#">li-mac-filter</a>
Description	This command specifies the LI filter name. Filter names cannot start with an underscore character (for example, “_my-filter”) and cannot use the name “default”.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li li-filter li-mac-filter</a> <i>string description string</i>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

### **entry** [[li-entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li li-filter li-mac-filter</a> <i>string entry number</i>
Tree	<a href="#">entry</a>

Description Commands in this context configure an entry for the LI filter.

Multiple entries can be created using unique entry ID numbers within the filter. An entry in an LI filter always has an implicit action of “forward”. LI filter entries can be used as LI source entries.

The entry numbers for LI filters serve only as keys for managing the entries (deleting entries, and so on). The order of the LI filter entries is not guaranteed to match the entry numbers and the software may reorder entries. Operators must therefore use LI entries in such a way that their relative order is not important.

Entries removed from the filter are immediately removed from all services or network ports where the associated filter is applied.

Introduced	19.10.R1
Platforms	All

### **[li-entry-id]** *number*

Synopsis	LI filter entry ID
Context	<a href="#">li li-filter li-mac-filter</a> <i>string entry number</i>
Tree	<a href="#">entry</a>

Range 1 to 65535

Notes This element is part of a list key.

Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li li-filter li-mac-filter</a> <i>string entry number description string</i>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Description	<p>Commands in this context configure match criteria for the filter entry. If more than one match criteria (within one match statement) is configured, all criteria must be satisfied (and function) for a match to occur.</p> <p>A match context may consist of multiple match criteria, but multiple match statements cannot be configured per entry.</p>
Introduced	19.10.R1
Platforms	All

## dst-mac

Synopsis	Enable the <b>dst-mac</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a>
Tree	<a href="#">dst-mac</a>
Introduced	19.10.R1
Platforms	All

## address *string*

Synopsis	MAC address for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All



**mask string**

Synopsis	MAC address mask for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-mac</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff
Introduced	19.10.R1
Platforms	All

**frame-type keyword**

Synopsis	Frame type for MAC filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">frame-type</a> <i>keyword</i>
Tree	<a href="#">frame-type</a>
Description	This command specifies the frame type for MAC filter entry matching. A filter can be edited even if an LI source references an entry in the filter.
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Default	802dot3
Introduced	19.10.R1
Platforms	All

**outer-tag number**

Synopsis	Outer tag for the QinQ SAP for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">outer-tag</a> <i>number</i>
Tree	<a href="#">outer-tag</a>
Description	<p>This command configures the outer-tag to match on and must be used in conjunction with match criteria SAP in order for the entry match to activate.</p> <p>The match criteria SAP must be an exact match with the QinQ configured on the Epipe or VPLS service (for example 1/1/1:1.*, where the outer tag (C-tag) must be "*"). This feature mandates the provisioning of an associated <b>outer-tag</b> (example, 1), to be able to match on the QinQ packet. This example would perform LI on 1/1/1:1.1 on a 1/1/1:1.* SAP.</p>
Range	1 to 4094
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sap string**

Synopsis	QinQ SAP for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Description	<p>This command specifies the QinQ SAP to match from the Epipe or VPLS service, where the S-tag must be a value and the outer tag (C-tag) must be of type *. This filter match is used in conjunction with match criteria <b>outer-tag</b>, where the <b>outer-tag</b> must also be provisioned for the entry match on the QinQ packet to activate.</p> <p>The match criteria SAP must be an exact match with the QinQ configured on the Epipe or VPLS service (for example 1/1/1:1.*, where the outer tag (C-tag) must be "*"). An associated <b>outer-tag</b> (example, 1) must be provisioned to match on the QinQ packet. This example would perform LI on 1/1/1:1.1 on a 1/1/1:1.* SAP.</p>
String Length	1 to 45
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**src-mac**

Synopsis	Enable the <b>src-mac</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a>
Tree	<a href="#">src-mac</a>
Introduced	19.10.R1
Platforms	All

**address string**

Synopsis	MAC address for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

**mask string**

Synopsis	MAC address mask for filter match
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">mask</a> <i>string</i>

Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff
Introduced	19.10.R1
Platforms	All

### **lock-filter** *keyword*

Synopsis	Lock state of LI filters
Context	<a href="#">li li-filter lock-filter</a> <i>keyword</i>
Tree	<a href="#">lock-filter</a>
Options	lock, unlock
Default	lock
Introduced	19.10.R1
Platforms	All

### **reserved-block** [[block-name](#)] *string*

Synopsis	Enter the <b>reserved-block</b> list instance
Context	<a href="#">li li-filter reserved-block</a> <i>string</i>
Tree	<a href="#">reserved-block</a>
Max. Instances	8
Introduced	19.10.R1
Platforms	All

### **[block-name]** *string*

Synopsis	Object uniquely identifying an LI reserved block
Context	<a href="#">li li-filter reserved-block</a> <i>string</i>
Tree	<a href="#">reserved-block</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">reserved-block</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

### **entry-range**

Synopsis	Enable the <b>entry-range</b> context
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">reserved-block</a> <i>string</i> <a href="#">entry-range</a>
Tree	<a href="#">entry-range</a>
Introduced	19.10.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of the range
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">reserved-block</a> <i>string</i> <a href="#">entry-range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **start** *number*

Synopsis	Lower bound of the range
Context	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">reserved-block</a> <i>string</i> <a href="#">entry-range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	1 to 2097151
Notes	This element is mandatory.
Introduced	19.10.R1

Platforms All

### **ip-filter** [\[filter-name\]](#) *string*

Synopsis Add a list entry for **ip-filter**  
 Context [li li-filter reserved-block](#) *string ip-filter string*  
 Tree [ip-filter](#)  
 Introduced 19.10.R1  
 Platforms All

### **[filter-name]** *string*

Synopsis IP filter ID for LI filter reserved block  
 Context [li li-filter reserved-block](#) *string ip-filter string*  
 Tree [ip-filter](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms All

### **ipv6-filter** [\[filter-name\]](#) *string*

Synopsis Add a list entry for **ipv6-filter**  
 Context [li li-filter reserved-block](#) *string ipv6-filter string*  
 Tree [ipv6-filter](#)  
 Introduced 19.10.R1  
 Platforms All

### **[filter-name]** *string*

Synopsis IP filter ID for LI filter reserved block  
 Context [li li-filter reserved-block](#) *string ipv6-filter string*  
 Tree [ipv6-filter](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.

Introduced 19.10.R1  
 Platforms All

### **mac-filter** [[filter-name](#)] *string*

Synopsis Add a list entry for **mac-filter**  
 Context [li li-filter reserved-block string mac-filter string](#)  
 Tree [mac-filter](#)  
 Introduced 19.10.R1  
 Platforms All

### **[filter-name]** *string*

Synopsis IP filter ID for LI filter reserved block  
 Context [li li-filter reserved-block string mac-filter string](#)  
 Tree [mac-filter](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms All

### **li-source** [[service-name](#)] *string*

Synopsis Enter the **li-source** list instance  
 Context [li li-source string](#)  
 Tree [li-source](#)  
 Introduced 19.10.R1  
 Platforms All

### **[service-name]** *string*

Synopsis Administrative service name  
 Context [li li-source string](#)  
 Tree [li-source](#)  
 String Length 1 to 64

Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of mirror service
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

### **li-ip-filter** [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-ip-filter</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>li-ip-filter</b> <i>reference</i>
Tree	<a href="#">li-ip-filter</a>
Introduced	19.10.R1
Platforms	All

### **[li-filter-name]** *reference*

Synopsis	A unique ID for an li-ip-filter
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <b>li-ip-filter</b> <i>reference</i>
Tree	<a href="#">li-ip-filter</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **entry** [[li-entry-id](#)] *reference*

Synopsis	Enter the <b>entry</b> list instance
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Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Min. Instances	1
Introduced	19.10.R1
Platforms	All

### **[li-entry-id]** *reference*

Synopsis	A unique ID for an li-ip-filter entry
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ip-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **intercept-id** *number*

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">intercept-id</a> <i>number</i>
Tree	<a href="#">intercept-id</a>
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command is configured with <b>ip-udp-shim</b> routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with <b>ip-gre</b> routable encap under the <b>header-type</b> command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All



**session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ip-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with <b>ip-udp-shim</b> routable encap under the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command. For all types of LI source entries, when the mirror service is configured with <b>ip-udp-shim</b> routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with <b>ip-gre</b> routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

**li-ipv6-filter** [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-ipv6-filter</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i>
Tree	<a href="#">li-ipv6-filter</a>
Introduced	19.10.R1
Platforms	All

**[li-filter-name]** *reference*

Synopsis	A unique ID for an li-ipv6-filter
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i>
Tree	<a href="#">li-ipv6-filter</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**entry** [*li-entry-id*] *reference*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Min.	1
Instances	
Introduced	19.10.R1
Platforms	All

**[li-entry-id]** *reference*

Synopsis	A unique ID for an li-ipv6-filter entry
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-ipv6-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**intercept-id** *number*

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">intercept-id</a> <i>number</i>
Tree	<a href="#">intercept-id</a>
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command is configured with <b>ip-udp-shim</b> routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with <b>ip-gre</b> routable encap under the <b>header-type</b> command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823

Introduced	19.10.R1
Platforms	All

### **session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with <b>ip-udp-shim</b> routable encap under the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command. For all types of LI source entries, when the mirror service is configured with <b>ip-udp-shim</b> routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with <b>ip-gre</b> routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **li-mac-filter** [[li-filter-name](#)] *reference*

Synopsis	Enter the <b>li-mac-filter</b> list instance
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i>
Tree	<a href="#">li-mac-filter</a>
Introduced	19.10.R1
Platforms	All

### **[li-filter-name]** *reference*

Synopsis	A unique ID for an li-mac-filter
Context	<a href="#">li li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i>
Tree	<a href="#">li-mac-filter</a>
Reference	<a href="#">li li-filter</a> <a href="#">li-mac-filter</a> <i>string</i>

Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **entry** [*li-entry-id*] *reference*

Synopsis	Enter the <b>entry</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Min. Instances	1
Introduced	19.10.R1
Platforms	All

### **[li-entry-id]** *reference*

Synopsis	A unique ID for an li-mac-filter entry
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i>
Tree	<a href="#">entry</a>
Reference	<a href="#">li</a> <a href="#">li-filter</a> <a href="#">li-mac-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **intercept-id** *number*

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">intercept-id</a> <i>number</i>
Tree	<a href="#">intercept-id</a>
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the <b>configure mirror mirror-dest encaps layer-3-encap header-type</b> command is configured with <b>ip-udp-shim</b> routable encaps, an intercept-id field (as part of the routable encaps) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p>

When the mirror service is configured with **ip-gre** routable encap under the **header-type** command, no intercept ID is inserted and none should be specified against the LI source entries.

Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

### **session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">li-mac-filter</a> <i>reference</i> <a href="#">entry</a> <i>reference</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with <b>ip-udp-shim</b> routable encap under the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command. For all types of LI source entries, when the mirror service is configured with <b>ip-udp-shim</b> routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with <b>ip-gre</b> routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **nat**

Synopsis	Enter the <b>nat</b> context
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a>
Tree	<a href="#">nat</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dslite** [[router-instance](#)] *string* **b4** *string*

Synopsis	Enter the <b>dslite</b> list instance
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Context	<a href="#">li li-source string nat dslite string b4 string</a>
Tree	<a href="#">dslite</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[router-instance] string**

Synopsis	Name of the service
Context	<a href="#">li li-source string nat dslite string b4 string</a>
Tree	<a href="#">dslite</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **b4 string**

Synopsis	B4 prefix of the subscriber
Context	<a href="#">li li-source string nat dslite string b4 string</a>
Tree	<a href="#">dslite</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **intercept-id number**

Synopsis	The intercept id of the traffic flow
Context	<a href="#">li li-source string nat dslite string b4 string intercept-id number</a>
Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-id** *number*

Synopsis	The session id of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">dslite</a> <i>string</i> <a href="#">b4</a> <i>string</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ethernet-header**

Synopsis	Enter the <b>ethernet-header</b> context
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">ethernet-header</a>
Tree	<a href="#">ethernet-header</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**destination-address** *string*

Synopsis	Destination MAC address field of Ethernet encapsulation
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">ethernet-header</a> <a href="#">destination-address</a> <i>string</i>
Tree	<a href="#">destination-address</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**source-address** *string*

Synopsis	Source MAC address field of the Ethernet encapsulation
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">ethernet-header</a> <a href="#">source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type** *number*

Synopsis	Ethertype of the ethernet encapsulation
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Context	<a href="#">li li-source string nat ethernet-header type number</a>
Tree	<a href="#">type</a>
Range	1536 to 65535
Default	1792
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2-aware** [[subscriber-id](#)] *string*

Synopsis	Enter the <b>I2-aware</b> list instance
Context	<a href="#">li li-source string nat I2-aware string</a>
Tree	<a href="#">I2-aware</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[subscriber-id]** *string*

Synopsis	The string identifying the subscribe
Context	<a href="#">li li-source string nat I2-aware string</a>
Tree	<a href="#">I2-aware</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **intercept-id** *number*

Synopsis	The intercept id of the traffic flow
Context	<a href="#">li li-source string nat I2-aware string intercept-id number</a>
Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**session-id** *number*

Synopsis	The session id of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">l2-aware</a> <i>string</i> <b>session-id</b> <i>number</i>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat44** [[router-instance](#)] *string ip string*

Synopsis	Enter the <b>nat44</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <b>nat44</b> <i>string ip string</i>
Tree	<a href="#">nat44</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[router-instance]** *string*

Synopsis	Name of the service
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">nat44</a> <i>string ip string</i>
Tree	<a href="#">nat44</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip** *string*

Synopsis	IP address of the subscriber
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">nat44</a> <i>string ip string</i>
Tree	<a href="#">nat44</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**intercept-id** *number*

Synopsis	The intercept id of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">nat44</a> <i>string</i> <a href="#">ip</a> <i>string</i> <b>intercept-id</b> <i>number</i>
Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-id** *number*

Synopsis	The session id of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">nat44</a> <i>string</i> <a href="#">ip</a> <i>string</i> <b>session-id</b> <i>number</i>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat64** [[router-instance](#)] *string* [ip](#) *string*

Synopsis	Enter the <b>nat64</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">nat64</a> <i>string</i> <a href="#">ip</a> <i>string</i>
Tree	<a href="#">nat64</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[[router-instance](#)]** *string*

Synopsis	Name of the service
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">nat</a> <a href="#">nat64</a> <i>string</i> <a href="#">ip</a> <i>string</i>
Tree	<a href="#">nat64</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip string**

Synopsis	IP prefix of the subscriber
Context	<a href="#">li</a> <a href="#">li-source</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">nat64</a> <a href="#">string</a> <a href="#">ip</a> <a href="#">string</a>
Tree	<a href="#">nat64</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**intercept-id number**

Synopsis	The intercept id of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">nat64</a> <a href="#">string</a> <a href="#">ip</a> <a href="#">string</a> <a href="#">intercept-id</a> <a href="#">number</a>
Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**session-id number**

Synopsis	The session id of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">nat64</a> <a href="#">string</a> <a href="#">ip</a> <a href="#">string</a> <a href="#">session-id</a> <a href="#">number</a>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port [port-id] string**

Synopsis	Enter the <b>port</b> list instance
Context	<a href="#">li</a> <a href="#">li-source</a> <a href="#">string</a> <a href="#">port</a> <a href="#">string</a>
Tree	<a href="#">port</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[port-id] string**

Synopsis	Port ID
Context	<a href="#">li li-source string port string</a>
Tree	<a href="#">port</a>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**egress boolean**

Synopsis	Perform lawful intercept on egress traffic
Context	<a href="#">li li-source string port string egress boolean</a>
Tree	<a href="#">egress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ingress boolean**

Synopsis	Perform lawful intercept on ingress traffic
Context	<a href="#">li li-source string port string ingress boolean</a>
Tree	<a href="#">ingress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sap [sap-id] string**

Synopsis	Enter the <b>sap</b> list instance
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Context	<a href="#">li</a> <a href="#">li-source</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a>
Tree	<a href="#">sap</a>
Description	Commands in this context create a service access point (SAP) within an LI configuration. The specified SAP must define a FastE, GigE, or XGigE, or XGigE access port with a dot1q, null, or q-in-q encapsulation type.
Introduced	19.10.R1
Platforms	All

**[sap-id] string**

Synopsis	SAP ID
Context	<a href="#">li</a> <a href="#">li-source</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a>
Tree	<a href="#">sap</a>
Description	This command specifies the physical port identifier portion of the SAP definition.
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**egress boolean**

Synopsis	Perform lawful intercept on egress traffic
Context	<a href="#">li</a> <a href="#">li-source</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">boolean</a>
Tree	<a href="#">egress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

**ingress boolean**

Synopsis	Perform lawful intercept on ingress traffic
Context	<a href="#">li</a> <a href="#">li-source</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">boolean</a>
Tree	<a href="#">ingress</a>

Description	When configured to <b>true</b> , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

### **intercept-id** *number*

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>intercept-id</b> <i>number</i>
Tree	<a href="#">intercept-id</a>
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command is configured with <b>ip-udp-shim</b> routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with <b>ip-gre</b> routable encap under the <b>header-type</b> command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

### **session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>session-id</b> <i>number</i>
Tree	<a href="#">session-id</a>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with <b>ip-udp-shim</b> routable encap under the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command. For all types of LI source entries, when the mirror service is configured with <b>ip-udp-shim</b> routable encap, a session ID field (as part of the routable</p>

encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.

When a mirror service is configured with **ip-gre** routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.

Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

### **subscriber** [**subscriber-id**] *string*

Synopsis	Enter the <b>subscriber</b> list instance
Context	<a href="#">li li-source</a> <i>string</i> <b>subscriber</b> <i>string</i>
Tree	<a href="#">subscriber</a>
Description	Commands in this context add hosts of a subscriber to a mirroring service.
Introduced	19.10.R1
Platforms	All

### **[subscriber-id]** *string*

Synopsis	Subscriber ID
Context	<a href="#">li li-source</a> <i>string</i> <b>subscriber</b> <i>string</i>
Tree	<a href="#">subscriber</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **egress** *boolean*

Synopsis	Perform lawful intercept on egress traffic
Context	<a href="#">li li-source</a> <i>string</i> <b>subscriber</b> <i>string</i> <b>egress</b> <i>boolean</i>
Tree	<a href="#">egress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on egress traffic. This command configures packets that egress the SAP to be mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false

Introduced	19.10.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding classes to be mirrored
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Description	This command specifies the name of the forwarding class with which to associate LI traffic. The forwarding class name must already be defined within the system.  If the FC name is not already defined, an error is returned and this command has no effect. If the FC name is defined, the forwarding class associated with the FC name overrides the default forwarding class.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

**host-type keyword**

Synopsis	Subscriber host type to be monitored
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>host-type</b> <i>keyword</i>
Tree	<a href="#">host-type</a>
Description	This command specifies the host type for LI.
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All

**ingress boolean**

Synopsis	Perform lawful intercept on ingress traffic
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>ingress</b> <i>boolean</i>
Tree	<a href="#">ingress</a>
Description	When configured to <b>true</b> , the router allows lawful intercept on ingress traffic. This command configures packets that ingress the SAP to be mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.



Default	false
Introduced	19.10.R1
Platforms	All

### **intercept-id** *number*

Synopsis	Intercept ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>intercept-id</b> <i>number</i>
Tree	<a href="#">intercept-id</a>
Description	<p>This command configures the intercept ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This intercept ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>For LI source entries, when the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command is configured with <b>ip-udp-shim</b> routable encap, an intercept-id field (as part of the routable encap) is always present in the mirrored packets. If there is no intercept ID configured for an LI source entry, the default value is inserted.</p> <p>When the mirror service is configured with <b>ip-gre</b> routable encap under the <b>header-type</b> command, no intercept ID is inserted and none should be specified against the LI source entries.</p>
Range	1 to 1073741823
Introduced	19.10.R1
Platforms	All

### **ip-address** *string*

Synopsis	IP address of the subscriber
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>ip-address</b> <i>string</i>
Tree	<a href="#">ip-address</a>
Description	This command specifies the service IP address (system IP address) of the remote device sending LI traffic. If 0.0.0.0 is specified, any remote router is allowed to send to this service.
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

**ip-family** *keyword*

Synopsis	IP family for LI
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>ip-family</b> <i>keyword</i>
Tree	<a href="#">ip-family</a>
Description	This command specifies the IP family for LI.
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

**mac-address** *string*

Synopsis	The source MAC address
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies a MAC address when defining a static host. Multiple static hosts may be configured with the same MAC address because each definition is distinguished by a unique IP address.
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

**sap-id** *string*

Synopsis	SAP ID
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <b>sap-id</b> <i>string</i>
Tree	<a href="#">sap-id</a>
String Length	1 to 45
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

**session-id** *number*

Synopsis	Session ID of the traffic flow
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <a href="#">session-id</a> <i>number</i>
Tree	<a href="#">session-id</a>
Description	<p>This command configures the session ID that is inserted into the packet header for all mirrored packets of the associated LI source entry. This session ID can be used (for example by a downstream LI gateway) to identify the particular LI session to which the packet belongs.</p> <p>The session ID is only valid and used for mirror services that are configured with <b>ip-udp-shim</b> routable encap under the <b>configure mirror mirror-dest encap layer-3-encap header-type</b> command. For all types of LI source entries, when the mirror service is configured with <b>ip-udp-shim</b> routable encap, a session ID field (as part of the routable encap) is always present in the mirrored packets. If no session ID is configured for an LI source entry, the default value is inserted.</p> <p>When a mirror service is configured with <b>ip-gre</b> routable encap under the header-type command, no session ID is inserted and none is specified against the LI source entries.</p>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

**sla-profile** *string*

Synopsis	SLA profile
Context	<a href="#">li</a> <a href="#">li-source</a> <i>string</i> <a href="#">subscriber</a> <i>string</i> <a href="#">sla-profile</a> <i>string</i>
Tree	<a href="#">sla-profile</a>
Description	<p>This command specifies an SLA profile name.</p> <p>Each host of a subscriber can use a different SLA profile. This option allows interception of only the hosts using the specified SLA profile. In some deployments, SLA profiles are assigned per type of traffic. There can be, for example, a specific SLA profile for voice traffic (which could be used for all SIP hosts).</p>
String Length	1 to 32
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

**wlan-gw-dsm-ue** [[mac](#)] *string*

Synopsis	Enter the <b>wlan-gw-dsm-ue</b> list instance
----------	---

Context	<a href="#">li li-source string wlan-gw-dsm-ue string</a>
Tree	<a href="#">wlan-gw-dsm-ue</a>
Introduced	19.10.R1
Platforms	All

**[mac] string**

Synopsis	MAC address of the DSM UE
Context	<a href="#">li li-source string wlan-gw-dsm-ue string</a>
Tree	<a href="#">wlan-gw-dsm-ue</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**intercept-id number**

Synopsis	Intercept identifier
Context	<a href="#">li li-source string wlan-gw-dsm-ue string intercept-id number</a>
Tree	<a href="#">intercept-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

**session-id number**

Synopsis	Session identifier
Context	<a href="#">li li-source string wlan-gw-dsm-ue string session-id number</a>
Tree	<a href="#">session-id</a>
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

**log**

Synopsis	Enter the <b>log</b> context
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Context	<a href="#">li log</a>
Tree	<a href="#">log</a>
Introduced	19.10.R1
Platforms	All

### **log-id** [[name](#)] *string*

Synopsis	Enter the <b>log-id</b> list instance
Context	<a href="#">li log log-id</a> <i>string</i>
Tree	<a href="#">log-id</a>
Max. Instances	30
Introduced	19.10.R1
Platforms	All

### **[name]** *string*

Synopsis	Log ID
Context	<a href="#">li log log-id</a> <i>string</i>
Tree	<a href="#">log-id</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	The administrative state of the log
Context	<a href="#">li log log-id</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<a href="#">li log log-id string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

**destination**

Synopsis	Enter the <b>destination</b> context
Context	<a href="#">li log log-id string destination</a>
Tree	<a href="#">destination</a>
Description	Commands in this context specify where log event data is to be sent.
Introduced	19.10.R1
Platforms	All

**memory**

Synopsis	Enable the <b>memory</b> context
Context	<a href="#">li log log-id string destination memory</a>
Tree	<a href="#">memory</a>
Description	Commands in this context configure log events directed to a memory file. A memory file is a circular buffer. When the file is full, each new entry replaces the oldest entry in the log.
Notes	The following elements are part of a choice: <b>memory</b> , <b>netconf</b> , or <b>snmp</b> .
Introduced	19.10.R1
Platforms	All

**max-entries** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
----------	--

Context	<a href="#">li log log-id string destination memory max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

## netconf

Synopsis	Enable the <b>netconf</b> context
Context	<a href="#">li log log-id string destination netconf</a>
Tree	<a href="#">netconf</a>
Description	Commands in this context configure log events directed to a NETCONF session as notifications. A NETCONF client can subscribe to a NETCONF log using the configured <b>netconf-stream</b> for the log in a subscription request. One or more NETCONF sessions can subscribe to a NETCONF log or stream.
Notes	The following elements are part of a choice: <b>memory</b> , <b>netconf</b> , or <b>snmp</b> .
Introduced	20.2.R1
Platforms	All

## max-entries *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Maximum number of events stored in the NETCONF log
Context	<a href="#">li log log-id string destination netconf max-entries number</a>
Tree	<a href="#">max-entries</a>
Description	This command configures the maximum number of events stored in the NETCONF log. If this setting needs to be modified, the log ID must be removed and re-created.
Range	50 to 1024
Default	100
Introduced	20.2.R1
Platforms	All

## snmp

Synopsis	Enable the <b>snmp</b> context
Context	<a href="#">li log log-id string destination snmp</a>
Tree	<a href="#">snmp</a>
Description	Commands in this context configure log events directed to the <b>snmp-trap-group</b> associated with the log ID. A local circular memory log is maintained for SNMP logs.
Notes	The following elements are part of a choice: <b>memory</b> , <b>netconf</b> , or <b>snmp</b> .
Introduced	19.10.R1
Platforms	All

## max-entries *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this snmp log
Context	<a href="#">li log log-id string destination snmp max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	50 to 1024
Default	100
Introduced	19.10.R1
Platforms	All

## send-using-vprn *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPRN to use to send SNMP notifications
Context	<a href="#">li log log-id string destination snmp send-using-vprn string</a>
Tree	<a href="#">send-using-vprn</a>
Description	This command configures lawful intercept (LI) SNMP notifications to transmit in a VPRN. This configuration is useful when doing management of LI via a VPRN.  The specified VPRN service must exist. After an LI log is configured using this command, the VPRN service cannot be deleted without removing the LI log ID.



When this command is configured, an LI log ID uses the snmp-trap-group configured for the VPRN.

When unconfigured, the outgoing routing instance of LI SNMP notifications is determined by the **configure log route-preference** command, and the LI log ID uses the snmp-trap-group configured in the main system log configuration.

String Length 1 to 64  
 Introduced 23.10.R1  
 Platforms All

### **filter string**

Synopsis Event filter ID to associate with log ID configuration  
 Context [li log log-id string filter string](#)  
 Tree [filter](#)  
 String Length 1 to 64  
 Introduced 19.10.R1  
 Platforms All

### **netconf-stream string**

Synopsis Destination NETCONF stream name  
 Context [li log log-id string netconf-stream string](#)  
 Tree [netconf-stream](#)  
 String Length 1 to 32  
 Introduced 20.2.R1  
 Platforms All

### **source**

Synopsis Enter the **source** context  
 Context [li log log-id string source](#)  
 Tree [source](#)  
 Introduced 19.10.R1  
 Platforms All

## **li *boolean***

Synopsis	Event stream for events configured for LI activities
Context	<a href="#">li log log-id string source li boolean</a>
Tree	<a href="#">li</a>
Default	false
Introduced	19.10.R1
Platforms	All

## **time-format *keyword***

Synopsis	Time zone to display date and time
Context	<a href="#">li log log-id string time-format keyword</a>
Tree	<a href="#">time-format</a>
Options	utc, local
Default	utc
Introduced	19.10.R1
Platforms	All

## **mirror-dest-reservation**

Synopsis	Enter the <b>mirror-dest-reservation</b> context
Context	<a href="#">li mirror-dest-reservation</a>
Tree	<a href="#">mirror-dest-reservation</a>
Description	Commands in this context configure the attributes to reserve mirror destination resources.
Introduced	19.10.R1
Platforms	All

## **end *number***

Synopsis	Upper bound of the mirror destination ID
Context	<a href="#">li mirror-dest-reservation end number</a>
Tree	<a href="#">end</a>
Range	1 to 2147483647
Introduced	19.10.R1

Platforms All

### **start number**

Synopsis Lower bound of the mirror destination ID  
 Context [li mirror-dest-reservation start number](#)  
 Tree [start](#)  
 Range 1 to 2147483647  
 Introduced 19.10.R1  
 Platforms All

### **mirror-dest-template [name] string**

Synopsis Enter the **mirror-dest-template** list instance  
 Context [li mirror-dest-template string](#)  
 Tree [mirror-dest-template](#)  
 Max. Instances 8  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name] string**

Synopsis Mirror destination template name  
 Context [li mirror-dest-template string](#)  
 Tree [mirror-dest-template](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **layer-3-encap**

Synopsis Enter the **layer-3-encap** context  
 Context [li mirror-dest-template string layer-3-encap](#)

Tree	<a href="#">layer-3-encap</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction-bit** *boolean*

Synopsis	Use highest bit in interception ID for flow direction
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">direction-bit</a> <i>boolean</i>
Tree	<a href="#">direction-bit</a>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encap-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	The header type of the layer 3 encapsulation.
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">encap-type</a> <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	ip-udp-shim, ip-gre
Default	ip-udp-shim
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-source** *string*

Synopsis	Source IPv4 address for Layer 3 encapsulation
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">ip-source</a> <i>string</i>
Tree	<a href="#">ip-source</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Virtual router instance to inject mirrored packets
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
String Length	1 to 64
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **udp**

Synopsis	Enter the <b>udp</b> context
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">udp</a>
Tree	<a href="#">udp</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **destination** *number*

Synopsis	Destination UDP port
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">udp</a> <a href="#">destination</a> <i>number</i>
Tree	<a href="#">destination</a>
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source** *number*

Synopsis	Source UDP port
Context	<a href="#">li mirror-dest-template</a> <i>string</i> <a href="#">layer-3-encap</a> <a href="#">udp</a> <a href="#">source</a> <i>number</i>
Tree	<a href="#">source</a>
Range	1 to 65535
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encapsulation type supported by the mirror service
Context	<a href="#">li mirror-dest-template</a> <i>string type keyword</i>
Tree	<a href="#">type</a>
Options	ether, ip-only
Default	ether
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat**

Synopsis	Enter the <b>nat</b> context
Context	<a href="#">li nat</a>
Tree	<a href="#">nat</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**use-outside-ip-address** *boolean*

Synopsis	Report outside IP address for L2-Aware NAT subscribers
Context	<a href="#">li nat use-outside-ip-address</a> <i>boolean</i>
Tree	<a href="#">use-outside-ip-address</a>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius**

Synopsis	Enter the <b>radius</b> context
Context	<a href="#">li radius</a>
Tree	<a href="#">radius</a>

Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mirror-dest-template** *reference*

Synopsis	RADIUS triggered mirror destination template
Context	<a href="#">li radius mirror-dest-template</a> <i>reference</i>
Tree	<a href="#">mirror-dest-template</a>
Reference	<a href="#">li mirror-dest-template</a> <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sci**

Synopsis	Enter the <b>sci</b> context
Context	<a href="#">li sci</a>
Tree	<a href="#">sci</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pfcp-li-shared-key** *string*

Synopsis	Key used to encrypt and decrypt exchanged LI PFCP IEs
Context	<a href="#">li sci pfcp-li-shared-key</a> <i>string</i>
Tree	<a href="#">pfcp-li-shared-key</a>
Description	This command configures the shared secret key that the SR OS uses in its role as a user plane (UP) to the MAG-c. The UP uses the shared secret key to encrypt and decrypt the LI PFCP IEs it exchanges with the MAG-c. The SR OS UP and the MAG-c must use matching secret keys. The system only accepts a secret key configured as a printable string.
String Length	1 to 199
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## x-interfaces

Synopsis	Enter the <b>x-interfaces</b> context
Context	<a href="#">li x-interfaces</a>
Tree	<a href="#">x-interfaces</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## admin-state *keyword*

Synopsis	Administrative state of the x-interfaces
Context	<a href="#">li x-interfaces admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## correlation-id

Synopsis	Enter the <b>correlation-id</b> context
Context	<a href="#">li x-interfaces correlation-id</a>
Tree	<a href="#">correlation-id</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## ipoe *keyword*

Synopsis	RADIUS accounting ID type for subscriber correlation
Context	<a href="#">li x-interfaces correlation-id ipoe keyword</a>
Tree	<a href="#">ipoe</a>
Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Default	radius-host-acct-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e



**pppoe keyword**

Synopsis	RADIUS accounting ID type for subscriber correlation
Context	<a href="#">li x-interfaces correlation-id pppoe keyword</a>
Tree	<a href="#">pppoe</a>
Options	radius-host-acct-id, radius-queue-acct-id, radius-session-acct-id
Default	radius-host-acct-id
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**ine-identifier string**

Synopsis	Intercepting Network Element (INE) ID
Context	<a href="#">li x-interfaces ine-identifier string</a>
Tree	<a href="#">ine-identifier</a>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**lic [name] string**

Synopsis	Enter the <b>lic</b> list instance
Context	<a href="#">li x-interfaces lic string</a>
Tree	<a href="#">lic</a>
Max. Instances	18
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**[name] string**

Synopsis	LIC name
Context	<a href="#">li x-interfaces lic string</a>
Tree	<a href="#">lic</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## authentication

Synopsis	Enter the <b>authentication</b> context
Context	<a href="#">li x-interfaces lic string authentication</a>
Tree	<a href="#">authentication</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## password *string*

Synopsis	Password for the X1 and X2 interfaces
Context	<a href="#">li x-interfaces lic string authentication password string</a>
Tree	<a href="#">password</a>
String Length	1 to 50
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## private-ki *string*

Synopsis	Private Ki string for the X1 and X2 interfaces
Context	<a href="#">li x-interfaces lic string authentication private-ki string</a>
Tree	<a href="#">private-ki</a>
String Length	1 to 50
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## sequence-group *string*

Synopsis	Sequence group for the X1 and X2 interfaces
Context	<a href="#">li x-interfaces lic string authentication sequence-group string</a>
Tree	<a href="#">sequence-group</a>

String Length 1 to 42  
Introduced 21.5.R1  
Platforms 7750 SR-1, 7750 SR-7/12/12e

### **description** *string*

Synopsis Text description  
Context [li x-interfaces lic string description string](#)  
Tree [description](#)  
String Length 1 to 80  
Introduced 21.5.R1  
Platforms 7750 SR-1, 7750 SR-7/12/12e

### **identifier** *string*

Synopsis LIC ID  
Context [li x-interfaces lic string identifier string](#)  
Tree [identifier](#)  
String Length 1 to 32  
Introduced 21.5.R1  
Platforms 7750 SR-1, 7750 SR-7/12/12e

### **ipv4**

Synopsis Enter the **ipv4** context  
Context [li x-interfaces lic string ipv4](#)  
Tree [ipv4](#)  
Introduced 21.5.R1  
Platforms 7750 SR-1, 7750 SR-7/12/12e

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the LIC  
Context [li x-interfaces lic string ipv4 ip-address \(ipv4-address-no-zone | ipv6-address-no-zone\)](#)  
Tree [ip-address](#)

Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **port number**

Synopsis	TCP port associated with the LIC
Context	<a href="#">li x-interfaces lic string port number</a>
Tree	<a href="#">port</a>
Range	0 to 65535
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **router-instance string**

Synopsis	Virtual router instance used by the X-interfaces
Context	<a href="#">li x-interfaces lic string router-instance string</a>
Tree	<a href="#">router-instance</a>
String Length	0 to 64
Default	
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **user-db string**

Synopsis	Location of the data-trigger host for the LIC
Context	<a href="#">li x-interfaces user-db string</a>
Tree	<a href="#">user-db</a>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **x1**

Synopsis	Enter the <b>x1</b> context
Context	<a href="#">li x-interfaces x1</a>

Tree	<a href="#">x1</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">li x-interfaces x1 ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## local-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	X1 interface IP address
Context	<a href="#">li x-interfaces x1 ipv4 local-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">local-address</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## lic-peer *reference*

Synopsis	Peer LIC for the X1 interface
Context	<a href="#">li x-interfaces x1 lic-peer <i>reference</i></a>
Tree	<a href="#">lic-peer</a>
Reference	<a href="#">li x-interfaces lic <i>string</i></a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## local-tcp-port *number*

Synopsis	Local TCP port used for the X1 interface
Context	<a href="#">li x-interfaces x1 local-tcp-port <i>number</i></a>
Tree	<a href="#">local-tcp-port</a>
Range	1 to 65535

Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## timeouts

Synopsis	Enter the <b>timeouts</b> context
Context	<a href="#">li x-interfaces x1 timeouts</a>
Tree	<a href="#">timeouts</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## message-timeout *number*

Synopsis	Maximum time for the LIC to reply to an X1 message
Context	<a href="#">li x-interfaces x1 timeouts message-timeout <i>number</i></a>
Tree	<a href="#">message-timeout</a>
Range	180 to 300
Units	seconds
Default	180
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## x2

Synopsis	Enter the <b>x2</b> context
Context	<a href="#">li x-interfaces x2</a>
Tree	<a href="#">x2</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">li x-interfaces x2 ipv4</a>
Tree	<a href="#">ipv4</a>

Introduced 21.5.R1  
 Platforms 7750 SR-1, 7750 SR-7/12/12e

### **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis X2 interface IP address  
 Context [li x-interfaces x2 ipv4 local-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [local-address](#)  
 Introduced 21.5.R1  
 Platforms 7750 SR-1, 7750 SR-7/12/12e

### **lic-peer** *reference*

Synopsis Peer LIC for the X2 interface  
 Context [li x-interfaces x2 lic-peer reference](#)  
 Tree [lic-peer](#)  
 Reference [li x-interfaces lic string](#)  
 Introduced 21.5.R1  
 Platforms 7750 SR-1, 7750 SR-7/12/12e

### **timeouts**

Synopsis Enter the **timeouts** context  
 Context [li x-interfaces x2 timeouts](#)  
 Tree [timeouts](#)  
 Introduced 21.5.R1  
 Platforms 7750 SR-1, 7750 SR-7/12/12e

### **keep-alive** *number*

Synopsis Keep-alive timeout  
 Context [li x-interfaces x2 timeouts keep-alive number](#)  
 Tree [keep-alive](#)  
 Range 300 to 600  
 Units seconds

---

Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **request number**

Synopsis	Tx2-normal timeout
Context	<a href="#">li x-interfaces x2 timeouts request number</a>
Tree	<a href="#">request</a>
Range	5 to 30
Units	seconds
Default	5
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **x3**

Synopsis	Enter the <b>x3</b> context
Context	<a href="#">li x-interfaces x3</a>
Tree	<a href="#">x3</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **alarms**

Synopsis	Enter the <b>alarms</b> context
Context	<a href="#">li x-interfaces x3 alarms</a>
Tree	<a href="#">alarms</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **cpu-alarm**

Synopsis	Enter the <b>cpu-alarm</b> context
Context	<a href="#">li x-interfaces x3 alarms cpu-alarm</a>



---

Tree	<a href="#">cpu-alarm</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **high-threshold** *number*

Synopsis	High threshold value of the CPU usage alarm
Context	<a href="#">li x-interfaces x3 alarms cpu-alarm high-threshold</a> <i>number</i>
Tree	<a href="#">high-threshold</a>
Range	1 to 100
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **low-threshold** *number*

Synopsis	Low threshold value of the CPU usage alarm
Context	<a href="#">li x-interfaces x3 alarms cpu-alarm low-threshold</a> <i>number</i>
Tree	<a href="#">low-threshold</a>
Range	0 to 99
Units	percent
Default	0
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **memory-alarm**

Synopsis	Enter the <b>memory-alarm</b> context
Context	<a href="#">li x-interfaces x3 alarms memory-alarm</a>
Tree	<a href="#">memory-alarm</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### high-threshold *number*

Synopsis	High threshold of the packet buffer memory usage alarm
Context	<a href="#">li x-interfaces x3 alarms memory-alarm high-threshold <i>number</i></a>
Tree	<a href="#">high-threshold</a>
Range	1 to 100
Units	percent
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### low-threshold *number*

Synopsis	Low threshold of the packet buffer memory usage alarm
Context	<a href="#">li x-interfaces x3 alarms memory-alarm low-threshold <i>number</i></a>
Tree	<a href="#">low-threshold</a>
Range	0 to 99
Units	percent
Default	0
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### throughput-alarm

Synopsis	Enter the <b>throughput-alarm</b> context
Context	<a href="#">li x-interfaces x3 alarms throughput-alarm</a>
Tree	<a href="#">throughput-alarm</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### high-threshold *number*

Synopsis	High threshold value of the throughput alarm
Context	<a href="#">li x-interfaces x3 alarms throughput-alarm high-threshold <i>number</i></a>
Tree	<a href="#">high-threshold</a>
Range	1 to 4294967295
Units	megabps

Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **low-threshold** *number*

Synopsis	Low threshold value of the throughput alarm
Context	<a href="#">li x-interfaces x3 alarms throughput-alarm low-threshold</a> <i>number</i>
Tree	<a href="#">low-threshold</a>
Range	1 to 4294967295
Units	megabps
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<a href="#">li x-interfaces x3 ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **local-address-range**

Synopsis	Enter the <b>local-address-range</b> context
Context	<a href="#">li x-interfaces x3 ipv4 local-address-range</a>
Tree	<a href="#">local-address-range</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **end** *string*

Synopsis	Upper bound of the range
Context	<a href="#">li x-interfaces x3 ipv4 local-address-range end</a> <i>string</i>
Tree	<a href="#">end</a>
Introduced	21.5.R1

Platforms 7750 SR-1, 7750 SR-7/12/12e

### **start string**

Synopsis Lower bound of the range  
 Context [li x-interfaces x3 ipv4 local-address-range start string](#)  
 Tree [start](#)  
 Introduced 21.5.R1  
 Platforms 7750 SR-1, 7750 SR-7/12/12e

### **li-group number**

Synopsis ISA group of the X3 interface  
 Context [li x-interfaces x3 li-group number](#)  
 Tree [li-group](#)  
 Range 1 to 4  
 Introduced 21.5.R1  
 Platforms 7750 SR-1, 7750 SR-7/12/12e

### **lic-peers [name] reference**

Synopsis Add a list entry for **lic-peers**  
 Context [li x-interfaces x3 lic-peers reference](#)  
 Tree [lic-peers](#)  
 Max. 16  
 Instances  
 Introduced 21.5.R1  
 Platforms 7750 SR-1, 7750 SR-7/12/12e

### **[name] reference**

Synopsis Peer LIC for the X3 interface  
 Context [li x-interfaces x3 lic-peers reference](#)  
 Tree [lic-peers](#)  
 Reference [li x-interfaces lic string](#)

---

Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **session-limit** *number*

Synopsis	Maximum number of X3 sessions initiated to the LIC
Context	<a href="#">li x-interfaces x3 session-limit</a> <i>number</i>
Tree	<a href="#">session-limit</a>
Range	1 to 32
Default	32
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **timeouts**

Synopsis	Enter the <b>timeouts</b> context
Context	<a href="#">li x-interfaces x3 timeouts</a>
Tree	<a href="#">timeouts</a>
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

### **keep-alive** *number*

Synopsis	Keep-alive timeout
Context	<a href="#">li x-interfaces x3 timeouts keep-alive</a> <i>number</i>
Tree	<a href="#">keep-alive</a>
Range	300 to 600
Units	seconds
Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**request *number***

Synopsis	Tx3-normal timeout
Context	<a href="#">li x-interfaces x3 timeouts request <i>number</i></a>
Tree	<a href="#">request</a>
Range	5 to 30
Units	seconds
Default	5
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

**target-retry-wait *number***

Synopsis	Retry interval for target tunnel setup
Context	<a href="#">li x-interfaces x3 timeouts target-retry-wait <i>number</i></a>
Tree	<a href="#">target-retry-wait</a>
Range	300 to 1200
Units	seconds
Default	300
Introduced	21.5.R1
Platforms	7750 SR-1, 7750 SR-7/12/12e

## 3.24 log commands

```

configure
- log
- accounting-policy number
- admin-state keyword
- align boolean
- apply-groups reference
- apply-groups-exclude reference
- collection-interval number
- custom-record
- aa-specific
- aa-sub-attributes
- app-profile boolean
- app-service-options boolean
- aa-sub-counters
- long-duration-flow-count boolean
- medium-duration-flow-count boolean
- short-duration-flow-count boolean
- total-flow-duration boolean
- total-flows-completed-count boolean
- from-aa-sub-counters
- flows-active-count boolean
- flows-admitted-count boolean
- flows-denied-count boolean
- forwarding-class boolean
- max-throughput-octet-count boolean
- max-throughput-packet-count boolean
- max-throughput-timestamp boolean
- octets-admitted-count boolean
- octets-denied-count boolean
- packets-admitted-count boolean
- packets-denied-count boolean
- to-aa-sub-counters
- flows-active-count boolean
- flows-admitted-count boolean
- flows-denied-count boolean
- forwarding-class boolean
- max-throughput-octet-count boolean
- max-throughput-packet-count boolean
- max-throughput-timestamp boolean
- octets-admitted-count boolean
- octets-denied-count boolean
- packets-admitted-count boolean
- packets-denied-count boolean
- apply-groups reference
- apply-groups-exclude reference
- policer number
- apply-groups reference
- apply-groups-exclude reference
- e-counters
- exceed-profile-octets-discarded-count boolean
- exceed-profile-octets-forwarded-count boolean
- exceed-profile-octets-offered-count boolean
- exceed-profile-packets-discarded-count boolean
- exceed-profile-packets-forwarded-count boolean
- exceed-profile-packets-offered-count boolean
- in-plus-profile-octets-discarded-count boolean
- in-plus-profile-octets-forwarded-count boolean
- in-plus-profile-octets-offered-count boolean
- in-plus-profile-packets-discarded-count boolean

```

configure log accounting-policy custom-record policer e-counters in-plus-profile-packets-forwarded-count

```

- in-plus-profile-packets-forwarded-count boolean
- in-plus-profile-packets-offered-count boolean
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- i-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-octets-offered-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- in-profile-packets-offered-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-octets-offered-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- out-profile-packets-offered-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- queue number
- apply-groups reference
- apply-groups-exclude reference
- e-counters
- in-profile-octets-discarded-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-discarded-count boolean
- in-profile-packets-forwarded-count boolean
- out-profile-octets-discarded-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-discarded-count boolean
- out-profile-packets-forwarded-count boolean
- i-counters
- all-octets-offered-count boolean
- all-packets-offered-count boolean
- high-octets-discarded-count boolean
- high-octets-offered-count boolean
- high-packets-discarded-count boolean
- high-packets-offered-count boolean
- in-profile-octets-forwarded-count boolean
- in-profile-packets-forwarded-count boolean
- low-octets-discarded-count boolean
- low-octets-offered-count boolean
- low-packets-discarded-count boolean
- low-packets-offered-count boolean
- out-profile-octets-forwarded-count boolean
- out-profile-packets-forwarded-count boolean
- uncoloured-octets-offered-count boolean
- uncoloured-packets-offered-count boolean
- ref-aa-specific-counter
- any boolean
- ref-policer
- all

```



configure log accounting-policy custom-record ref-policer e-counters

```

- e-counters
  - exceed-profile-octets-discarded-count boolean
  - exceed-profile-octets-forwarded-count boolean
  - exceed-profile-octets-offered-count boolean
  - exceed-profile-packets-discarded-count boolean
  - exceed-profile-packets-forwarded-count boolean
  - exceed-profile-packets-offered-count boolean
  - in-plus-profile-octets-discarded-count boolean
  - in-plus-profile-octets-forwarded-count boolean
  - in-plus-profile-octets-offered-count boolean
  - in-plus-profile-packets-discarded-count boolean
  - in-plus-profile-packets-forwarded-count boolean
  - in-plus-profile-packets-offered-count boolean
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-octets-offered-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - in-profile-packets-offered-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-octets-offered-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - out-profile-packets-offered-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- i-counters
  - in-profile-octets-discarded-count boolean
  - in-profile-octets-forwarded-count boolean
  - in-profile-octets-offered-count boolean
  - in-profile-packets-discarded-count boolean
  - in-profile-packets-forwarded-count boolean
  - in-profile-packets-offered-count boolean
  - out-profile-octets-discarded-count boolean
  - out-profile-octets-forwarded-count boolean
  - out-profile-octets-offered-count boolean
  - out-profile-packets-discarded-count boolean
  - out-profile-packets-forwarded-count boolean
  - out-profile-packets-offered-count boolean
  - uncoloured-octets-offered-count boolean
  - uncoloured-packets-offered-count boolean
- id reference
- ref-queue
  - all
  - e-counters
    - in-profile-octets-discarded-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-discarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - out-profile-octets-discarded-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-discarded-count boolean
    - out-profile-packets-forwarded-count boolean
  - i-counters
    - all-octets-offered-count boolean
    - all-packets-offered-count boolean
    - high-octets-discarded-count boolean
    - high-octets-offered-count boolean
    - high-packets-discarded-count boolean
    - high-packets-offered-count boolean
    - in-profile-octets-forwarded-count boolean
    - in-profile-packets-forwarded-count boolean
    - low-octets-discarded-count boolean

```

configure log accounting-policy custom-record ref-queue i-counters low-octets-offered-count

```

    - low-octets-offered-count boolean
    - low-packets-discarded-count boolean
    - low-packets-offered-count boolean
    - out-profile-octets-forwarded-count boolean
    - out-profile-packets-forwarded-count boolean
    - uncoloured-octets-offered-count boolean
    - uncoloured-packets-offered-count boolean
  - id reference
  - significant-change number
- default boolean
- description string
- destination
  - file reference
  - null
- include-system-info boolean
- record keyword
- app-route-notifications
  - cold-start-wait number
  - route-recovery-wait number
- apply-groups reference
- apply-groups-exclude reference
- encryption-key string
- event-damping boolean
- event-handling
  - handler string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - min-delay number
      - script-policy
        - name reference
        - owner reference
  - event-trigger
    - adp event keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - entry number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - debounce
          - time number
          - value number
        - description string
        - filter reference
        - handler reference
    - anysec event keyword
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - entry number
        - admin-state keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - debounce

```

configure log event-trigger anysec entry debounce time

```

    - time number
    - value number
    - description string
    - filter reference
    - handler reference
- application-assurance event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- aps event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- auto-prov event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- bfd event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference

```

## configure log event-trigger bfd entry handler

- **handler** *reference*
- **bgp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **bier event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **calltrace event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **cflowd event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **chassis event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*

configure log event-trigger chassis apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **debug event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **dhcp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **dhcps event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **diameter event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*

configure log event-trigger diameter entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
  - **time** *number*
  - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **dotlx event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **dynsvc event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **efm-oam event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **elmi event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*

configure log event-trigger elmi entry debounce value

```

    - value number
    - description string
    - filter reference
    - handler reference
- ering event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- eth-cfm event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- etun event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- filter event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference

```

## configure log event-trigger gsm

- **gsm** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **igmp** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **igmp-snooping** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ip** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ipsec** event *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*



configure log event-trigger ipsec description

- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **isis event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **l2tp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **lag event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ldap event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*

configure log event-trigger ldap entry apply-groups-exclude

- **apply-groups-exclude** *reference*
- **debounce**
  - **time** *number*
  - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **ldap event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **li event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **lldp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **logger event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*

configure log event-trigger logger entry description

- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **macsec event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mc-redundancy event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mcpath event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mgmt-core event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mirror event** *keyword*

## configure log event-trigger mirror admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **mld event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mld-snooping event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mpls event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **mpls-tp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*

## configure log event-trigger mpls-tp entry

- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **msdp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **nat event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ntp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **oam event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*

configure log event-trigger oam entry debounce

```

    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
  - openflow event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - ospf event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - pcap event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string
      - filter reference
      - handler reference
  - pcep event keyword
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - entry number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - debounce
        - time number
        - value number
      - description string

```

configure log event-trigger pcep entry filter

- **filter** *reference*
- **handler** *reference*
- **pfcp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **pim event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **pim-snooping event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **port event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **pppoe event** *keyword*
  - **admin-state** *keyword*

configure log event-trigger pppoe apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **pppoe-clnt event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ptp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **python event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **radius event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*



configure log event-trigger radius entry admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
  - **time** *number*
  - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **rip event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **ripng event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **route-policy event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **rpki event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**

configure log event-trigger rpki entry debounce time

```

    - time number
    - value number
    - description string
    - filter reference
    - handler reference
- rsvp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
      - description string
      - filter reference
      - handler reference
- satellite event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
      - description string
      - filter reference
      - handler reference
- security event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
      - description string
      - filter reference
      - handler reference
- sflow event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
      - description string
      - filter reference

```

## configure log event-trigger sflow entry handler

- **handler** *reference*
- **snmp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **sr-mpls event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **sr-policy event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **srv6 event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **stp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*

configure log event-trigger stp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **entry** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **debounce**
    - **time** *number*
    - **value** *number*
  - **description** *string*
  - **filter** *reference*
  - **handler** *reference*
- **svcmgr event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **system event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **tls event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **tree-sid event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*

configure log event-trigger tree-sid entry apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **debounce**
  - **time** *number*
  - **value** *number*
- **description** *string*
- **filter** *reference*
- **handler** *reference*
- **user event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **video event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **vrtp event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*
      - **value** *number*
    - **description** *string*
    - **filter** *reference*
    - **handler** *reference*
- **vrtr event** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **entry** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **debounce**
      - **time** *number*

configure log event-trigger vrtr entry debounce value

```

    - value number
    - description string
    - filter reference
    - handler reference
- wlan-gw event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- wpp event keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - entry number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - debounce
      - time number
      - value number
    - description string
    - filter reference
    - handler reference
- file string
  - apply-groups reference
  - apply-groups-exclude reference
  - compact-flash-location
    - backup keyword
    - primary keyword
  - description string
  - retention number
  - rollover number
- file-storage-control
  - accounting-files-total-size number
  - log-files-total-size number
- filter string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-action keyword
  - description string
  - named-entry string
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - match
    - application
      - eq keyword
      - neq keyword
    - event
      - eq number
      - gt number
      - gte number

```

configure log filter named-entry match event lt

```

    - lt number
    - lte number
    - neq number
  - message
    - eq string
    - neq string
    - regexp boolean
  - severity
    - eq keyword
    - gt keyword
    - gte keyword
    - lt keyword
    - lte keyword
    - neq keyword
  - subject
    - eq string
    - neq string
    - regexp boolean
  - vrtr-name
    - eq string
    - neq string
    - regexp boolean
- log-events
  - adp event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - generate boolean
    - repeat boolean
    - severity keyword
    - specific-throttle boolean
    - specific-throttle-interval number
    - specific-throttle-limit number
    - throttle boolean
  - anysec event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - generate boolean
    - repeat boolean
    - severity keyword
    - specific-throttle boolean
    - specific-throttle-interval number
    - specific-throttle-limit number
    - throttle boolean
  - application-assurance event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - generate boolean
    - repeat boolean
    - severity keyword
    - specific-throttle boolean
    - specific-throttle-interval number
    - specific-throttle-limit number
    - throttle boolean
  - aps event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - generate boolean
    - repeat boolean
    - severity keyword
    - specific-throttle boolean
    - specific-throttle-interval number
    - specific-throttle-limit number
    - throttle boolean
  - auto-prov event keyword

```

configure log log-events auto-prov apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- bfd event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- bgp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- bier event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- calltrace event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- cflowd event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- chassis event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean

```



## configure log log-events chassis severity

- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **debug event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **dhcp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **dhcps event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **diameter event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **dot1x event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **dynsvc event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*

## configure log log-events dynsvc throttle

- **throttle** *boolean*
- **efm-oam event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **elmi event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **ering event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **eth-cfm event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **etun event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **filter event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **gsmp event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*

configure log log-events gsmp generate

```

- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- igmp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- igmp-snooping event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ip event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- ipsec event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- isis event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean
  - specific-throttle-interval number
  - specific-throttle-limit number
  - throttle boolean
- l2tp event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - generate boolean
  - repeat boolean
  - severity keyword
  - specific-throttle boolean

```

configure log log-events l2tp specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- lag event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ldap event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ldp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- li event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- lldp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- logger event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- macsec event keyword

```

configure log log-events macsec apply-groups

```
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mc-redundancy event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mcpath event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mgmt-core event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mirror event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mld event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mld-snooping event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
```

configure log log-events mld-snooping severity

```
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mpls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- mpls-tp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- msdp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- nat event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ntp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- oam event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
```

## configure log log-events oam throttle

- **throttle** *boolean*
- **openflow event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **ospf event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pcap event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pcep event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pfcp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pim event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pim-snooping event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

configure log log-events pim-snooping generate

- **generate** *boolean*
- **repeat** *boolean*
- **severity** *keyword*
- **specific-throttle** *boolean*
- **specific-throttle-interval** *number*
- **specific-throttle-limit** *number*
- **throttle** *boolean*
- **port event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pppoe event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **pppoe-clnt event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **ptp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **python event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **radius event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*



configure log log-events radius specific-throttle-interval

```

- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- rip event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- ripng event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- route-policy event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- rpki event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- rsvp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- satellite event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- security event keyword

```

## configure log log-events security apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- sflow event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- snmp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- sr-mps event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- sr-policy event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- srv6 event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- stp event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean

```

configure log log-events stp severity

```

- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- svcmgr event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- system event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- tls event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- tree-sid event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- user event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number
- throttle boolean
- video event keyword
- apply-groups reference
- apply-groups-exclude reference
- generate boolean
- repeat boolean
- severity keyword
- specific-throttle boolean
- specific-throttle-interval number
- specific-throttle-limit number

```

## configure log log-events video throttle

- **throttle** *boolean*
- **vrp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **vrtr event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **wlan-gw event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **wpp event** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **generate** *boolean*
  - **repeat** *boolean*
  - **severity** *keyword*
  - **specific-throttle** *boolean*
  - **specific-throttle-interval** *number*
  - **specific-throttle-limit** *number*
  - **throttle** *boolean*
- **log-id** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **destination**
    - **cli**
      - **max-entries** *number*
    - **console**
    - **file** *reference*
    - **memory**
      - **max-entries** *number*
    - **netconf**
      - **max-entries** *number*
    - **snmp**
      - **max-entries** *number*
    - **syslog** *reference*
  - **filter** *reference*
  - **netconf-stream** *string*
  - **python-policy** *reference*
  - **source**
    - **change** *boolean*
    - **debug** *boolean*

## configure log log-id source main

- **main** *boolean*
- **security** *boolean*
- **time-format** *keyword*
- **route-preference**
- **primary** *keyword*
- **secondary** *keyword*
- **services-all-events**
- **service** *reference*
- **snmp-trap-group** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **trap-target** *string*
- **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **notify-community** *string*
- **port** *number*
- **replay** *boolean*
- **security-level** *keyword*
- **version** *keyword*
- **syslog** *string*
- **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **facility** *keyword*
- **hostname**
- **use-system-name**
- **value** *string*
- **log-prefix** (*keyword* | *string*)
- **port** *number*
- **severity** *keyword*
- **tls-client-profile** *reference*
- **throttle-rate**
- **interval** *number*
- **limit** *number*

### 3.24.1 log command descriptions

#### log

Synopsis	Enter the <b>log</b> context
Context	<b>configure log</b>
Tree	<a href="#">log</a>
Introduced	16.0.R1
Platforms	All

#### accounting-policy [[policy-id](#)] *number*

Synopsis	Enter the <b>accounting-policy</b> list instance
Context	<b>configure log accounting-policy</b> <i>number</i>
Tree	<a href="#">accounting-policy</a>
Introduced	16.0.R1
Platforms	All

#### [\[policy-id\]](#) *number*

Synopsis	Accounting policy unique ID
Context	<b>configure log accounting-policy</b> <i>number</i>
Tree	<a href="#">accounting-policy</a>
Range	1 to 99
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### admin-state *keyword*

Synopsis	Administrative state of the accounting policy
Context	<b>configure log accounting-policy</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command controls the administrative state of the accounting policy.

When an accounting policy is disabled, no accounting data is written to the destination log ID. Counters in the billing data reflect totals, and not increments. When the policy is re-enabled, the counters include the data collected during the period the policy was administratively disabled.

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **align** *boolean*

Synopsis	Align statistics collection interval to absolute time
Context	<b>configure</b> <b>log accounting-policy</b> <i>number</i> <b>align</b> <i>boolean</i>
Tree	<a href="#">align</a>
Description	<p>When the <b>align</b> command is configured to <b>true</b>, statistics collection is aligned to the nearest interval within an hour. Statistics are generated when the absolute time can be divided by the collection-interval value, after which the collection interval continues. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:15, 15:30, 15:45, 16:00, 16:15, and so on. This supports synchronized statistics intervals and collection across multiple nodes in the network.</p> <p>When the <b>align</b> command is configured to <b>false</b>, statistics collection occurs immediately after the configuration has been committed. For example, if the interval is set to 15 minutes and the current time is 15:03, the statistics are collected at 15:03, 15:18, 15:33, 15:48, 16:03, and so on.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **collection-interval** *number*

Synopsis	Accounting collection interval
Context	<b>configure</b> <b>log accounting-policy</b> <i>number</i> <b>collection-interval</b> <i>number</i>
Tree	<a href="#">collection-interval</a>
Range	1 to 120
Units	minutes
Introduced	16.0.R1
Platforms	All

## custom-record

Synopsis	Enter the <b>custom-record</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a>
Tree	<a href="#">custom-record</a>
Introduced	16.0.R1
Platforms	All

## aa-specific

Synopsis	Enter the <b>aa-specific</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a>
Tree	<a href="#">aa-specific</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aa-sub-attributes

Synopsis	Enter the <b>aa-sub-attributes</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-attributes</a>
Tree	<a href="#">aa-sub-attributes</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## app-profile *boolean*

Synopsis	Include application profile to be exported
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-attributes</a> <a href="#">app-profile</a> <i>boolean</i>
Tree	<a href="#">app-profile</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



### **app-service-options** *boolean*

Synopsis	Include application service options
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-attributes</a> <a href="#">app-service-options</a> <i>boolean</i>
Tree	<a href="#">app-service-options</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aa-sub-counters**

Synopsis	Enter the <b>aa-sub-counters</b> context
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a>
Tree	<a href="#">aa-sub-counters</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **long-duration-flow-count** *boolean*

Synopsis	Include the long duration flow count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">long-duration-flow-count</a> <i>boolean</i>
Tree	<a href="#">long-duration-flow-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **medium-duration-flow-count** *boolean*

Synopsis	Include the medium duration flow
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">medium-duration-flow-count</a> <i>boolean</i>
Tree	<a href="#">medium-duration-flow-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**short-duration-flow-count** *boolean*

Synopsis	Include the short duration flow count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">short-duration-flow-count</a> <i>boolean</i>
Tree	<a href="#">short-duration-flow-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**total-flow-duration** *boolean*

Synopsis	Include the total flow duration count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">total-flow-duration</a> <i>boolean</i>
Tree	<a href="#">total-flow-duration</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**total-flows-completed-count** *boolean*

Synopsis	Include the total of completed flows count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">aa-sub-counters</a> <a href="#">total-flows-completed-count</a> <i>boolean</i>
Tree	<a href="#">total-flows-completed-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**from-aa-sub-counters**

Synopsis	Enter the <b>from-aa-sub-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a>
Tree	<a href="#">from-aa-sub-counters</a>

Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-active-count** *boolean*

Synopsis Include the active flows  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-active-count](#) *boolean*  
Tree [flows-active-count](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-admitted-count** *boolean*

Synopsis Include the admitted flows  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-admitted-count](#) *boolean*  
Tree [flows-admitted-count](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-denied-count** *boolean*

Synopsis Include the denied flows  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [aa-specific](#) [from-aa-sub-counters](#) [flows-denied-count](#) *boolean*  
Tree [flows-denied-count](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **forwarding-class** *boolean*

Synopsis Include forwarding class

---

Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">forwarding-class</a> <i>boolean</i>
Tree	<a href="#">forwarding-class</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-octet-count** *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">max-throughput-octet-count</a> <i>boolean</i>
Tree	<a href="#">max-throughput-octet-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-packet-count** *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">max-throughput-packet-count</a> <i>boolean</i>
Tree	<a href="#">max-throughput-packet-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-timestamp** *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">max-throughput-timestamp</a> <i>boolean</i>
Tree	<a href="#">max-throughput-timestamp</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**octets-admitted-count** *boolean*

Synopsis	Include the admitted octets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">octets-admitted-count</a> <i>boolean</i>
Tree	<a href="#">octets-admitted-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**octets-denied-count** *boolean*

Synopsis	Include the denied octets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">octets-denied-count</a> <i>boolean</i>
Tree	<a href="#">octets-denied-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packets-admitted-count** *boolean*

Synopsis	Include the admitted packets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">packets-admitted-count</a> <i>boolean</i>
Tree	<a href="#">packets-admitted-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packets-denied-count** *boolean*

Synopsis	Include the denied packets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">from-aa-sub-counters</a> <a href="#">packets-denied-count</a> <i>boolean</i>
Tree	<a href="#">packets-denied-count</a>

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Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **to-aa-sub-counters**

Synopsis	Enter the <b>to-aa-sub-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a>
Tree	<a href="#">to-aa-sub-counters</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-active-count** *boolean*

Synopsis	Include the active flows
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">flows-active-count</a> <i>boolean</i>
Tree	<a href="#">flows-active-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-admitted-count** *boolean*

Synopsis	Include the admitted flows
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">flows-admitted-count</a> <i>boolean</i>
Tree	<a href="#">flows-admitted-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flows-denied-count** *boolean*

Synopsis	Include the denied flows
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Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">flows-denied-count</a> <i>boolean</i>
Tree	<a href="#">flows-denied-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **forwarding-class** *boolean*

Synopsis	Include forwarding class
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">forwarding-class</a> <i>boolean</i>
Tree	<a href="#">forwarding-class</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-octet-count** *boolean*

Synopsis	Include maximum throughput as measured in octet count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">max-throughput-octet-count</a> <i>boolean</i>
Tree	<a href="#">max-throughput-octet-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-throughput-packet-count** *boolean*

Synopsis	Include maximum throughput as measured in packet count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">max-throughput-packet-count</a> <i>boolean</i>
Tree	<a href="#">max-throughput-packet-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-throughput-timestamp** *boolean*

Synopsis	Include timestamp of the maximum throughput
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">max-throughput-timestamp</a> <i>boolean</i>
Tree	<a href="#">max-throughput-timestamp</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**octets-admitted-count** *boolean*

Synopsis	Include the admitted octets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">octets-admitted-count</a> <i>boolean</i>
Tree	<a href="#">octets-admitted-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**octets-denied-count** *boolean*

Synopsis	Include the denied octets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">octets-denied-count</a> <i>boolean</i>
Tree	<a href="#">octets-denied-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packets-admitted-count** *boolean*

Synopsis	Include the admitted packets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">aa-specific</a> <a href="#">to-aa-sub-counters</a> <a href="#">packets-admitted-count</a> <i>boolean</i>
Tree	<a href="#">packets-admitted-count</a>



Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **packets-denied-count** *boolean*

Synopsis	Include the denied packets count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record aa-specific to-aa-sub-counters</a> <a href="#">packets-denied-count</a> <i>boolean</i>
Tree	<a href="#">packets-denied-count</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** [*id*] *number*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Introduced	19.10.R1
Platforms	All

### **[id]** *number*

Synopsis	Policer ID
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **e-counters**

Synopsis	Enter the <b>e-counters</b> context
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Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a>
Tree	<a href="#">e-counters</a>
Introduced	19.10.R1
Platforms	All

### **exceed-profile-octets-discarded-count** *boolean*

Synopsis	Include the exceed profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-octets-forwarded-count** *boolean*

Synopsis	Include the exceed profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-octets-offered-count** *boolean*

Synopsis	Include the exceed profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**exceed-profile-packets-discarded-count** *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**exceed-profile-packets-forwarded-count** *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**exceed-profile-packets-offered-count** *boolean*

Synopsis	Include the exceed profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-octets-discarded-count** *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-plus-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-octets-discarded-count</a>
Default	false

Introduced 19.10.R1  
Platforms All

### **in-plus-profile-octets-forwarded-count** *boolean*

Synopsis Include the in-plus profile octets forwarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-octets-forwarded-count](#) *boolean*  
Tree [in-plus-profile-octets-forwarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-plus-profile-octets-offered-count** *boolean*

Synopsis Include the in-plus profile octets offered count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-octets-offered-count](#) *boolean*  
Tree [in-plus-profile-octets-offered-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-plus-profile-packets-discarded-count** *boolean*

Synopsis Include the in-plus profile packets discarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [in-plus-profile-packets-discarded-count](#) *boolean*  
Tree [in-plus-profile-packets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-plus-profile-packets-forwarded-count** *boolean*

Synopsis Include the in-plus profile packets forwarded count

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Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-plus-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-plus-profile-packets-offered-count** *boolean*

Synopsis	Include the in-plus profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-plus-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-discarded-count** *boolean*

Synopsis	Include the in profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-octets-offered-count** *boolean*

Synopsis	Include the in profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters in-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-offered-count** *boolean*

Synopsis	Include the in profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">e-counters in-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-offered-count</a>

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Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-offered-count** *boolean*

Synopsis	Include the out profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-offered-count** *boolean*

Synopsis	Include the out profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**uncoloured-octets-offered-count** *boolean*

Synopsis	Include the uncolored octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">e-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false



Introduced 19.10.R1  
Platforms All

### **uncoloured-packets-offered-count** *boolean*

Synopsis Include the uncolored packets offered count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [e-counters](#) [uncoloured-packets-offered-count](#) *boolean*  
Tree [uncoloured-packets-offered-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **i-counters**

Synopsis Enter the **i-counters** context  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#)  
Tree [i-counters](#)  
Introduced 19.10.R1  
Platforms All

### **in-profile-octets-discarded-count** *boolean*

Synopsis Include the in profile octets discarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [in-profile-octets-discarded-count](#) *boolean*  
Tree [in-profile-octets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-profile-octets-forwarded-count** *boolean*

Synopsis Include the in profile octets forwarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [in-profile-octets-forwarded-count](#) *boolean*

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Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-offered-count** *boolean*

Synopsis	Include the in profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-offered-count** *boolean*

Synopsis	Include the in profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">i-counters in-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">i-counters out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">i-counters out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-offered-count** *boolean*

Synopsis	Include the out profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record policer</a> <i>number</i> <a href="#">i-counters out-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-offered-count</a>
Default	false

Introduced 19.10.R1  
Platforms All

### **out-profile-packets-discarded-count** *boolean*

Synopsis Include the out profile packets discarded count  
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-discarded-count](#) *boolean*  
Tree [out-profile-packets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis Include the out profile packets forwarded count  
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-forwarded-count](#) *boolean*  
Tree [out-profile-packets-forwarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **out-profile-packets-offered-count** *boolean*

Synopsis Include the out profile packets offered count  
Context **configure** [log](#) [accounting-policy](#) *number* [custom-record](#) [policer](#) *number* [i-counters](#) [out-profile-packets-offered-count](#) *boolean*  
Tree [out-profile-packets-offered-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **uncoloured-octets-offered-count** *boolean*

Synopsis Include the uncolored octets offered count

Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **uncoloured-packets-offered-count** *boolean*

Synopsis	Include the uncolored packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">policer</a> <i>number</i> <a href="#">i-counters</a> <a href="#">uncoloured-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **queue** [*id*] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	Queue ID for which counters are collected in the record
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## e-counters

Synopsis	Enter the <b>e-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <b>e-counters</b>
Tree	<a href="#">e-counters</a>
Introduced	16.0.R1
Platforms	All

## in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <b>e-counters</b> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <b>e-counters</b> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## in-profile-packets-discarded-count *boolean*

Synopsis	Include the in-profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <b>e-counters</b> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out-profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out-profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">e-counters out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **i-counters**

Synopsis	Enter the <b>i-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a>
Tree	<a href="#">i-counters</a>
Introduced	16.0.R1
Platforms	All

### **all-octets-offered-count** *boolean*

Synopsis	Include the all octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters all-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **all-packets-offered-count** *boolean*

Synopsis	Include all packets offered count
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Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">all-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-octets-discarded-count** *boolean*

Synopsis	Include the high octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-octets-offered-count** *boolean*

Synopsis	Include the high octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-packets-discarded-count** *boolean*

Synopsis	Include the high packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-packets-offered-count** *boolean*

Synopsis	Include the high packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-octets-discarded-count** *boolean*

Synopsis	Include the low octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-discarded-count</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **low-octets-offered-count** *boolean*

Synopsis	Include the low octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-packets-discarded-count** *boolean*

Synopsis	Include the low packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-packets-offered-count** *boolean*

Synopsis	Include the low packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">low-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**uncoloured-octets-offered-count** *boolean*

Synopsis	Include the uncolored octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**uncoloured-packets-offered-count** *boolean*

Synopsis	Include the uncolored packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">uncoloured-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-packets-offered-count</a>
Default	false

Introduced 16.0.R1  
Platforms All

### ref-aa-specific-counter

Synopsis Enter the **ref-aa-specific-counter** context  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-aa-specific-counter](#)  
Tree [ref-aa-specific-counter](#)  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### any *boolean*

Synopsis Report a change to any counter  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-aa-specific-counter](#) [any](#) *boolean*  
Tree [any](#)  
Default false  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ref-policer

Synopsis Enter the **ref-policer** context  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#)  
Tree [ref-policer](#)  
Introduced 19.10.R1  
Platforms All

### all

Synopsis Apply significant change to counters for all policers  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [all](#)  
Tree [all](#)  
Notes The following elements are part of a choice: **all** or **id**.

Introduced 19.10.R1  
Platforms All

## e-counters

Synopsis Enter the **e-counters** context  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#)  
Tree [e-counters](#)  
Introduced 19.10.R1  
Platforms All

## exceed-profile-octets-discarded-count *boolean*

Synopsis Include the exceed profile octets discarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-discarded-count](#) *boolean*  
Tree [exceed-profile-octets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

## exceed-profile-octets-forwarded-count *boolean*

Synopsis Include the exceed profile octets forwarded count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-forwarded-count](#) *boolean*  
Tree [exceed-profile-octets-forwarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

## exceed-profile-octets-offered-count *boolean*

Synopsis Include the exceed profile octets offered count  
Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [e-counters](#) [exceed-profile-octets-offered-count](#) *boolean*

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Tree	<a href="#">exceed-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-packets-discarded-count** *boolean*

Synopsis	Include the exceed profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-packets-forwarded-count** *boolean*

Synopsis	Include the exceed profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **exceed-profile-packets-offered-count** *boolean*

Synopsis	Include the exceed profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">exceed-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">exceed-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-octets-discarded-count** *boolean*

Synopsis	Include the in-plus profile octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-plus-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-plus profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-plus-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-octets-offered-count** *boolean*

Synopsis	Include the in-plus profile octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-plus-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-plus-profile-packets-discarded-count** *boolean*

Synopsis	Include the in-plus profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-plus-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-plus-profile-packets-discarded-count</a>
Default	false



Introduced 19.10.R1  
Platforms All

### **in-plus-profile-packets-forwarded-count** *boolean*

Synopsis Include the in-plus profile packets forwarded count  
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-plus-profile-packets-forwarded-count](#) *boolean*  
Tree [in-plus-profile-packets-forwarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-plus-profile-packets-offered-count** *boolean*

Synopsis Include the in-plus profile packets offered count  
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-plus-profile-packets-offered-count](#) *boolean*  
Tree [in-plus-profile-packets-offered-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-profile-octets-discarded-count** *boolean*

Synopsis Include the in profile octets discarded count  
Context **configure** [log](#) [accounting-policy](#) [number](#) [custom-record](#) [ref-policer](#) [e-counters](#) [in-profile-octets-discarded-count](#) *boolean*  
Tree [in-profile-octets-discarded-count](#)  
Default false  
Introduced 19.10.R1  
Platforms All

### **in-profile-octets-forwarded-count** *boolean*

Synopsis Include the in profile octets forwarded count

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Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-offered-count** *boolean*

Synopsis	Include the in profile octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-offered-count** *boolean*

Synopsis	Include the in profile packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-offered-count** *boolean*

Synopsis	Include the out profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-offered-count</a>

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Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-packets-offered-count** *boolean*

Synopsis	Include the out profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **uncoloured-octets-offered-count** *boolean*

Synopsis	Include the uncolored octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **uncoloured-packets-offered-count** *boolean*

Synopsis	Include the uncolored packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">e-counters</a> <a href="#">uncoloured-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **i-counters**

Synopsis	Enter the <b>i-counters</b> context
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a>
Tree	<a href="#">i-counters</a>
Introduced	19.10.R1
Platforms	All

### **in-profile-octets-discarded-count** *boolean*

Synopsis	Include the in profile octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-octets-offered-count** *boolean*

Synopsis	Include the in profile octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>

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Default	false
Introduced	19.10.R1
Platforms	All

### **in-profile-packets-offered-count** *boolean*

Synopsis	Include the in profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out profile octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-octets-offered-count** *boolean*

Synopsis	Include the out profile octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-offered-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	19.10.R1
Platforms	All

**out-profile-packets-offered-count** *boolean*

Synopsis	Include the out profile packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-policer</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-offered-count</a>
Default	false



Introduced 19.10.R1  
 Platforms All

### **uncoloured-octets-offered-count** *boolean*

Synopsis Include the uncolored octets offered count  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [i-counters](#)  
[uncoloured-octets-offered-count](#) *boolean*  
 Tree [uncoloured-octets-offered-count](#)  
 Default false  
 Introduced 19.10.R1  
 Platforms All

### **uncoloured-packets-offered-count** *boolean*

Synopsis Include the uncolored packets offered count  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [i-counters](#)  
[uncoloured-packets-offered-count](#) *boolean*  
 Tree [uncoloured-packets-offered-count](#)  
 Default false  
 Introduced 19.10.R1  
 Platforms All

### **id** *reference*

Synopsis Policer ID  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-policer](#) [id](#) *reference*  
 Tree [id](#)  
 Reference **configure** [log accounting-policy](#) *number* [custom-record](#) [policer](#) *number*  
 Notes The following elements are part of a choice: **all** or **id**.  
 Introduced 19.10.R1  
 Platforms All

### **ref-queue**

Synopsis Enter the **ref-queue** context

Context	<b>configure log accounting-policy number custom-record ref-queue</b>
Tree	<a href="#">ref-queue</a>
Description	Commands in this context configure reference queue counters for significant change only reporting. The custom record is only generated when the change in the sum of all queue and policer reference counters equals or exceeds the configured (non-zero) significant change value.
Introduced	16.0.R1
Platforms	All

## all

Synopsis	Apply significant change to counters for all queues
Context	<b>configure log accounting-policy number custom-record ref-queue all</b>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>id</b> .
Introduced	16.0.R1
Platforms	All

## e-counters

Synopsis	Enter the <b>e-counters</b> context
Context	<b>configure log accounting-policy number custom-record ref-queue e-counters</b>
Tree	<a href="#">e-counters</a>
Introduced	16.0.R1
Platforms	All

## in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	<b>configure log accounting-policy number custom-record ref-queue e-counters in-profile-octets-discarded-count <i>boolean</i></b>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in-profile packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out-profile octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out-profile packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **i-counters**

Synopsis	Enter the <b>i-counters</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a>
Tree	<a href="#">i-counters</a>
Introduced	16.0.R1
Platforms	All

## **all-octets-offered-count** *boolean*

Synopsis	Include the all octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">all-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **all-packets-offered-count** *boolean*

Synopsis	Include all packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">all-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **high-octets-discarded-count** *boolean*

Synopsis	Include the high octets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**high-octets-offered-count** *boolean*

Synopsis	Include the high octets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**high-packets-discarded-count** *boolean*

Synopsis	Include the high packets discarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**high-packets-offered-count** *boolean*

Synopsis	Include the high packets offered count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

**in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-octets-discarded-count** *boolean*

Synopsis	Include the low octets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-octets-offered-count** *boolean*

Synopsis	Include the low octets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-packets-discarded-count** *boolean*

Synopsis	Include the low packets discarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **low-packets-offered-count** *boolean*

Synopsis	Include the low packets offered count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false



Introduced 16.0.R1  
 Platforms All

### **uncoloured-octets-offered-count** *boolean*

Synopsis Include the uncolored octets offered count  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#)  
[uncoloured-octets-offered-count](#) *boolean*  
 Tree [uncoloured-octets-offered-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **uncoloured-packets-offered-count** *boolean*

Synopsis Include the uncolored packets offered count  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [i-counters](#)  
[uncoloured-packets-offered-count](#) *boolean*  
 Tree [uncoloured-packets-offered-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **id** *reference*

Synopsis Queue ID  
 Context **configure** [log accounting-policy](#) *number* [custom-record](#) [ref-queue](#) [id](#) *reference*  
 Tree [id](#)  
 Reference **configure** [log accounting-policy](#) *number* [custom-record](#) [queue](#) *number*  
 Notes The following elements are part of a choice: **all** or **id**.  
 Introduced 16.0.R1  
 Platforms All

### **significant-change** *number*

Synopsis Significant change required to generate the record

Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">custom-record significant-change</a> <i>number</i>
Tree	<a href="#">significant-change</a>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

**default** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default accounting policy for all objects that do not have an accounting policy
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <b>default</b> <i>boolean</i>
Tree	<a href="#">default</a>
Default	false
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**destination**

Synopsis	Enter the <b>destination</b> context
Context	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i> <a href="#">destination</a>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

**file reference****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique file identifier when creating a log or accounting file
Context	<b>configure log accounting-policy number destination file reference</b>
Tree	<a href="#">file</a>
Reference	<b>configure log file string</b>
Notes	The following elements are part of a choice: <b>file</b> or <b>null</b> .
Introduced	16.0.R1
Platforms	All

**null****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Indicate no destination for accounting policy records
Context	<b>configure log accounting-policy number destination null</b>
Tree	<a href="#">null</a>
Notes	The following elements are part of a choice: <b>file</b> or <b>null</b> .
Introduced	16.0.R1
Platforms	All

**include-system-info boolean**

Synopsis	Include system information in accounting policy records
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Context	<b>configure log accounting-policy</b> <i>number</i> <b>include-system-info</b> <i>boolean</i>
Tree	<b>include-system-info</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **record** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Accounting policy record type
Context	<b>configure log accounting-policy</b> <i>number</i> <b>record</b> <i>keyword</i>
Tree	<b>record</b>
Description	<p>This command adds the accounting record type to the accounting policy that is forwarded to the configured accounting file. A record name can only be used in one accounting policy. To obtain a list of all record types that can be configured, use the <b>show log accounting-records</b> command.</p> <p>To configure an accounting policy for access ports, select a service record (for example, <b>service-ingress-octets</b>). To change the record name to another service record, configure the new record name with this command.</p> <p>When configuring an accounting policy for network ports, select a network record. To change the record name to another network record, configure the new record name with this command.</p> <p><b>Note:</b> AA, video, and subscriber records are not applicable to the 7950 XRS.</p>
Options	<p>service-ingress-octets, service-egress-octets, service-ingress-packets, service-egress-packets, network-ingress-octets, network-egress-octets, network-ingress-packets, network-egress-packets, compact-service-ingress-octets, combined-service-ingress, combined-network-ing-egr-octets, combined-service-ing-egr-octets, complete-service-ingress-egress, combined-sdp-ingress-egress, complete-sdp-ingress-egress, complete-subscriber-ingress-egress, aa-protocol, aa-application, aa-app-group, aa-subscriber-protocol, aa-subscriber-application, custom-record-subscriber, custom-record-service, custom-record-aa-sub, queue-group-octets, queue-group-packets, combined-queue-group, combined-mpls-lsp-ingress, combined-mpls-lsp-egress, combined-ldp-lsp-egress, saa, video, aa-performance, complete-ethernet-port, extended-service-ingress-egress, complete-network-ing-egr, aa-partition, complete-pm, aa-admit-deny, network-interface-ingress-octets,</p>

network-interface-egress-octets, network-interface-ingress-packets, network-interface-egress-packets, combined-network-interface-ingress, combined-network-interface-egress, complete-network-interface-ing-egr, access-egress-octets, access-egress-packets, combined-access-egress, combined-network-egress, complete-service-activation-test, combined-mpls-srte-egress, combined-sr-policy-egress

Introduced 16.0.R1  
Platforms All

## app-route-notifications

Synopsis Enter the **app-route-notifications** context  
Context **configure** [log app-route-notifications](#)  
Tree [app-route-notifications](#)  
Introduced 16.0.R1  
Platforms All

## cold-start-wait *number*

Synopsis Time delay before notifying specific CPM applications for available route  
Context **configure** [log app-route-notifications cold-start-wait \*number\*](#)  
Tree [cold-start-wait](#)  
Range 1 to 300  
Introduced 16.0.R1  
Platforms All

## route-recovery-wait *number*

Synopsis Time delay before notifying specific CPM applications after route recovery or change  
Context **configure** [log app-route-notifications route-recovery-wait \*number\*](#)  
Tree [route-recovery-wait](#)  
Range 1 to 100  
Introduced 16.0.R1  
Platforms All

### **encryption-key** *string*

Synopsis	Secret key for the encryption of log files
Context	<b>configure</b> <a href="#">log encryption-key</a> <i>string</i>
Tree	<a href="#">encryption-key</a>
Description	This command specifies the encryption key used by AES-256-CTR for log file encryption. The encryption key is used for all local log files on the system.
String Length	1 to 71
Introduced	22.7.R1
Platforms	All

### **event-damping** *boolean*

Synopsis	Allow event damping algorithm to suppress QoS or filter change events
Context	<b>configure</b> <a href="#">log event-damping</a> <i>boolean</i>
Tree	<a href="#">event-damping</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **event-handling**

Synopsis	Enter the <b>event-handling</b> context
Context	<b>configure</b> <a href="#">log event-handling</a>
Tree	<a href="#">event-handling</a>
Introduced	16.0.R1
Platforms	All

### **handler** [[name](#)] *string*

Synopsis	Enter the <b>handler</b> list instance
Context	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Tree	<a href="#">handler</a>
Max. Instances	1500
Introduced	16.0.R1

Platforms All

### **[name]** *string*

Synopsis EHS handler name  
Context **configure log event-handling handler** *string*  
Tree [handler](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS handler  
Context **configure log event-handling handler** *string admin-state* *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure log event-handling handler** *string description* *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
Context **configure log event-handling handler** *string entry* *number*

Tree	<a href="#">entry</a>
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	EHS handler entry ID
Context	<b>configure</b> <a href="#">log event-handling handler</a> <i>string entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS handler entry
Context	<b>configure</b> <a href="#">log event-handling handler</a> <i>string entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-handling handler</a> <i>string entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All



**min-delay** *number*

Synopsis	Minimum delay between subsequent executions of the script policy
Context	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i> <a href="#">entry number</a> <a href="#">min-delay</a> <i>number</i>
Tree	<a href="#">min-delay</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**script-policy**

Synopsis	Enable the <b>script-policy</b> context
Context	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i> <a href="#">entry number</a> <a href="#">script-policy</a>
Tree	<a href="#">script-policy</a>
Introduced	16.0.R1
Platforms	All

**name** *reference*

Synopsis	Script policy name
Context	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i> <a href="#">entry number</a> <a href="#">script-policy</a> <i>name</i> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">system script-control</a> <a href="#">script-policy</a> <i>string</i> <i>owner</i> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**owner** *reference*

Synopsis	Script policy owner
Context	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i> <a href="#">entry number</a> <a href="#">script-policy</a> <i>owner</i> <i>reference</i>
Tree	<a href="#">owner</a>
Default	TIMOS CLI
Reference	<b>configure</b> <a href="#">system script-control</a> <a href="#">script-policy</a> <i>string</i> <i>owner</i> <i>string</i>

Introduced	16.0.R1
Platforms	All

## event-trigger

Synopsis	Enter the <b>event-trigger</b> context
Context	<b>configure log event-trigger</b>
Tree	<a href="#">event-trigger</a>
Introduced	16.0.R1
Platforms	All

## adp event keyword

Synopsis	Enter the <b>adp</b> list instance
Context	<b>configure log event-trigger adp event keyword</b>
Tree	<a href="#">adp</a>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger adp event keyword</b>
Tree	<a href="#">adp</a>
Options	tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## admin-state keyword

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger adp event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger adp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger adp event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger adp event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger adp event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

**anysec event keyword**

Synopsis	Enter the <b>anysec</b> list instance
Context	<b>configure log event-trigger anysec event</b> <i>keyword</i>
Tree	<a href="#">anysec</a>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**event keyword**

Synopsis	ANYSec module event
Context	<b>configure log event-trigger anysec event keyword</b>
Tree	<a href="#">anysec</a>
Options	tmnxAnySecMkaPskRollover, tmnxAnySecMkaOperStateChanged, tmnxAnySecMkaSessionInitiation, tmnxAnySecMkaSessionTermination, tmnxAnySecSessionEnabled, tmnxAnySecSessionDisabled, tmnxAnySecPeerInconsisRxSciDtctd, tmnxAnySecPeerInconsisRxSciClrd
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger anysec event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger anysec event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**entry** *[id] number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger anysec event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger anysec event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger anysec event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger anysec event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	23.3.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **time number**

Synopsis Time window for events for EHS to trigger a response

Context **configure log event-trigger anysec event keyword entry number debounce time number**

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 23.3.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **value number**

Synopsis Occurrences in time interval to trigger EHS response

Context **configure log event-trigger anysec event keyword entry number debounce value number**

Tree [value](#)

Range 2 to 15

Introduced 23.3.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **description string**

Synopsis Text description

Context **configure log event-trigger anysec event keyword entry number description string**

Tree [description](#)

String Length 1 to 80

Introduced 23.3.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se



**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger anysec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger anysec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

**application-assurance event keyword**

Synopsis	Enter the <b>application-assurance</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i>
Tree	<a href="#">application-assurance</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i>
Tree	<a href="#">application-assurance</a>
Options	tmnxBsxIsaAaGrpFailureV2, tmnxBsxIsaAaGrpFailureClearV2, tmnxBsxIsaAaGrpNonRedundantV2, tmnxBsxIsaAaGrpSwitchover, tmnxBsxIsaAaGrpFlowFull, tmnxBsxIsaAaGrpFlowFullClear, tmnxBsxIsaAaSubLoadBalance, tmnxBsxIsaAaGrpCapCostThres, tmnxBsxIsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned,

tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded,  
 tmnxBsxAaSubPolResExceededClear, tmnxBsxIsaAaGrpFlowSetup,  
 tmnxBsxIsaAaGrpFlowSetupClear, tmnxBsxIsaAaGrpPacketRate,  
 tmnxBsxIsaAaGrpPacketRateClear, tmnxBsxIsaAaGrpBitRate,  
 tmnxBsxIsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated,  
 tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit,  
 tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError,  
 tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning,  
 tmnxBsxIsaAaGrpFmSbWaSBufOvld, tmnxBsxIsaAaGrpFmSbWaSBufOvldClr,  
 tmnxBsxIsaAaGrpToSbWaSBufOvld, tmnxBsxIsaAaGrpToSbWaSBufOvldClr,  
 tmnxBsxIsaAaGrpOvldCutthru, tmnxBsxIsaAaGrpOvldCutthruClr,  
 tmnxBsxTransIpPersistenceWarn, tmnxBsxAarpInstOperStateChanged,  
 tmnxBsxAarpInstStateChanged, tmnxBsxRadApFailure,  
 tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure,  
 tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded,  
 tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure,  
 tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate,  
 tmnxBsxUrlListFailure, tmnxBsxIsaAaTimFileProcFailure,  
 tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear,  
 tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear,  
 tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear,  
 tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear,  
 tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage,  
 tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed,  
 tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd,  
 tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear,  
 tmnxBsxUrlFiltrWebServOprStateChg

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** keyword

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <b>log</b> <b>event-trigger</b> <b>application-assurance</b> <b>event</b> keyword <b>admin-state</b> keyword
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger application-assurance event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## debounce

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry number](#) [debounce](#)

Tree [debounce](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry number](#) [debounce time](#) *number*

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis Occurrences in time interval to trigger EHS response

Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry number](#) [debounce value](#) *number*

Tree [value](#)

Range 2 to 15

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis Text description

Context **configure** [log event-trigger application-assurance event](#) *keyword* [entry number](#) [description](#) *string*

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">application-assurance event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">application-assurance event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aps event keyword**

Synopsis	Enter the <b>aps</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">aps event</a> <i>keyword</i>
Tree	<a href="#">aps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	<b>configure log event-trigger aps event</b> <i>keyword</i>
Tree	<a href="#">aps</a>
Options	apsEventSwitchover, apsEventModeMismatch, apsEventChannelMismatch, apsEventPSBF, apsEventFEPLF, tApsModeMismatchClear, tApsChannelMismatchClear, tApsPSBFClear, tApsFEPLFClear, tApsLocalSwitchCommandSet, tApsLocalSwitchCommandClear, tApsRemoteSwitchCommandSet, tApsRemoteSwitchCommandClear, tApsMcApsCtlLinkStateChange, tApsChanTxLaisStateChange, tApsPrimaryChannelChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger aps event</b> <i>keyword admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger aps event</b> <i>keyword description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger aps event</b> <i>keyword entry</i> <i>number</i>
Tree	<a href="#">entry</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger aps event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger aps event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger aps event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger aps event keyword entry number debounce time number</b>

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger aps event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger aps event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger aps event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger aps event</a> <i>keyword</i> <a href="#">entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**auto-prov event keyword**

Synopsis	Enter the <b>auto-prov</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event</a> <i>keyword</i>
Tree	<a href="#">auto-prov</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event</a> <i>keyword</i>
Tree	<a href="#">auto-prov</a>
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger auto-prov event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger auto-prov event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [[id](#)] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger auto-prov event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger auto-prov event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger auto-prov event](#) *keyword* [entry](#) *number* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable

Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger auto-prov event</b> <i>keyword entry number</i> <b>debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger auto-prov event</b> <i>keyword entry number</i> <b>debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger auto-prov event</b> <i>keyword entry number</i> <b>debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## **description string**

Synopsis	Text description
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Context	<b>configure log event-trigger auto-prov event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger auto-prov event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger auto-prov event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **bfd event keyword**

Synopsis	Enter the <b>bfd</b> list instance
Context	<b>configure log event-trigger bfd event</b> <i>keyword</i>
Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	<b>configure log event-trigger bfd event</b> <i>keyword</i>
Tree	<a href="#">bfd</a>
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger bfd event</b> <i>keyword admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger bfd event</b> <i>keyword description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger bfd event</b> <i>keyword entry</i> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1

Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger bfd event](#) *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger bfd event](#) *keyword entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger bfd event](#) *keyword entry number debounce*  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger bfd event](#) *keyword entry number debounce time number*  
 Tree [time](#)

Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger bfd event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger bfd event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bfd event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger bfd event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

### **bgp event** *keyword*

Synopsis	Enter the <b>bgp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger bgp event keyword</a>
Tree	<a href="#">bgp</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger bgp event keyword</a>
Tree	<a href="#">bgp</a>
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError, tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tBgpBmpSessionStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
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Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bgp event</a> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **bier event** *keyword*

Synopsis	Enter the <b>bier</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword</i>
Tree	<a href="#">bier</a>
Introduced	19.5.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">bier event</a> <i>keyword</i>
Tree	<a href="#">bier</a>
Options	vRtrBierBfrIdCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">bier event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">bier event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">bier event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>

Introduced 19.5.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger bier event](#) *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 19.5.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger bier event](#) *keyword entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 19.5.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger bier event](#) *keyword entry number debounce*  
 Tree [debounce](#)  
 Introduced 19.5.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger bier event](#) *keyword entry number debounce time number*

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	19.5.R1
Platforms	All

**value *number***

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger bier event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	19.5.R1
Platforms	All

**description *string***

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger bier event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

**filter *reference***

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bier event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	19.5.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger bier event</a> <i>keyword</i> <a href="#">entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	19.5.R1
Platforms	All

**calltrace** [event](#) *keyword*

Synopsis	Enter the <b>calltrace</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger calltrace event</a> <i>keyword</i>
Tree	<a href="#">calltrace</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger calltrace event</a> <i>keyword</i>
Tree	<a href="#">calltrace</a>
Options	tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger calltrace event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure log event-trigger calltrace event** *keyword description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure log event-trigger calltrace event** *keyword entry number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger calltrace event** *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger calltrace event** *keyword entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable



Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger calltrace event keyword entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger calltrace event keyword entry number</a> <b>debounce time</b> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger calltrace event keyword entry number</a> <b>debounce value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
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Context	<b>configure</b> <a href="#">log event-trigger calltrace event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger calltrace event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger calltrace event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cflowd** [event](#) *keyword*

Synopsis	Enter the <b>cflowd</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger cflowd event</a> <i>keyword</i>
Tree	<a href="#">cflowd</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword</a>
Tree	<a href="#">cflowd</a>
Options	tmnCflowdCreateFailure, tmnCflowdStateChange, tmnCflowdFlowCreateFailure, tmnCflowdPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger cflowd event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger cflowd event keyword entry number debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger cflowd event keyword entry number description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger cflowd event keyword entry number filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger cflowd event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)

Introduced	16.0.R1
Platforms	All

### **chassis event keyword**

Synopsis	Enter the <b>chassis</b> list instance
Context	<b>configure log event-trigger chassis event keyword</b>
Tree	<a href="#">chassis</a>
Introduced	16.0.R1
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger chassis event keyword</b>
Tree	<a href="#">chassis</a>
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclfTimingHoldover, tmnxEqSynclfTimingHoldoverClear, tmnxEqSynclfTimingRef1Alarm, tmnxEqSynclfTimingRef1AlarmClear, tmnxEqSynclfTimingRef2Alarm, tmnxEqSynclfTimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclfTimingBITSAlarm, tmnxEqSynclfTimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivelsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch, tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark, tmnxIPseclsaGrpTnlMax, tmnxEqSynclfTimingRef1Quality, tmnxEqSynclfTimingRef2Quality, tmnxEqSynclfTimingBITSQuality, tmnxEqSynclfTimingBITS2Quality, tmnxEqSynclfTimingRefSwitch, tmnxEqSynclfTimingBITS2Alarm, tmnxEqSynclfTimingBITS2AlarmClr, tmnxEqSynclfTimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSynclfTimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSynclfTimingPTPQuality, tmnxEqSynclfTimingPTPAlarm, tmnxEqSynclfTimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState,

tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent,  
tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent,  
tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent,  
tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear,  
tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear,  
tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear,  
tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm,  
tmnxEqProvPowerCapacityAlmClr, tmnxPlyAcctStatsPoolExcResource,  
tmnxPlyAcctStatsPoolLowResource, tmnxPlyAcctStatsEventOvrflwClr,  
tmnxPlyAcctStatsEventOvrflw, tmnxlomResHighLimitReached,  
tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow,  
tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact,  
tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail,  
tmnxEqMdalngrXplError, tmnxSynclfTimBITS2048khzUnsup,  
tmnxSynclfTimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise,  
tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp,  
tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,  
tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,  
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,  
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,  
tmnxEqPhysChassPowerSupOutFailClr, tmnxEqPhysChassisFanFailure,  
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,  
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,  
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,  
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,  
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,  
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,  
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,  
tmnxPhysChassisPCMInputFeed, tmnxPhysChassisPCMInputFeedClr,  
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,  
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,  
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,  
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,  
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,  
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,  
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,  
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,  
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,  
tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg,  
tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail,  
tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed,  
tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen,  
tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp,  
tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError,  
tmnxEqSynclfTimingSyncEQuality, tmnxEqSynclfTimingSyncE2Quality,  
tmnxEqSynclfTimingSyncEAlarm, tmnxEqSynclfTimingSyncEAlarmClr,  
tmnxEqSynclfTimingSyncE2Alarm, tmnxEqSynclfTimingSyncE2AlarmClr,  
tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered,  
tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,  
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,  
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,

tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch, tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr, tmnxEqSynclftimingGnssQuality, tmnxEqSynclftimingGnss2Quality, tmnxEqSynclftimingGnssAlarm, tmnxEqSynclftimingGnss2Alarm, tmnxEqSynclftimingGnssAlarmClr, tmnxEqSynclftimingGnss2AlarmClr, tmnxEsaFirmwareUpgradeStarted, tmnxPlyAcctPlyPoolExcResource, tmnxPlyAcctPlyPoolLowResource, tChassisAirflowDirMismatch, tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch, tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup, tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw, tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared, tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear, tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear, tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull, tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded, tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr, tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr, tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr, tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr, tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr, tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr, tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr, tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr, tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr, tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr, tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr, tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr, tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr, tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr, tmnxPowerSupplyFanFailed, tmnxPowerSupplyFanFailedClear, tmnxLxrResourceHighUsage, tmnxLxrResourceExhausted, tmnxLxrResourceRecovered, tmnxLxrResourceHighUsageByOwner, tmnxLxrResourceExhaustedByOwner, tmnxLxrResourceRecoveredByOwner, tmnxSasAlarminput1StateChanged, tmnxSasAlarminput2StateChanged, tmnxSasAlarminput3StateChanged, tmnxSasAlarminput4StateChanged, tmnxAlarmInputVoltageFailure, tmnxlomRsrcUsageHighLimitReached, tmnxlomRsrcUsageExhausted, tmnxlomRsrcUsageRecovered, tmnxlomRsrcEventOverflow, tmnxlomRsrcEventOverflowClr, tmnxlomRsrcOwnerOversubscribed, tmnxlomRsrcOwnerOversubscrbdClr, tmnxInterChassisCommsDown, tmnxInterChassisCommsUp, tmnxCpmlcPortDown, tmnxCpmlcPortUp, tmnxCpmlcPortSFFInserted, tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort, tmnxCpmBNoLocallcPort, tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail, CpmlcPortSFFStatusFailure, CpmlcPortSFFStatusDDMCorrupt, CpmlcPortSFFStatusReadError, CpmlcPortSFFStatusUnsupported, tmnxCpmlcPortDDMFailure, tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown, tmnxSfmlcPortUp, tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved, SfmlcPortSFFStatusFailure, SfmlcPortSFFStatusDDMCorrupt, SfmlcPortSFFStatusReadError, SfmlcPortSFFStatusUnsupported, tmnxSfmlcPortDDMFailure, tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded, tmnxSfmlcPortDegradedClear, tmnxCardResMacFdbHighUsgSet, tmnxCardResMacFdbHighUsgClr, tmnxPowerShelfInputPwrModeSwitch,



	tmnxPowerShelfCommsDown, tmnxPowerShelfCommsUp, tmnxPowerShelfOutputStatusSwitch, tmnxPowerShelfOutputStatusDown, tmnxPowerShelfOutputStatusUp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword</a> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger chassis event keyword</a> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger chassis event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger chassis event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger chassis event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger chassis event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger chassis event keyword entry number debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger chassis event keyword entry number description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger chassis event keyword entry number filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger chassis event keyword entry number handler reference](#)  
 Tree [handler](#)

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Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **debug event** *keyword*

Synopsis	Enter the <b>debug</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger debug event</a> <i>keyword</i>
Tree	<a href="#">debug</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger debug event</a> <i>keyword</i>
Tree	<a href="#">debug</a>
Options	traceEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger debug event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
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Context	<b>configure</b> log event-trigger debug event keyword description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [id] number

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> log event-trigger debug event keyword entry number
Tree	entry
Introduced	16.0.R1
Platforms	All

### **[id]** number

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> log event-trigger debug event keyword entry number
Tree	entry
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** keyword

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> log event-trigger debug event keyword entry number admin-state keyword
Tree	admin-state
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger debug event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger debug event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger debug event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**dhcp event keyword**

Synopsis	Enter the <b>dhcp</b> list instance
Context	<b>configure log event-trigger dhcp event</b> <i>keyword</i>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger dhcp event</b> <i>keyword</i>
Tree	<a href="#">dhcp</a>
Options	svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError,

tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError,  
 tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded,  
 tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni,  
 tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet,  
 tmnxVRtrDHCP6ClientMacUnresolved, sapDHCP6LseStateMobilityError,  
 sdpBindDHCP6LseStateMobilityErr, svcDHCP6MiscellaneousProblem,  
 sapStatHost6DynMacConflict

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All



**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger dhcp event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger dhcp event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger dhcp event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger dhcp event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds

Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>

Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **dhcps event** *keyword*

Synopsis	Enter the <b>dhcps</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger dhcps event</a> <i>keyword</i>
Tree	<a href="#">dhcps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger dhcps event</a> <i>keyword</i>
Tree	<a href="#">dhcps</a>
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPIThTooLowV6, tmnxDhcpSvrPIThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger dhcps event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger dhcp event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dhcp</a> s event <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp</a> s event <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dhcp</a> s event <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **diameter** [event](#) *keyword*

Synopsis	Enter the <b>diameter</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter</a> event <i>keyword</i>
Tree	<a href="#">diameter</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter event</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>

Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
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Context	<b>configure</b> <a href="#">log event-trigger diameter event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger diameter event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger diameter event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger diameter event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

## handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">diameter event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## dot1x [event](#) *keyword*

Synopsis	Enter the <b>dot1x</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">dot1x event</a> <i>keyword</i>
Tree	<a href="#">dot1x</a>
Introduced	23.7.R1
Platforms	All

## event *keyword*

Synopsis	Events for dynsvc module.
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">dot1x event</a> <i>keyword</i>
Tree	<a href="#">dot1x</a>
Options	alxDot1xHostAuthEvent
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">dot1x event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.7.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure log event-trigger dot1x event** *keyword description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 23.7.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure log event-trigger dot1x event** *keyword entry number*  
 Tree [entry](#)  
 Introduced 23.7.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger dot1x event** *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 23.7.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger dot1x event** *keyword entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable

Default	enable
Introduced	23.7.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger dot1x event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	23.7.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger dot1x event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	23.7.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger dot1x event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	23.7.R1
Platforms	All

## **description string**

Synopsis	Text description
Context	<b>configure log event-trigger dot1x event keyword entry number description string</b>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	23.7.R1
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dot1x event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	23.7.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger dot1x event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	23.7.R1
Platforms	All

### **dynsvc** [event](#) *keyword*

Synopsis	Enter the <b>dynsvc</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger dynsvc event</a> <i>keyword</i>
Tree	<a href="#">dynsvc</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger dynsvc event</a> <i>keyword</i>

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Tree	<a href="#">dynsvc</a>
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger dynsvc event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger dynsvc event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger dynsvc event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger dynsvc event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger dynsvc event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger dynsvc event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger dynsvc event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger dynsvc event keyword entry number](#) [debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger dynsvc event keyword entry number](#) [description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger dynsvc event keyword entry number](#) [filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger dynsvc event keyword entry number](#) [handler reference](#)  
 Tree [handler](#)



Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **efm-oam** [event](#) *keyword*

Synopsis	Enter the <b>efm-oam</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i>
Tree	<a href="#">efm-oam</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i>
Tree	<a href="#">efm-oam</a>
Options	tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger efm-oam event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger efm-oam event keyword entry number debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R1
Platforms	All

## time number

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger efm-oam event keyword entry number debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger efm-oam event keyword entry number debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## description string

Synopsis	Text description
Context	<b>configure log event-trigger efm-oam event keyword entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry number filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger efm-oam event](#) *keyword* [entry number handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **elmi** [event](#) *keyword*

Synopsis Enter the **elmi** list instance  
 Context **configure** [log event-trigger elmi event](#) *keyword*  
 Tree [elmi](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger elmi event](#) *keyword*  
 Tree [elmi](#)  
 Options tmnxElmilfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent  
 Notes This element is part of a list key.

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Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number</i> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number</i> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number</i> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger elmi event</a> <i>keyword entry number</i> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**ering event keyword**

Synopsis	Enter the <b>ering</b> list instance
Context	<b>configure log event-trigger ering event keyword</b>
Tree	<a href="#">ering</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger ering event keyword</b>
Tree	<a href="#">ering</a>
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger ering event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger ering event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80



Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ering event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ering event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ering event</a> <i>keyword</i> <b>entry</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ering event</a> <i>keyword</i> <b>entry</b> <i>number</i> <b>debounce</b>

Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ering event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ering event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ering event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
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Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">ering</a> <a href="#">event</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">filter</a> <a href="#">reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">ering</a> <a href="#">event</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">handler</a> <a href="#">reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### eth-cfm [event](#) *keyword*

Synopsis	Enter the <b>eth-cfm</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	All

### event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">eth-cfm</a>
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFcityFaultRaise, tmnxDot1agCfmMepFcityFaultClear
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger eth-cfm event keyword admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger eth-cfm event keyword description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger eth-cfm event keyword entry number](#)  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger eth-cfm event keyword entry number](#)  
 Tree [entry](#)  
 Range 1 to 1500

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger eth-cfm event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**etun event keyword**

Synopsis	Enter the <b>etun</b> list instance
Context	<b>configure log event-trigger etun event keyword</b>
Tree	<a href="#">etun</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger etun event keyword</b>
Tree	<a href="#">etun</a>
Options	tmnxEthTunnelApsCfgRaiseAlarm, tmnxEthTunnelApsCfgClearAlarm, tmnxEthTunnelApsPrvsnRaiseAlarm, tmnxEthTunnelApsPrvsnClearAlarm, tmnxEthTunnelApsNoRspRaiseAlarm, tmnxEthTunnelApsNoRspClearAlarm, tmnxEthTunnelApsSwitchoverAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger etun event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger etun event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure log event-trigger etun event keyword entry number**  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger etun event keyword entry number**  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger etun event keyword entry number admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger etun event keyword entry number debounce**



Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger etun event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
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Context	<b>configure log event-trigger etun event keyword entry number filter reference</b>
Tree	<b>filter</b>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1
Platforms	All

### handler reference

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger etun event keyword entry number handler reference</b>
Tree	<b>handler</b>
Reference	<b>configure log event-handling handler string</b>
Introduced	16.0.R1
Platforms	All

### filter event keyword

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure log event-trigger filter event keyword</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	All

### event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger filter event keyword</b>
Tree	<b>filter</b>
Options	tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterRPActiveDestChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* **entry** *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log](#) [event-trigger](#) [filter](#) [event](#) *keyword* **entry** *number*  
 Tree [entry](#)  
 Range 1 to 1500

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger filter event</a> <i>keyword entry number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger filter event</a> <i>keyword entry number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger filter event</a> <i>keyword entry number</i> <b>debounce</b> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	<b>configure log event-trigger filter event</b> <i>keyword entry number debounce value number</i>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger filter event</b> <i>keyword entry number description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger filter event</b> <i>keyword entry number filter reference</i>
Tree	<b>filter</b>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger filter event</b> <i>keyword entry number handler reference</i>
Tree	<b>handler</b>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**gsmp event keyword**

Synopsis	Enter the <b>gsmp</b> list instance
Context	<b>configure log event-trigger gsmp event keyword</b>
Tree	<a href="#">gsmp</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger gsmp event keyword</b>
Tree	<a href="#">gsmp</a>
Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger gsmp event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger gsmp event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger gsmp event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger gsmp event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger gsmp event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger gsmp event</b> <i>keyword entry number debounce</i>

Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger gsm event keyword entry number</a> <a href="#">debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger gsm event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger gsm event keyword entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
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Context	<b>configure log event-trigger gsmpp event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### handler reference

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger gsmpp event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### igmp event keyword

Synopsis	Enter the <b>igmp</b> list instance
Context	<b>configure log event-trigger igmp event</b> <i>keyword</i>
Tree	<a href="#">igmp</a>
Introduced	16.0.R1
Platforms	All

### event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger igmp event</b> <i>keyword</i>
Tree	<a href="#">igmp</a>
Options	vRtrIgmppIfRxQueryVerMismatch, vRtrIgmppIfCModeRxQueryMismatch, vRtrIgmppMaxGrpsLimitExceeded, vRtrIgmppMcacPlcyDropped, vRtrIgmppHostInstantiationFail, vRtrIgmppHostMaxGrpsLimitExceeded, vRtrIgmppHostMcacPlcyDropped, vRtrIgmppHostCModeRxQueryMismatch, vRtrIgmppHostRxQueryVerMismatch, vRtrIgmppHostMaxSrcsLimitExceeded, vRtrIgmppMaxSrcsLimitExceeded, vRtrIgmppGrpIfSapMaxGrpsLimExceed, vRtrIgmppGrpIfSapMaxSrcsLimExceed, vRtrIgmppGrpIfSapMcacPlcyDropped, vRtrIgmppGrpIfSapCModeRxQueryMism, vRtrIgmppGrpIfSapRxQueryVerMism, vRtrIgmppHostMaxGrpSrcsLimitExcd, vRtrIgmppMaxGrpSrcsLimitExceeded, vRtrIgmppGrpIfSapMaxGrpSrcLimExcd, vRtrIgmppHostQryIntervalConflict,

	vRtrIgmPNotifyNumOfIPseclfLowWm, vRtrIgmPNotifyNumOfIPseclfHighWm, vRtrIgmPNotifyNumOfIPseclfMaxRch, vRtrIgmPSlaProfInstMcacPlcyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
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Context	<b>configure log event-trigger igmp event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger igmp event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger igmp event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger igmp event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igmp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**igmp-snooping event keyword**

Synopsis	Enter the <b>igmp-snooping</b> list instance
Context	<b>configure log event-trigger igmp-snooping event keyword</b>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger igmp-snooping event keyword</b>
Tree	<a href="#">igmp-snooping</a>
Options	sapIgmPsnPgGrpLimitExceeded, sapIgmPsnPgMcacPlcyDropped, sdpBndIgmPsnPgGrpLimitExceeded, sdpBndIgmPsnPgMcacPlcyDropped, sapIgmPsnPgMcsFailure, sapIgmPsnPgSrcLimitExceeded, sdpBndIgmPsnPgSrcLimitExceeded, sdpBndIgmPsnPgGrpSrcLimitExceed, sapIgmPsnPgGrpSrcLimitExceeded, eMplIgmPsnPgMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger igmp-snooping event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger igmp-snooping event keyword description string</b>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword entry number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword entry number</i> <b>debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword entry number</i> <b>debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger igmp-snooping event</a> <i>keyword entry number</i> <b>description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger igmp-snooping event](#) *keyword entry number filter reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger igmp-snooping event](#) *keyword entry number handler reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **ip event** *keyword*

Synopsis Enter the **ip** list instance  
 Context **configure** [log event-trigger ip event](#) *keyword*  
 Tree [ip](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger ip event](#) *keyword*  
 Tree [ip](#)  
 Options clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface,



	ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger ip event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ip event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ip event</a> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ip event</a> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ip event keyword entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All



Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ipsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger ipsec event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## time number

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger ipsec event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger ipsec event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
Context	<b>configure log event-trigger ipsec event keyword entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger ipsec event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger ipsec event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**isis event keyword**

Synopsis	Enter the <b>isis</b> list instance
Context	<b>configure log event-trigger isis event</b> <i>keyword</i>
Tree	<a href="#">isis</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger isis event</b> <i>keyword</i>
Tree	<a href="#">isis</a>
Options	vRtrIsisSpbNbrMultAdjExists, vRtrIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIsisDatabaseOverload, tmnxIsisManualAddressDrops, tmnxIsisCorruptedLSPDetected, tmnxIsisMaxSeqExceedAttempt, tmnxIsisIDLenMismatch, tmnxIsisMaxAreaAddrsMismatch, tmnxIsisOwnLSPPurge, tmnxIsisSequenceNumberSkip, tmnxIsisAutTypeFail, tmnxIsisAuthFail, tmnxIsisVersionSkew, tmnxIsisAreaMismatch, tmnxIsisRejectedAdjacency,

tmnxIisisLSPTooLargeToPropagate, tmnxIisisOrigLSPBufSizeMismatch, tmnxIisisProtoSuppMismatch, tmnxIisisAdjacencyChange, tmnxIisisCirclDExhausted, tmnxIisisAdjRestartStatusChange, tmnxIisisLdpSyncTimerStarted, tmnxIisisLdpSyncExit, tmnxIisisExportLimitReached, tmnxIisisExportLimitWarning, tmnxIisisRoutesExpLmtDropped, tmnxIisisFailureDisabled, tmnxIisisSidError, tmnxIisisSidNotInLabelRange, tmnxIisisRejectedAdjacencySid, tmnxIisisLSPPurge, tmnxIisisPfxLimitOverloadWarning, tmnxIisisAdjBfdSessionSetupFail, tmnxIisisSrgbBadLabelRange, tmnxIisisCircMtuTooLow, tmnxIisisRejectedAdjacencySet, tmnxIisisCorruptRemainingLifetime, tmnxIisisSidStatsIndexAlloc, tmnxIisisFaOperParticipationDown, tmnxIisisRejectedEndXSid, tmnxIisisRejectedPgld, tmnxIisisSrv6LocError, tmnxIisisSrv6StaticSidIfTypeError

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <b>entry</b> <i>number</i>



Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
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Context	<b>configure log event-trigger isis event keyword entry number debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger isis event keyword entry number debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger isis event keyword entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger isis event keyword entry number filter reference</b>
Tree	<b>filter</b>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger isis event</a> <i>keyword</i> <a href="#">entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**l2tp event** *keyword*

Synopsis	Enter the <b>l2tp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i>
Tree	<a href="#">l2tp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i>
Tree	<a href="#">l2tp</a>
Options	tmnxL2tpPeerUnreachable, tmnxL2tpIlsaMdaVRtrStateChange, tmnxL2tpLnsSePppSessionFailure, tmnxL2tpVappVRtrStateChange, tmnxL2tpTunnelBlacklisted, tmnxL2tpTunnelSelBlacklistFull, tmnxL2tpLnsPppNcpFailure, tmnxL2tpApFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger l2tp event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger l2tp event keyword description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger l2tp event keyword entry number](#)  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger l2tp event keyword entry number](#)  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger l2tp event keyword entry number admin-state keyword](#)  
 Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger l2tp event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## time number

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger l2tp event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger l2tp event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
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Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger l2tp event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lag event keyword**

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger lag event keyword</a>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
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Context	<b>configure</b> <a href="#">log event-trigger lag event</a> <i>keyword</i>
Tree	<a href="#">lag</a>
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger lag event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger lag event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger lag event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger lag event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger lag event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger lag event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger lag event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds



Introduced 16.0.R1  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger lag event](#) *keyword* [entry number](#) [debounce value](#) *number*  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger lag event](#) *keyword* [entry number](#) [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger lag event](#) *keyword* [entry number](#) [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger lag event](#) *keyword* [entry number](#) [handler](#) *reference*  
 Tree [handler](#)

Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ldap event** *keyword*

Synopsis	Enter the <b>ldap</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ldap event</a> <i>keyword</i>
Tree	<a href="#">ldap</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger ldap event</a> <i>keyword</i>
Tree	<a href="#">ldap</a>
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ldap event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
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Context	<b>configure log event-trigger ldap event</b> <i>keyword description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger ldap event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger ldap event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger ldap event</b> <i>keyword entry number admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger ldap event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger ldap event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger ldap event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger ldap event keyword entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger ldap event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger ldap event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ldap event keyword**

Synopsis	Enter the <b>ldap</b> list instance
Context	<b>configure log event-trigger ldap event</b> <i>keyword</i>
Tree	<a href="#">ldap</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger ldap event</b> <i>keyword</i>
Tree	<a href="#">ldap</a>
Options	vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged,

	vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger ldp event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ldp event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ldp event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
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Context	<b>configure log event-trigger ldp event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger ldp event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger ldp event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger ldp event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ldp event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ldp event keyword entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ldp event keyword entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ldp event keyword entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All



**li event keyword**

Synopsis	Enter the <b>li</b> list instance
Context	<b>configure log event-trigger li event keyword</b>
Tree	<b>li</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger li event keyword</b>
Tree	<b>li</b>
Options	sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFtrChangeReject, tMirrorSourceMacFtrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn, tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn, tMirrorFilterAssignToIrfWarn, tMirrorSourceLiFilterChanged, tMirrorSourceLiSubProblem, tMirrorSourceIPv6FtrChangeRej, tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh, tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFtrLiRsvdBlockRangeChangeEvent, tMirrorLiSrcPortLicInvalid, tMirrorLiXlflicenseInvalid, tMirrorLiUpSubFailed, tMirrorLiUpSubSuccess, tMirrorLiUpleInvalid, cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, host_snmp_attempts, radiusFailed, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, mdCommitSucceeded, ssiSaveConfigSucceeded, ssiSaveConfigFailed, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md_cli_io, md_cli_unauth_io, tmnxClear, netconf_auth, netconf_unauth, grpc_auth, grpc_unauth
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger li event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger li event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger li event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger li event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger li event</a> <i>keyword</i> <a href="#">entry number</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger li event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger li event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <b>time</b> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger li event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <b>value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger li event keyword entry number description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger li event keyword entry number filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger li event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### **lldp event** *keyword*

Synopsis Enter the **lldp** list instance  
 Context **configure** [log event-trigger lldp event keyword](#)  
 Tree [lldp](#)  
 Introduced 16.0.R1

Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger lldp event keyword](#)

Tree [lldp](#)

Options lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger lldp event keyword admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger lldp event keyword description string](#)

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context	<b>configure log event-trigger lldp event keyword entry number</b>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger lldp event keyword entry number</b>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger lldp event keyword entry number admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger lldp event keyword entry number debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger lldp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger lldp event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger lldp event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger lldp event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">lldp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**logger** [event](#) *keyword*

Synopsis	Enter the <b>logger</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">logger</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">logger</a>
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger</a> <a href="#">event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>



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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">logger event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**macsec** [event](#) *keyword*

Synopsis	Enter the <b>macsec</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">macsec event</a> <i>keyword</i>
Tree	<a href="#">macsec</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">macsec event</a> <i>keyword</i>
Tree	<a href="#">macsec</a>
Options	tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">macsec event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">macsec event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger macsec event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger macsec event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger macsec event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger macsec event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>

Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger macsec event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mc-redundancy** [event](#) *keyword*

Synopsis	Enter the <b>mc-redundancy</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i>
Tree	<a href="#">mc-redundancy</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i>
Tree	<a href="#">mc-redundancy</a>
Options	tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceIdMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled,

tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIpsecDomainProtStatusChg

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All



**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b> <i>time</i> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800

Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mc-redundancy event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
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Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mcpath** [event](#) *keyword*

Synopsis	Enter the <b>mcpath</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mcpath</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mcpath</a>
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log</a> <a href="#">event-trigger</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mcpath event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mcpath event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mcpath event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mcpath event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

## debounce

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger mcpath event keyword entry number](#) [debounce](#)  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

## time *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger mcpath event keyword entry number](#) [debounce time number](#)  
 Tree [time](#)  
 Range 1 to 604800  
 Units seconds  
 Introduced 16.0.R1  
 Platforms All

## value *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger mcpath event keyword entry number](#) [debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

## description *string*

Synopsis Text description  
 Context **configure** [log event-trigger mcpath event keyword entry number](#) [description string](#)  
 Tree [description](#)  
 String Length 1 to 80

Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger mcpath event keyword entry number filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger mcpath event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### **mgmt-core** [event keyword](#)

Synopsis Enter the **mgmt-core** list instance  
 Context **configure** [log event-trigger mgmt-core event keyword](#)  
 Tree [mgmt-core](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger mgmt-core event keyword](#)  
 Tree [mgmt-core](#)

Options	none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange, mdAutomaticRollbackFailed, mdRollbackFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800



Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event keyword entry number</a> <a href="#">debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event keyword entry number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event keyword entry number</a> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger mgmt-core event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mirror event** *keyword*

Synopsis	Enter the <b>mirror</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i>
Tree	<a href="#">mirror</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i>
Tree	<a href="#">mirror</a>
Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpV6FilterChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mirror event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

## debounce

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger mirror event](#) *keyword* [entry number](#) [debounce](#)  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

## time *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger mirror event](#) *keyword* [entry number](#) [debounce](#) [time](#) *number*  
 Tree [time](#)  
 Range 1 to 604800  
 Units seconds  
 Introduced 16.0.R1  
 Platforms All

## value *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger mirror event](#) *keyword* [entry number](#) [debounce](#) [value](#) *number*  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

## description *string*

Synopsis Text description  
 Context **configure** [log event-trigger mirror event](#) *keyword* [entry number](#) [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80

Introduced 16.0.R1  
Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
Context **configure** [log event-trigger mirror event](#) *keyword* [entry number](#) [filter](#) *reference*  
Tree [filter](#)  
Reference **configure** [log filter](#) *string*  
Introduced 16.0.R1  
Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
Context **configure** [log event-trigger mirror event](#) *keyword* [entry number](#) [handler](#) *reference*  
Tree [handler](#)  
Reference **configure** [log event-handling handler](#) *string*  
Introduced 16.0.R1  
Platforms All

### **mld event** *keyword*

Synopsis Enter the **mld** list instance  
Context **configure** [log event-trigger mld event](#) *keyword*  
Tree [mld](#)  
Introduced 16.0.R1  
Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure** [log event-trigger mld event](#) *keyword*  
Tree [mld](#)

Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlyDropped, vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism, vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict, vRtrMldSlaProflnstMcacPlyDrop
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <b>entry</b> <i>number</i>

Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
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Context	<b>configure</b> <a href="#">log event-trigger mld event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mld event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mld event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All



**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld event</a> <i>keyword</i> <a href="#">entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**mld-snooping** [event](#) *keyword*

Synopsis	Enter the <b>mld-snooping</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i>
Tree	<a href="#">mld-snooping</a>
Options	sapMldSnpGrpLimitExceeded, sdpBndMldSnpGrpLimitExceeded, sapMldSnpMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger mld-snooping event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger mld-snooping event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger mld-snooping event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger mld-snooping event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword entry number</i> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword entry number</i> <a href="#">filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mld-snooping event</a> <i>keyword entry number</i> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**mpls** [event](#) *keyword*

Synopsis	Enter the <b>mpls</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mpls event</a> <i>keyword</i>
Tree	<a href="#">mpls</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">mpls event</a> <i>keyword</i>
Tree	<a href="#">mpls</a>
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResignaled, vRtrMplsP2mplInstanceUp, vRtrMplsP2mplInstanceDown, vRtrMplsS2ISubLspUp, vRtrMplsS2ISubLspDown, vRtrMplsS2ISubLspRerouted, vRtrMplsS2ISubLspResignaled, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mplInstanceResignaled, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInIgpOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2ISubLspPreempted, vRtrMplsNodeInIgpOverloadIpv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">mpls event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">mpls event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger mpls event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger mpls event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger mpls event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger mpls event](#) *keyword* [entry](#) *number* [debounce](#)

Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mpls event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mpls event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mpls event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
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Context	<b>configure log event-trigger mpls event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### handler *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger mpls event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### mpls-tp [event](#) *keyword*

Synopsis	Enter the <b>mpls-tp</b> list instance
Context	<b>configure log event-trigger mpls-tp event</b> <i>keyword</i>
Tree	<a href="#">mpls-tp</a>
Introduced	16.0.R1
Platforms	All

### event *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger mpls-tp event</b> <i>keyword</i>
Tree	<a href="#">mpls-tp</a>
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger mpls-tp event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15

Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry number](#) [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry number](#) [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger mpls-tp event](#) *keyword* [entry number](#) [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling](#) [handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **msdp** [event](#) *keyword*

Synopsis Enter the **msdp** list instance  
 Context **configure** [log event-trigger msdp event](#) *keyword*  
 Tree [msdp](#)

Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger msdp event keyword</a>
Tree	<a href="#">msdp</a>
Options	msdpEstablished, msdpBackwardTransition, tmnxMsdpNgActSrcLimExcd, tmnxMsdpNgPeerActSrcLimExcd, tmnxMsdpNgRPFFailure, tmnxMsdpNgSourceSrcActMsgsExcd, tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger msdp event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger msdp event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger msdp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger msdp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger msdp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger msdp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger msdp event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger msdp event</b> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger msdp event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger msdp event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1

Platforms All

### handler *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger msdp event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### nat [event](#) *keyword*

Synopsis Enter the **nat** list instance  
 Context **configure** [log event-trigger nat event](#) *keyword*  
 Tree [nat](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger nat event](#) *keyword*  
 Tree [nat](#)  
 Options tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSubIcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSubIcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr,

	tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged, tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPIMemberExtBlockUsageHigh, tmnxNatPILsnMemberPortUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger nat event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger nat event](#) *keyword* [entry number](#) [debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger nat event](#) *keyword* [entry number](#) [description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger nat event](#) *keyword* [entry number](#) [filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger nat event](#) *keyword* [entry number](#) [handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ntp event** *keyword*

Synopsis	Enter the <b>ntp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ntp event</a> <i>keyword</i>
Tree	<a href="#">ntp</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ntp event</a> <i>keyword</i>
Tree	<a href="#">ntp</a>
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ntp event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
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Context	<b>configure log event-trigger ntp event</b> <i>keyword description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger ntp event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger ntp event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger ntp event</b> <i>keyword entry number admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ntp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger ntp event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger ntp event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**oam event keyword**

Synopsis	Enter the <b>oam</b> list instance
Context	<b>configure log event-trigger oam event</b> <i>keyword</i>
Tree	<a href="#">oam</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger oam event</b> <i>keyword</i>
Tree	<a href="#">oam</a>
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcIdInvalid, svcIdWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate,

tmnxOamSaaThreshold, tmnxOamDiagTestCompleted,  
 tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded,  
 tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded,  
 tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout,  
 tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted,  
 tmnxOamSathSvcStrmCompleted

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">oam event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger oam event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger oam event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger oam event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger oam event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds



Introduced 16.0.R1  
Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
Context **configure** [log event-trigger oam event](#) *keyword* [entry](#) *number* [debounce](#) *value* *number*  
Tree [value](#)  
Range 2 to 15  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [log event-trigger oam event](#) *keyword* [entry](#) *number* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
Context **configure** [log event-trigger oam event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
Tree [filter](#)  
Reference **configure** [log filter](#) *string*  
Introduced 16.0.R1  
Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
Context **configure** [log event-trigger oam event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
Tree [handler](#)

Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **openflow event** *keyword*

Synopsis	Enter the <b>openflow</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger openflow event</a> <i>keyword</i>
Tree	<a href="#">openflow</a>
Introduced	16.0.R2
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger openflow event</a> <i>keyword</i>
Tree	<a href="#">openflow</a>
Options	tmnxOFFlowEntryInsertFailed
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger openflow event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R2
Platforms	All

### **description** *string*

Synopsis	Text description
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Context	<b>configure log event-trigger openflow event keyword description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R2
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger openflow event keyword entry number</b>
Tree	<b>entry</b>
Introduced	16.0.R2
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger openflow event keyword entry number</b>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger openflow event keyword entry number admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R2
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R2
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword entry number</a> <b>debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R2
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword entry number</a> <b>debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R2
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger openflow event keyword entry number</a> <b>description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R2

Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger](#) [openflow event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R2  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger](#) [openflow event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling](#) [handler](#) *string*  
 Introduced 16.0.R2  
 Platforms All

### **ospf** [event](#) *keyword*

Synopsis Enter the **ospf** list instance  
 Context **configure** [log event-trigger](#) [ospf event](#) *keyword*  
 Tree [ospf](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger](#) [ospf event](#) *keyword*  
 Tree [ospf](#)  
 Options `tmnxOspfVirtIfStateChange`, `tmnxOspfVirtNbrStateChange`,  
`tmnxOspfVirtIfConfigError`, `tmnxOspfVirtIfAuthFailure`, `tmnxOspfVirtIfRxBadPacket`,  
`tmnxOspfAreaOriginateLsa`, `tmnxOspfAreaMaxAgeLsa`, `tmnxOspfLsdbOverflow`,

tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown, tmnxOspfNgNbrStrictBfdBlocked

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** **log event-trigger ospf event** *keyword* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** **log event-trigger ospf event** *keyword* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger ospf event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger ospf event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger ospf event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger ospf event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger ospf event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger ospf event</b> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger ospf event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger ospf event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1



Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger ospf event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### **pcap event** *keyword*

Synopsis Enter the **pcap** list instance  
 Context **configure** [log event-trigger pcap event keyword](#)  
 Tree [pcap](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger pcap event keyword](#)  
 Tree [pcap](#)  
 Options tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger pcap event keyword admin-state keyword](#)  
 Tree [admin-state](#)

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pcap event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger pcap event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pcap event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number debounce time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pcap event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	All

**pcep event** *keyword*

Synopsis	Enter the <b>pcep</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger pcep event keyword</a>
Tree	<a href="#">pcep</a>
Introduced	22.2.R1
Platforms	All

**event keyword**

Synopsis	PCEP module events
Context	<b>configure log event-trigger pcep event keyword</b>
Tree	<a href="#">pcep</a>
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger pcep event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.2.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger pcep event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger pcep event keyword entry number</b>
Tree	<a href="#">entry</a>
Introduced	22.2.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger pcep event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger pcep event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	22.2.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger pcep event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	22.2.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger pcep event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds

Introduced 22.2.R1  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger pcep event keyword entry number debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 22.2.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger pcep event keyword entry number description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 22.2.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger pcep event keyword entry number filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 22.2.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger pcep event keyword entry number handler reference](#)  
 Tree [handler](#)

Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **pfcp event** *keyword*

Synopsis	Enter the <b>pfcp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger pfcp event</a> <i>keyword</i>
Tree	<a href="#">pfcp</a>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis	PFCP events
Context	<b>configure</b> <a href="#">log event-trigger pfcp event</a> <i>keyword</i>
Tree	<a href="#">pfcp</a>
Options	tmnxPfcplInvalidle
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger pfcp event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
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Context	<b>configure log event-trigger pfcpc event</b> <i>keyword description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number</i> <b>debounce</b>
Tree	<b>debounce</b>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number</i> <b>debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number</i> <b>debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number</i> <b>description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger pfcpc event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pim event keyword**

Synopsis	Enter the <b>pim</b> list instance
Context	<b>configure log event-trigger pim event</b> <i>keyword</i>
Tree	<a href="#">pim</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger pim event</b> <i>keyword</i>
Tree	<a href="#">pim</a>
Options	vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlycDropped, vRtrPimNgInvalidIPmsiTunnel,

vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrId,  
vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri,  
vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger pim event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pim event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger pim event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger pim event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger pim event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger pim event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger pim event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger pim event keyword entry number debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger pim event keyword entry number description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger pim event keyword entry number filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger pim event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)

Introduced 16.0.R1  
 Platforms All

### **pim-snooping** *event keyword*

Synopsis Enter the **pim-snooping** list instance  
 Context **configure log event-trigger pim-snooping event keyword**  
 Tree [pim-snooping](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure log event-trigger pim-snooping event keyword**  
 Tree [pim-snooping](#)  
 Options tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure log event-trigger pim-snooping event keyword admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description

Context	<b>configure log event-trigger pim-snooping event</b> <i>keyword description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger pim-snooping event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger pim-snooping event</b> <i>keyword entry number</i>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger pim-snooping event</b> <i>keyword entry number admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All



**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pim-snooping event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger pim-snooping event](#) *keyword entry number filter reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger pim-snooping event](#) *keyword entry number handler reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **port event** *keyword*

Synopsis Enter the **port** list instance  
 Context **configure** [log event-trigger port event](#) *keyword*  
 Tree [port](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger port event](#) *keyword*  
 Tree [port](#)  
 Options sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure,

portError, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear, SFPStatusInvalidFormFactor, tmnxDS0ChanGrpLoopbackStarted, tmnxDS0ChanGrpLoopbackStopped

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** **log** **event-trigger** **port** **event** *keyword* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger port event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger port event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger port event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger port event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger port event keyword entry number debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R1
Platforms	All

## time number

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger port event keyword entry number debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger port event keyword entry number debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## description string

Synopsis	Text description
Context	<b>configure log event-trigger port event keyword entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger port event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger port event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**pppoe event keyword**

Synopsis	Enter the <b>pppoe</b> list instance
Context	<b>configure log event-trigger pppoe event</b> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger pppoe event</b> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
Context **configure** [log event-trigger](#) [pppoe event](#) *keyword* **admin-state** *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [log event-trigger](#) [pppoe event](#) *keyword* **description** *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
Context **configure** [log event-trigger](#) [pppoe event](#) *keyword* **entry** *number*  
Tree [entry](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
Context **configure** [log event-trigger](#) [pppoe event](#) *keyword* **entry** *number*  
Tree [entry](#)

---

Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pppoe event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger pppoe event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger pppoe event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <b>time</b> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger pppoe event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger pppoe event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pppoe event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger pppoe event keyword entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe-clnt event keyword**

Synopsis	Enter the <b>pppoe-clnt</b> list instance
Context	<b>configure log event-trigger pppoe-clnt event keyword</b>
Tree	<a href="#">pppoe-clnt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger pppoe-clnt event keyword</b>
Tree	<a href="#">pppoe-clnt</a>
Options	tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger pppoe-clnt event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger pppoe-clnt event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe-clnt event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe-clnt event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe-clnt event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **debounce**

Synopsis	Enter the <b>debounce</b> context
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Context	<b>configure</b> log event-trigger pppoe-clnt event keyword entry number debounce
Tree	debounce
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> log event-trigger pppoe-clnt event keyword entry number debounce time number
Tree	time
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> log event-trigger pppoe-clnt event keyword entry number debounce value number
Tree	value
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> log event-trigger pppoe-clnt event keyword entry number description string
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe-clnt event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">pppoe-clnt event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ptp event keyword**

Synopsis	Enter the <b>ptp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i>
Tree	<a href="#">ptp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i>
Tree	<a href="#">ptp</a>
Options	tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear, tmnxPtpTimeRecoveryStateChange, tmnxPtpPeerNoTxTimestamping,

	tmnxPtpPeerNoTxTimestampingClear, tmnxPtpPeerNoRxTimestamping, tmnxPtpPeerNoRxTimestampingClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
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Context	<b>configure</b> <a href="#">log event-trigger ptp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ptp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ptp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ptp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">ptp event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**python event keyword**

Synopsis	Enter the <b>python</b> list instance
Context	<b>configure log event-trigger python event keyword</b>
Tree	<a href="#">python</a>
Introduced	23.3.R2
Platforms	All

**event keyword**

Synopsis	Python module events
Context	<b>configure log event-trigger python event keyword</b>
Tree	<a href="#">python</a>
Options	tmnxPythonInterpreterRestarted
Notes	This element is part of a list key.
Introduced	23.3.R2
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger python event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.3.R2
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger python event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	23.3.R2

Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure log event-trigger python event keyword entry number**  
 Tree [entry](#)  
 Introduced 23.3.R2  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger python event keyword entry number**  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 23.3.R2  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger python event keyword entry number admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 23.3.R2  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger python event keyword entry number debounce**  
 Tree [debounce](#)

Introduced 23.3.R2  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger](#) [python event](#) *keyword* [entry](#) *number* [debounce](#) [time](#) *number*  
 Tree [time](#)  
 Range 1 to 604800  
 Units seconds  
 Introduced 23.3.R2  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger](#) [python event](#) *keyword* [entry](#) *number* [debounce](#) [value](#) *number*  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 23.3.R2  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger](#) [python event](#) *keyword* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 23.3.R2  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger](#) [python event](#) *keyword* [entry](#) *number* [filter](#) *reference*

Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	23.3.R2
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger python event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	23.3.R2
Platforms	All

### **radius event** *keyword*

Synopsis	Enter the <b>radius</b> list instance
Context	<b>configure log event-trigger radius event</b> <i>keyword</i>
Tree	<a href="#">radius</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger radius event</b> <i>keyword</i>
Tree	<a href="#">radius</a>
Options	tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <b>time</b> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger radius event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <b>value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger radius event keyword entry number description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger radius event keyword entry number filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger radius event keyword entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)  
 Introduced 16.0.R1  
 Platforms All

### **rip event** *keyword*

Synopsis Enter the **rip** list instance  
 Context **configure** [log event-trigger rip event keyword](#)  
 Tree [rip](#)  
 Introduced 16.0.R1

Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log event-trigger](#) [rip event](#) *keyword*

Tree [rip](#)

Options [ripPacketDiscarded](#), [vRtrRipAuthTypeMismatch](#), [vRtrRipAuthTypeFailure](#), [vRtrRipInstanceShuttingDown](#), [vRtrRipInstanceRestarted](#), [vRtrRipInstanceExpLmtReached](#), [vRtrRipInstanceExpLmtWarning](#), [vRtrRipInstanceRtsExpLmtDropped](#), [vRtrRipPeerBfdDown](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger](#) [rip event](#) *keyword* [admin-state](#) *keyword*

Tree [admin-state](#)

Options [enable](#), [disable](#)

Default [disable](#)

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger](#) [rip event](#) *keyword* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All



**entry** *[id] number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger rip event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger rip event</a> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger rip event</a> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger rip event</a> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger rip event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger rip event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger rip event keyword entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger rip event keyword entry number filter reference</b>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1

Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger rip event](#) *keyword* [entry number handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **ripng event** *keyword*

Synopsis Enter the **ripng** list instance  
 Context **configure** [log event-trigger ripng event](#) *keyword*  
 Tree [ripng](#)  
 Introduced 16.0.R3  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger ripng event](#) *keyword*  
 Tree [ripng](#)  
 Options tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown  
 Notes This element is part of a list key.  
 Introduced 16.0.R3  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger ripng event](#) *keyword* [admin-state](#) *keyword*

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R3
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

### **entry** [[id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R3
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry number admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R3
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry number debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R3
Platforms	All

**time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry number debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R3
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry number debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R3
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R3
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger ripng event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **route-policy** [event](#) *keyword*

Synopsis	Enter the <b>route-policy</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger route-policy event</a> <i>keyword</i>
Tree	<a href="#">route-policy</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">route-policy</a>
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1

Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger route-policy event keyword entry number](#)

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger route-policy event keyword entry number admin-state keyword](#)

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **debounce**

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger route-policy event keyword entry number debounce](#)

Tree [debounce](#)

Introduced 16.0.R1

Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger route-policy event keyword entry number debounce time number](#)



Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger route-policy event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger route-policy event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger route-policy event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">route-policy event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**rpki event** *keyword*

Synopsis	Enter the <b>rpki</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">rpki event</a> <i>keyword</i>
Tree	<a href="#">rpki</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">rpki event</a> <i>keyword</i>
Tree	<a href="#">rpki</a>
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">rpki event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger rpki event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger rpki event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger rpki event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger rpki event](#) *keyword* [entry](#) *number* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable

Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger rpki event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger rpki event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger rpki event keyword entry number debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## **description string**

Synopsis	Text description
Context	<b>configure log event-trigger rpki event keyword entry number description string</b>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger rpki event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger rpki event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **rsvp event** *keyword*

Synopsis	Enter the <b>rsvp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger rsvp event</a> <i>keyword</i>
Tree	<a href="#">rsvp</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger rsvp event</a> <i>keyword</i>

Tree	<a href="#">rsvp</a>
Options	vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger rsvp event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger rsvp event</a> <i>keyword</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger rsvp event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger rsvp event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger rsvp event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger rsvp event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger rsvp event keyword entry number debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger rsvp event](#) *keyword* [entry](#) *number* [debounce](#) *value* *number*  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger rsvp event](#) *keyword* [entry](#) *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger rsvp event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger rsvp event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*



Introduced 16.0.R1  
 Platforms All

### **satellite event** keyword

Synopsis Enter the **satellite** list instance  
 Context **configure log event-trigger satellite event** keyword  
 Tree [satellite](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **event** keyword

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure log event-trigger satellite event** keyword  
 Tree [satellite](#)  
 Options tmnxSatelliteOperStateChange, tmnxSatSynclfTimRefSwitch, tmnxSatSynclfTimSystemQuality, tmnxSatSynclfTimRef1Quality, tmnxSatSynclfTimRef2Quality, tmnxSatSynclfTimHoldover, tmnxSatSynclfTimHoldoverClear, tmnxSatSynclfTimRef1Alarm, tmnxSatSynclfTimRef1AlarmClear, tmnxSatSynclfTimRef2Alarm, tmnxSatSynclfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** keyword

Synopsis Administrative state of the EHS event trigger  
 Context **configure log event-trigger satellite event** keyword **admin-state** keyword  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger satellite event</b> keyword <i>description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger satellite event</b> keyword <i>entry number</i>
Tree	<i>entry</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger satellite event</b> keyword <i>entry number</i>
Tree	<i>entry</i>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger satellite event</b> keyword <i>entry number admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## debounce

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger satellite event keyword entry number](#) **debounce**

Tree [debounce](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## time number

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger satellite event keyword entry number](#) **debounce time number**

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## value number

Synopsis Occurrences in time interval to trigger EHS response

Context **configure** [log event-trigger satellite event keyword entry number](#) **debounce value number**

Tree [value](#)

Range 2 to 15

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## description string

Synopsis Text description

Context **configure** [log event-trigger satellite event keyword entry number](#) **description string**

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger satellite event](#) *keyword* [entry](#) *number* [filter](#) *reference*  
 Tree [filter](#)  
 Reference **configure** [log filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger satellite event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **security event** *keyword*

Synopsis Enter the **security** list instance  
 Context **configure** [log event-trigger security event](#) *keyword*  
 Tree [security](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger security event](#) *keyword*  
 Tree [security](#)

Options

cli\_user\_login, cli\_user\_logout, cli\_user\_login\_failed, cli\_user\_login\_max\_attempts, ftp\_user\_login, ftp\_user\_logout, ftp\_user\_login\_failed, ftp\_user\_login\_max\_attempts, ssh\_user\_login, ssh\_user\_logout, ssh\_user\_login\_failed, ssh\_user\_login\_max\_attempts, radiusOperStatusChange, user\_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp\_transfer\_successful, ftp\_transfer\_failed, enable\_admin, host\_snmp\_attempts, SSH\_server\_preserve\_key\_fail, tacplusInetSvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrIfEventOvrflw, tmnxPkiCAProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp, tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf, tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid, tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning, tmnxCAProfUpDueToRevokeChkCrIOpt, tmnxPkiCertBeforeExpWarning, tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared, tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning, tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid, tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed, tmnxPkiCAProfCrlUpdateStart, tmnxPkiCAProfCrlUpdateSuccess, tmnxPkiCAProfCrlUpdateUrlFail, tmnxPkiCAProfCrlUpdAllUrIsFail, tmnxPkiFileWriteFailed, tmnxPkiCAProfCrlUpdNoNxtUpdTime, tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded, tmnxPkiCAProfCrlUpdLargPreUpdTm, tmnxPkiCertNotYetValid, tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc\_user\_login, grpc\_user\_logout, grpc\_user\_login\_failed, grpc\_user\_login\_max\_attempts, netconf\_user\_login, netconf\_user\_logout, netconf\_user\_login\_failed, netconf\_user\_login\_max\_attempts, tmnxSysLicenseActivated, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid, tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md\_cli\_io,

md\_cli\_unauth\_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired, netconf\_auth, netconf\_unauth, grpc\_auth, grpc\_unauth, tmnxCertKeyPairGen, tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved, tmnxFileCopied, tmnxFileUnzip, tmnxPasswordHashingChanged, tmnxUserPasswordChangedByAdmin, tmnxSSHSessionFailed, tmnxSecSignedSwCpmBootEvent, tSecSgndSwUefiVarsUpdtReqd, tmnxPkiCertUpdUpdateStarted, tmnxPkiCertUpdUpdateFinished, tmnxPkiCertUpdUpdateFailed, tmnxSystemPasswordChangedByAdmin, tmnxSysLicenseCleared, tmnxSysLicensingStateOk, tmnxPkiCertChainCompareCaNoMatch

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger security event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger security event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger security event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1

Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry

Context **configure** [log event-trigger security event](#) *keyword entry number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure** [log event-trigger security event](#) *keyword entry number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **debounce**

Synopsis Enter the **debounce** context

Context **configure** [log event-trigger security event](#) *keyword entry number debounce*

Tree [debounce](#)

Introduced 16.0.R1

Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure** [log event-trigger security event](#) *keyword entry number debounce time number*

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger security event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger security event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger security event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All



**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger security event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**sflow event keyword**

Synopsis	Enter the <b>sflow</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i>
Tree	<a href="#">sflow</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i>
Tree	<a href="#">sflow</a>
Options	none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger sflow event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-s, 7950 XRS

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger sflow event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-s, 7950 XRS

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger sflow event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger sflow event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable

Default	enable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger sflow event keyword entry number debounce</b>
Tree	<b>debounce</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

## time number

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger sflow event keyword entry number debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

## value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger sflow event keyword entry number debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

## description string

Synopsis	Text description
Context	<b>configure log event-trigger sflow event keyword entry number description string</b>

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Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i> <a href="#">entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sflow event</a> <i>keyword</i> <a href="#">entry number handler reference</a>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **snmp event keyword**

Synopsis	Enter the <b>snmp</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i>
Tree	<a href="#">snmp</a>
Introduced	16.0.R1
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i>

Tree	<a href="#">snmp</a>
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger snmp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger snmp event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger snmp event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger snmp event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger snmp event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure log event-trigger snmp event** *keyword entry number debounce value number*  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure log event-trigger snmp event** *keyword entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure log event-trigger snmp event** *keyword entry number filter reference*  
 Tree [filter](#)  
 Reference **configure log filter** *string*  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure log event-trigger snmp event** *keyword entry number handler reference*  
 Tree [handler](#)  
 Reference **configure log event-handling handler** *string*

Introduced 16.0.R1  
Platforms All

### **sr-mpls event keyword**

Synopsis Enter the **sr-mpls** list instance  
Context **configure log event-trigger sr-mpls event keyword**  
Tree [sr-mpls](#)  
Introduced 21.10.R1  
Platforms All

### **event keyword**

Synopsis SR MPLS event  
Context **configure log event-trigger sr-mpls event keyword**  
Tree [sr-mpls](#)  
Options tmnxSrMplsPfxSidFailure  
Notes This element is part of a list key.  
Introduced 21.10.R1  
Platforms All

### **admin-state keyword**

Synopsis Administrative state of the EHS event trigger  
Context **configure log event-trigger sr-mpls event keyword admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 21.10.R1  
Platforms All

### **description string**

Synopsis Text description  
Context **configure log event-trigger sr-mpls event keyword description string**



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Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	21.10.R1
Platforms	All

### **[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	All

## debounce

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	21.10.R1
Platforms	All

## time number

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	21.10.R1
Platforms	All

## value number

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	21.10.R1
Platforms	All

## description string

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sr-mpls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

### **sr-policy** [event](#) *keyword*

Synopsis	Enter the <b>sr-policy</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i>
Tree	<a href="#">sr-policy</a>
Introduced	23.10.R2
Platforms	All

### **event** *keyword*

Synopsis	Events for sr-policy module.
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i>
Tree	<a href="#">sr-policy</a>
Options	vRtrSrPathIsCandPathOperChanged, vRtrSrPlycPathActiveStateChanged
Notes	This element is part of a list key.
Introduced	23.10.R2
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.10.R2
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	23.10.R2
Platforms	All

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	23.10.R2
Platforms	All

**[id]** *number*

Synopsis	ID of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	23.10.R2

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger sr-policy event keyword entry number admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 23.10.R2  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger sr-policy event keyword entry number debounce](#)  
 Tree [debounce](#)  
 Introduced 23.10.R2  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger sr-policy event keyword entry number debounce time number](#)  
 Tree [time](#)  
 Range 1 to 604800  
 Units seconds  
 Introduced 23.10.R2  
 Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger sr-policy event keyword entry number debounce value number](#)

Tree	<a href="#">value</a>
Range	2 to 15
Introduced	23.10.R2
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	23.10.R2
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	23.10.R2
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger sr-policy event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	23.10.R2
Platforms	All

### **srv6** [event](#) *keyword*

Synopsis	Enter the <b>srv6</b> list instance
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Context	<b>configure log event-trigger srv6 event keyword</b>
Tree	<a href="#">srv6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger srv6 event keyword</b>
Tree	<a href="#">srv6</a>
Options	vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state keyword**

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger srv6 event keyword admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **description string**

Synopsis	Text description
Context	<b>configure log event-trigger srv6 event keyword description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger srv6 event keyword entry number</b>
Tree	<a href="#">entry</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger srv6 event keyword entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger srv6 event keyword entry number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger srv6 event keyword entry number debounce</b>
Tree	<a href="#">debounce</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR



**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger srv6 event keyword entry number debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure log event-trigger srv6 event keyword entry number debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger srv6 event keyword entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger srv6 event keyword entry number filter reference</b>
Tree	<b>filter</b>
Reference	<b>configure log filter string</b>
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### handler *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger srv6 event](#) *keyword* [entry](#) *number* [handler](#) *reference*  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler](#) *string*  
 Introduced 21.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### stp event *keyword*

Synopsis Enter the **stp** list instance  
 Context **configure** [log event-trigger stp event](#) *keyword*  
 Tree [stp](#)  
 Introduced 16.0.R1  
 Platforms All

### event *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log event-trigger stp event](#) *keyword*  
 Tree [stp](#)  
 Options topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange  
 Notes This element is part of a list key.  
 Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
Context **configure** [log event-trigger stp event](#) *keyword* **admin-state** *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [log event-trigger stp event](#) *keyword* **description** *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
Context **configure** [log event-trigger stp event](#) *keyword* **entry** *number*  
Tree [entry](#)  
Introduced 16.0.R1  
Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
Context **configure** [log event-trigger stp event](#) *keyword* **entry** *number*  
Tree [entry](#)  
Range 1 to 1500

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger stp event</a> <i>keyword</i> <a href="#">entry number</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger stp event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger stp event</a> <i>keyword</i> <a href="#">entry number</a> <b>debounce</b> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	<b>configure log event-trigger stp event</b> <i>keyword entry number debounce value number</i>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger stp event</b> <i>keyword entry number description string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger stp event</b> <i>keyword entry number filter reference</i>
Tree	<b>filter</b>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger stp event</b> <i>keyword entry number handler reference</i>
Tree	<b>handler</b>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**svcmgr event keyword**

Synopsis	Enter the <b>svcmgr</b> list instance
Context	<b>configure</b> <b>log event-trigger svcmgr event keyword</b>
Tree	<b>svcmgr</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log event-trigger svcmgr event keyword</b>
Tree	<b>svcmgr</b>
Options	<p>           svcTlsMacPinningViolation, tmnxSubSlaacOverride,            svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd,            svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd,            svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAdrsDetected,            svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr,            svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr,            svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared,            svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet,            ieslfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr,            svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet,            svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr,            svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac,            svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTbIFullAlarmRaised,            svcTlsMrpAttrTbIFullAlarmCleared, svcEvpnMplsTEPEgrLblStateChgd,            svcEpipePbbOperStatusChanged, svcTlsVxInstVTEPEgrVniStateChgd,            svcEvpnVxInstESDstTEPStateChgd, svcSrv6InstTEPSidOperStateChgd,            svcSrv6InstESDstTEPOperStateChgd, svcEvpnMplsESDestTEPStateChgd,            svcBgpEvpnTepStateChgd, svcSrv6FunctionOutOfResources, sapStatusChanged,            sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared,            hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac,            sapTlsMacMoveExceeded, sapPortStateChangeProcessed,            sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear,            msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock,            sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall,            tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop,            sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged,            sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure,            sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised,            sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged,            sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged,            sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked,            sdpBindInsufficientBandwidth, dynamicSdpConfigChanged,            dynamicSdpBindConfigChanged, dynamicSdpCreationFailed,         </p>

dynamicSdpBindCreationFailed, sdpEgrlfsNetDomInconsCntChanged, sdpBindIpipeCelpAddressChange, sdpBindReceivedProtSrcMac, sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock, sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped, sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected, svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised, svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet, svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet, svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised, svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg, svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect, svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet, svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised, svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet, svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet, svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet, svcTlsProxyArpSysHiUsgClr, svcTlsProxyArpSvcHiUsgSet, svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr, svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg, sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised, svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated, tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPclyFailure, tmnxSubMcsRelatedProblem, tmnxSubAuthPclyRadSerOperStatChg, tmnxSubAcctPclyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised, svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError, tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError, tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError, tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm, svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr, svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved, svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive, sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit, svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit, tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd, svcTlsGroupOperStatusChanged, sapTunnelStateChange, tmnxSubHostInconsistentAtmTdOvr, svcMSPwRtMisconfig, svcOperGrpOperStatusChanged, sapIpipeCelpAddrChange, svcMSPwRetryExpiredNotif, svcVIIISiteDesigFwdrChg, tmnxSubSlaacSetupFailure, tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached, tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi, tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed, tmnxSublpoeInvalidSessionKey, tmnxSublpoeInvalidCidRidChange, tmnxSublpoeSessionLimitReached, tmnxSublpoePersistenceRecovery, tmnxSublpoeMigrHostDeleted, tmnxSubMngdHostCreationFail, tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed, tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed, tmnxSubBrgRadiusUpdatelpoeSeFail, tmnxSubBrgRadiusCoaError, tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached, tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected, alulpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError, tmnxSublpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed,

tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd, svcTlsVxInstMacAdrLimitAlrmClr, tmnxSubCupsUpSapCreationFailed, tmnxSubCupsUpLfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd, tmnxSubInfoEgrAggRateLimitLowReq, tmnxSubIpoeWppRegistrationFailed, svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr, svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict, svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr, svclFSubForwardingStatsDisNotify, svclFSubForwardingStatsEnNotify, svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet, svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger

Context **configure** [log event-trigger svcmgr event](#) *keyword* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [log event-trigger svcmgr event](#) *keyword* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [log event-trigger svcmgr event](#) *keyword* **entry** *number*

Tree [entry](#)



Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger svcmgr event keyword entry number](#)  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger svcmgr event keyword entry number admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure** [log event-trigger svcmgr event keyword entry number debounce](#)  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure** [log event-trigger svcmgr event keyword entry number debounce time number](#)

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger svcmgr event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger svcmgr event</b> <i>keyword</i> <i>entry number</i> <i>handler reference</i>
Tree	<i>handler</i>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**system event keyword**

Synopsis	Enter the <b>system</b> list instance
Context	<b>configure log event-trigger system event</b> <i>keyword</i>
Tree	<i>system</i>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger system event</b> <i>keyword</i>
Tree	<i>system</i>
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure,

tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, tmnxLastSystemRebootAdmin, mdCommitInProgress, mdCommitSucceeded

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger system event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger system event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger system event keyword entry number</a>
Tree	<a href="#">entry</a>

Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure log event-trigger system event** *keyword entry number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure log event-trigger system event** *keyword entry number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **debounce**

Synopsis Enter the **debounce** context  
 Context **configure log event-trigger system event** *keyword entry number debounce*  
 Tree [debounce](#)  
 Introduced 16.0.R1  
 Platforms All

### **time** *number*

Synopsis Time window for events for EHS to trigger a response  
 Context **configure log event-trigger system event** *keyword entry number debounce time number*

Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger system event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger system event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger system event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger system event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**tls** [event](#) *keyword*

Synopsis	Enter the <b>tls</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger tls event</a> <i>keyword</i>
Tree	<a href="#">tls</a>
Introduced	20.5.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger tls event</a> <i>keyword</i>
Tree	<a href="#">tls</a>
Options	tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger tls event</a> <i>keyword</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger](#) [tls event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 20.5.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger](#) [tls event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 20.5.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger](#) [tls event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 20.5.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger](#) [tls event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable



Default	enable
Introduced	20.5.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger tls event keyword entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	20.5.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger tls event keyword entry number</a> <b>debounce</b> <a href="#">time number</a>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	20.5.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger tls event keyword entry number</a> <b>debounce</b> <a href="#">value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	20.5.R1
Platforms	All

## **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger tls event keyword entry number</a> <b>description</b> <a href="#">string</a>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

### **filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

### **handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tls event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

### **tree-sid event keyword**

Synopsis	Enter the <b>tree-sid</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">tree-sid</a>
Introduced	20.10.R1
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i>

Tree	<a href="#">tree-sid</a>
Options	vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreeldAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared, vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared, vRtrTreeSidFailOverPriToStdBy, vRtrTreeSidFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number</a>
Tree	<a href="#">entry</a>
Introduced	20.10.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger tree-sid event keyword entry number</b>
Tree	<b>entry</b>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger tree-sid event keyword entry number admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger tree-sid event keyword entry number debounce</b>
Tree	<b>debounce</b>
Introduced	20.10.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger tree-sid event keyword entry number debounce time number</b>
Tree	<b>time</b>
Range	1 to 604800
Units	seconds

Introduced	20.10.R1
Platforms	All

**value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number debounce value number</a>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	20.10.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter string</a>
Introduced	20.10.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger tree-sid event keyword entry number handler reference</a>

Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	20.10.R1
Platforms	All

### **user event** *keyword*

Synopsis	Enter the <b>user</b> list instance
Context	<b>configure log event-trigger user event</b> <i>keyword</i>
Tree	<a href="#">user</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger user event</b> <i>keyword</i>
Tree	<a href="#">user</a>
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, cli_user_io, snmp_user_set, cli_config_io, cli_unauth_user_io, cli_unauth_config_io, grpc_user_login, grpc_user_logout, grpc_user_login_failed, grpc_user_login_max_attempts, netconf_user_login, netconf_user_logout, netconf_user_login_failed, netconf_user_login_max_attempts
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger user event</b> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger user event](#) *keyword* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger user event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger user event](#) *keyword* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 1500  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry  
 Context **configure** [log event-trigger user event](#) *keyword* [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable

Default	enable
Introduced	16.0.R1
Platforms	All

## **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number</a> <b>debounce</b>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

## **time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number</a> <b>debounce time number</b>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

## **value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number</a> <b>debounce value number</b>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

## **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger user event keyword entry number</a> <b>description string</b>



Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">user event</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">log filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">user event</a> <a href="#">keyword</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">handler</a> <i>reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure</b> <a href="#">log event-handling</a> <a href="#">handler</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **video event** *keyword*

Synopsis	Enter the <b>video</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i>
Tree	<a href="#">video</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i>

Tree	<a href="#">video</a>
Options	tmnxVdoDuplicateSsrclId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear, tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared, tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared, tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared, tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared, tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared, tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared, tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded, tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared, tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared, tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared, tmnxVdoVappFccRetTotBwLmtExceeded, tmnxVdoVappFccRetTotBwLmtCleared, tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared, tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared, tmnxVdoVappFccRetTotSeLmtExceeded, tmnxVdoVappFccRetTotSeLmtCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **entry** [id] *number*

Synopsis Enter the **entry** list instance

Context **configure log event-trigger video event** *keyword entry number*

Tree [entry](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[id]** *number*

Synopsis ID of the EHS event trigger entry

Context **configure log event-trigger video event** *keyword entry number*

Tree [entry](#)

Range 1 to 1500

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger entry

Context **configure log event-trigger video event** *keyword entry number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **debounce**

Synopsis Enter the **debounce** context

Context **configure log event-trigger video event** *keyword entry number debounce*

Tree [debounce](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**value number**

Synopsis	Occurrences in time interval to trigger EHS response
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">debounce</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger</a> <a href="#">video event</a> <i>keyword</i> <a href="#">entry</a> <i>number</i> <a href="#">filter</a> <i>reference</i>

Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### handler reference

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger video event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### vrrp event keyword

Synopsis	Enter the <b>vrrp</b> list instance
Context	<b>configure log event-trigger vrrp event</b> <i>keyword</i>
Tree	<a href="#">vrrp</a>
Introduced	16.0.R1
Platforms	All

### event keyword

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger vrrp event</b> <i>keyword</i>
Tree	<a href="#">vrrp</a>
Options	vrrpTrapNewMaster, vrrpTrapAuthFailure, tmnxVrrpIPListMismatch, tmnxVrrpIPListMismatchClear, tmnxVrrpMultipleOwners, tmnxVrrpBecameBackup, vrrpPacketDiscarded, tmnxVrrpBfdIntfSessStateChgd, vrrpTrapProtoError, tVrrpBecameBackup, tVrrpTrapNewMaster, tVrrpIPListMismatch, tVrrpIPListMismatchClear, tVrrpMultipleOwners, tVrrpPacketDiscarded, tVrrpRouterAdvNotActivated, tVrrpRouterAdvNotActivatedClear, tVrrpOperDownInvalidMac, tVrrpOperDownInvalidMacClear, tmnxVrrpOperDownInvalidMac, tmnxVrrpOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger vrrp event](#) *keyword* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger vrrp event](#) *keyword* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger vrrp event](#) *keyword* **entry** *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger vrrp event](#) *keyword* **entry** *number*  
 Tree [entry](#)  
 Range 1 to 1500

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger vrrp event</a> <i>keyword entry number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger vrrp event</a> <i>keyword entry number</i> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger vrrp event</a> <i>keyword entry number</i> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	<b>configure log event-trigger vrrp event</b> <i>keyword entry number debounce value number</i>
Tree	<a href="#">value</a>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log event-trigger vrrp event</b> <i>keyword entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter** *reference*

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger vrrp event</b> <i>keyword entry number filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**handler** *reference*

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger vrrp event</b> <i>keyword entry number handler reference</i>
Tree	<a href="#">handler</a>
Reference	<b>configure log event-handling handler</b> <i>string</i>
Introduced	16.0.R1
Platforms	All



**vrtr event keyword**

Synopsis	Enter the <b>vrtr</b> list instance
Context	<b>configure</b> <b>log event-trigger</b> <b>vrtr event keyword</b>
Tree	<b>vrtr</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log event-trigger</b> <b>vrtr event keyword</b>
Tree	<b>vrtr</b>
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared, tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted, tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources, tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust, tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt, tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt, tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState, tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared, tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped, tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged, tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified, vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCIStateDnsChanged, vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CIStateDnsChanged, tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped, tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold, tmnxVRtrBfdMultiHopFpMismatch, vRtrBgplInstanceError
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the EHS event trigger  
 Context **configure** [log event-trigger vrtr event keyword admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger vrtr event keyword description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [log event-trigger vrtr event keyword entry number](#)  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *number*

Synopsis ID of the EHS event trigger entry  
 Context **configure** [log event-trigger vrtr event keyword entry number](#)  
 Tree [entry](#)  
 Range 1 to 1500

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure</b> <a href="#">log event-trigger vrtr event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure</b> <a href="#">log event-trigger vrtr event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

### **time** *number*

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure</b> <a href="#">log event-trigger vrtr event</a> <i>keyword</i> <a href="#">entry number</a> <a href="#">debounce</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Occurrences in time interval to trigger EHS response
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Context	<b>configure log event-trigger vrtr event keyword entry number debounce value number</b>
Tree	<b>value</b>
Range	2 to 15
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger vrtr event keyword entry number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**filter reference**

Synopsis	Log filter for EHS event trigger entry
Context	<b>configure log event-trigger vrtr event keyword entry number filter reference</b>
Tree	<b>filter</b>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1
Platforms	All

**handler reference**

Synopsis	Event handler for EHS event trigger entry
Context	<b>configure log event-trigger vrtr event keyword entry number handler reference</b>
Tree	<b>handler</b>
Reference	<b>configure log event-handling handler string</b>
Introduced	16.0.R1
Platforms	All

**wlan-gw event** *keyword*

Synopsis	Enter the <b>wlan-gw</b> list instance
Context	<b>configure log event-trigger wlan-gw event</b> <i>keyword</i>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log event-trigger wlan-gw event</b> <i>keyword</i>
Tree	<a href="#">wlan-gw</a>
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwlomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure log event-trigger wlan-gw event</b> <i>keyword admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log event-trigger wlan-gw event</b> <i>keyword description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**entry [id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure log event-trigger wlan-gw event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger wlan-gw event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger wlan-gw event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

## debounce

Synopsis Enter the **debounce** context

Context **configure log event-trigger wlan-gw event** *keyword* *entry number* **debounce**

Tree [debounce](#)

Introduced 16.0.R1

Platforms All

## time *number*

Synopsis Time window for events for EHS to trigger a response

Context **configure log event-trigger wlan-gw event** *keyword* *entry number* **debounce time** *number*

Tree [time](#)

Range 1 to 604800

Units seconds

Introduced 16.0.R1

Platforms All

## value *number*

Synopsis Occurrences in time interval to trigger EHS response

Context **configure log event-trigger wlan-gw event** *keyword* *entry number* **debounce value** *number*

Tree [value](#)

Range 2 to 15

Introduced 16.0.R1

Platforms All

## description *string*

Synopsis Text description

Context **configure log event-trigger wlan-gw event** *keyword* *entry number* **description** *string*

Tree [description](#)

String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
Context **configure** [log event-trigger wlan-gw event](#) *keyword entry number filter reference*  
Tree [filter](#)  
Reference **configure** [log filter](#) *string*  
Introduced 16.0.R1  
Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
Context **configure** [log event-trigger wlan-gw event](#) *keyword entry number handler reference*  
Tree [handler](#)  
Reference **configure** [log event-handling handler](#) *string*  
Introduced 16.0.R1  
Platforms All

### **wpp event** *keyword*

Synopsis Enter the **wpp** list instance  
Context **configure** [log event-trigger wpp event](#) *keyword*  
Tree [wpp](#)  
Introduced 16.0.R1  
Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure** [log event-trigger wpp event](#) *keyword*  
Tree [wpp](#)



Options	tmnxWppPortalStatChanged, tmnxWppHostAuthenticationFailed, tmnxWppPortalUnreachable, tmnxWppPortalGroupStatChanged, tmnxWppPGHostAuthFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the EHS event trigger
Context	<b>configure</b> <a href="#">log event-trigger wpp event</a> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log event-trigger wpp event</a> <i>keyword</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">log event-trigger wpp event</a> <i>keyword</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of the EHS event trigger entry
Context	<b>configure log event-trigger wpp event</b> <i>keyword entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1500
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the EHS event trigger entry
Context	<b>configure log event-trigger wpp event</b> <i>keyword entry number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**debounce**

Synopsis	Enter the <b>debounce</b> context
Context	<b>configure log event-trigger wpp event</b> <i>keyword entry number debounce</i>
Tree	<a href="#">debounce</a>
Introduced	16.0.R1
Platforms	All

**time number**

Synopsis	Time window for events for EHS to trigger a response
Context	<b>configure log event-trigger wpp event</b> <i>keyword entry number debounce time number</i>
Tree	<a href="#">time</a>
Range	1 to 604800
Units	seconds
Introduced	16.0.R1

Platforms All

### **value** *number*

Synopsis Occurrences in time interval to trigger EHS response  
 Context **configure** [log event-trigger wpp event](#) *keyword entry number* [debounce value number](#)  
 Tree [value](#)  
 Range 2 to 15  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [log event-trigger wpp event](#) *keyword entry number* [description string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **filter** *reference*

Synopsis Log filter for EHS event trigger entry  
 Context **configure** [log event-trigger wpp event](#) *keyword entry number* [filter reference](#)  
 Tree [filter](#)  
 Reference **configure** [log filter string](#)  
 Introduced 16.0.R1  
 Platforms All

### **handler** *reference*

Synopsis Event handler for EHS event trigger entry  
 Context **configure** [log event-trigger wpp event](#) *keyword entry number* [handler reference](#)  
 Tree [handler](#)  
 Reference **configure** [log event-handling handler string](#)

Introduced	16.0.R1
Platforms	All

### **file** [[file-policy-name](#)] *string*

Synopsis	Enter the <b>file</b> list instance
Context	<b>configure</b> <a href="#">log file</a> <i>string</i>
Tree	<a href="#">file</a>
Max. Instances	99
Introduced	16.0.R1
Platforms	All

### **[file-policy-name]** *string*

Synopsis	File ID for a log or accounting file
Context	<b>configure</b> <a href="#">log file</a> <i>string</i>
Tree	<a href="#">file</a>
Description	This command specifies the identification name or number for a log or accounting file. If the name begins with a numerical digit (from 1 to 9), the name must be a number from 1 to 99.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

### **compact-flash-location**

Synopsis	Enter the <b>compact-flash-location</b> context
Context	<b>configure</b> <a href="#">log file</a> <i>string</i> <a href="#">compact-flash-location</a>
Tree	<a href="#">compact-flash-location</a>
Introduced	16.0.R1
Platforms	All

**backup** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	<b>configure</b> <a href="#">log file</a> <i>string</i> <a href="#">compact-flash-location</a> <b>backup</b> <i>keyword</i>
Tree	<a href="#">backup</a>
Options	cf-unspecified, cf1, cf2, cf3, cf4
Default	cf-unspecified
Introduced	16.0.R1
Platforms	All

**primary** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Log file location
Context	<b>configure</b> <a href="#">log file</a> <i>string</i> <a href="#">compact-flash-location</a> <b>primary</b> <i>keyword</i>
Tree	<a href="#">primary</a>
Options	cf-unspecified, cf1, cf2, cf3, cf4
Default	cf-unspecified
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log file</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **retention number**

Synopsis	Minimum time that a file is retained on the media
Context	<b>configure log file string retention number</b>
Tree	<a href="#">retention</a>
Range	1 to 500
Units	hours
Default	12
Introduced	16.0.R1
Platforms	All

### **rollover number**

Synopsis	Frequency at which a new log or accounting file is created
Context	<b>configure log file string rollover number</b>
Tree	<a href="#">rollover</a>
Range	5 to 10080
Units	minutes
Default	1440
Introduced	16.0.R1
Platforms	All

### **file-storage-control**

Synopsis	Enter the <b>file-storage-control</b> context
Context	<b>configure log file-storage-control</b>
Tree	<a href="#">file-storage-control</a>
Introduced	23.3.R1
Platforms	All

### **accounting-files-total-size number**

Synopsis	Per CF total accounting file storage limit
Context	<b>configure log file-storage-control accounting-files-total-size number</b>
Tree	<a href="#">accounting-files-total-size</a>

Description	<p>This command configures the limit for the total space that all accounting files can occupy on each storage device on the active CPM.</p> <p>When this threshold is reached, new accounting files are no longer created in the \act-collect directory of the storage device until SR OS removes older accounting files from the \act directory and the occupancy is below the limit. Currently open, in-progress accounting files in the \act-collect directory are not affected by this limit and are completed.</p> <p>When unconfigured, there is no specific limit for the total size of all accounting files.</p> <p>Only accounting files in the \act directory with system generated names (including no file extension) are applicable toward the total size limit.</p> <p>If a user manually adds or deletes accounting files from the \act directory, the size of the files is not taken into account for up to 1 hour.</p> <p>The configured total size limit is not validated against the actual size of the installed storage devices. If the configured limit is larger than the installed compact flash (CF) device, the limit is never reached.</p>
Range	50 to 4194304
Units	megabytes
Introduced	23.3.R1
Platforms	All

### **log-files-total-size** *number*

Synopsis	Per CF total log file storage limit
Context	<b>configure</b> <a href="#">log file-storage-control</a> <a href="#">log-files-total-size</a> <i>number</i>
Tree	<a href="#">log-files-total-size</a>
Description	<p>This command configures the limit for the total space that all log files can occupy on each storage device on the active CPM.</p> <p>When this threshold is reached, log events are no longer written to the files in the \log directory until SR OS removes older log files and the occupancy is below the limit.</p> <p>When unconfigured, there is no specific limit for the total size of all log files.</p> <p>Only log files in the \log directory with system generated names (including no file extension) are applicable toward the total size limit.</p> <p>If a user manually adds or deletes log files from the \log directory, the size of the files is not taken into account for up to 1 hour.</p> <p>The configured total size limit is not validated against the actual size of the installed storage devices. If the configured limit is larger than the installed CF device, the limit is never reached.</p>
Range	50 to 4194304
Units	megabytes
Introduced	23.3.R1

Platforms All

### **filter** [*filter-name*] *string*

Synopsis Enter the **filter** list instance  
 Context **configure log filter** *string*  
 Tree [filter](#)  
 Max. Instances 1500  
 Introduced 16.0.R1  
 Platforms All

### **[filter-name]** *string*

Synopsis Filter name  
 Context **configure log filter** *string*  
 Tree [filter](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 21.2.R1  
 Platforms All

### **default-action** *keyword*

Synopsis Default action for the event filter  
 Context **configure log filter** *string* **default-action** *keyword*  
 Tree [default-action](#)  
 Options drop, forward  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure log filter** *string* **description** *string*



Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **named-entry** [[entry-name](#)] *string*

Synopsis	Enter the <b>named-entry</b> list instance
Context	<b>configure</b> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i>
Tree	<a href="#">named-entry</a>
Description	Commands in this context create or edit an event filter entry.
Max. Instances	999
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

### **[entry-name]** *string*

Synopsis	Entry name
Context	<b>configure</b> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i>
Tree	<a href="#">named-entry</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **action** *keyword*

Synopsis	Action for this event filter entry
Context	<b>configure</b> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	drop, forward
Introduced	21.2.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log filter string named-entry string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.2.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure log filter string named-entry string match</b>
Tree	<a href="#">match</a>
Introduced	21.2.R1
Platforms	All

**application**

Synopsis	Enter the <b>application</b> context
Context	<b>configure log filter string named-entry string match application</b>
Tree	<a href="#">application</a>
Introduced	21.2.R1
Platforms	All

**eq keyword**

Synopsis	Application to match
Context	<b>configure log filter string named-entry string match application eq keyword</b>
Tree	<a href="#">eq</a>
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap,

	pppoe-clnt, tls, adp, mgmt-core, macsec, sr-policy, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq** keyword

Synopsis	Application to be filtered out
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match</b> <i>application</i> <b>neq</b> <i>keyword</i>
Tree	<b>neq</b>
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcp, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, sr-policy, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **event**

Synopsis	Enter the <b>event</b> context
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match</b> <i>event</i>
Tree	<b>event</b>
Introduced	21.2.R1
Platforms	All

### **eq** number

Synopsis	Log event message to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match</b> <i>event</i> <b>eq</b> <i>number</i>
Tree	<b>eq</b>
Range	1 to 4294967295

Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**gt number**

Synopsis	Number of the log event to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match event</b> <i>gt number</i>
Tree	<a href="#">gt</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**gte number**

Synopsis	Number of the log event to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match event</b> <i>gte number</i>
Tree	<a href="#">gte</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**lt number**

Synopsis	Number of the log event to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match event</b> <i>lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **lte number**

Synopsis	Number of the log event to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match event lte</b> <i>number</i>
Tree	<b>lte</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq number**

Synopsis	Log event message to filter out
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match event neq</b> <i>number</i>
Tree	<b>neq</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **message**

Synopsis	Enter the <b>message</b> context
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match message</b>
Tree	<b>message</b>
Introduced	21.2.R1
Platforms	All

### **eq string**

Synopsis	Log event message to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match message eq</b> <i>string</i>
Tree	<b>eq</b>
String Length	1 to 400
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .

Introduced 21.2.R1  
Platforms All

### **neq** *string*

Synopsis Log event message to be filtered out  
Context **configure log filter** *string* **named-entry** *string* **match message neq** *string*  
Tree [neq](#)  
String Length 1 to 400  
Notes The following elements are part of a choice: **eq** or **neq**.  
Introduced 21.2.R1  
Platforms All

### **regexp** *boolean*

Synopsis String comparison to determine if the log event matches the value of pattern  
Context **configure log filter** *string* **named-entry** *string* **match message regexp** *boolean*  
Tree [regexp](#)  
Default false  
Introduced 21.2.R1  
Platforms All

### **severity**

Synopsis Enter the **severity** context  
Context **configure log filter** *string* **named-entry** *string* **match severity**  
Tree [severity](#)  
Introduced 21.2.R1  
Platforms All

### **eq** *keyword*

Synopsis Log event severity level to match  
Context **configure log filter** *string* **named-entry** *string* **match severity eq** *keyword*  
Tree [eq](#)

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Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **gt** keyword

Synopsis	Log event severity level
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity</b> <b>gt</b> <i>keyword</i>
Tree	<b>gt</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **gte** keyword

Synopsis	Log event severity level
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity</b> <b>gte</b> <i>keyword</i>
Tree	<b>gte</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **lt** keyword

Synopsis	Log event severity level
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity</b> <b>lt</b> <i>keyword</i>
Tree	<b>lt</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **Ite keyword**

Synopsis	Log event severity level
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity</b> <b>lte</b> <i>keyword</i>
Tree	<b>lte</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq keyword**

Synopsis	Log event severity level to filter out
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match severity</b> <b>neq</b> <i>keyword</i>
Tree	<b>neq</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **subject**

Synopsis	Enter the <b>subject</b> context
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match subject</b>
Tree	<b>subject</b>
Introduced	21.2.R1
Platforms	All

### **eq string**

Synopsis	Log event subject string to match
Context	<b>configure log filter</b> <i>string</i> <b>named-entry</b> <i>string</i> <b>match subject</b> <b>eq</b> <i>string</i>
Tree	<b>eq</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .



Introduced 21.2.R1  
 Platforms All

### **neq** *string*

Synopsis Log event subject string to filter out  
 Context **configure log filter** *string* **named-entry** *string* **match subject neq** *string*  
 Tree [neq](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **eq** or **neq**.  
 Introduced 21.2.R1  
 Platforms All

### **regexp** *boolean*

Synopsis String comparison to determine if the log event matches the value of subject  
 Context **configure log filter** *string* **named-entry** *string* **match subject regexp** *boolean*  
 Tree [regexp](#)  
 Default false  
 Introduced 21.2.R1  
 Platforms All

### **vrtr-name**

Synopsis Enter the **vrtr-name** context  
 Context **configure log filter** *string* **named-entry** *string* **match vrtr-name**  
 Tree [vrtr-name](#)  
 Description Commands in this context configure the criteria for the name of a router instance.  
 The vrtr-name is a name for a router instance, in a special format, used in the logging system. Examples of names include Base and vprn101, where 101 is the service ID of the VPRN service. The name represents the router instance that generated the log event.  
 Introduced 21.2.R1  
 Platforms All

### **eq string**

Synopsis	Log event router instance to match
Context	<b>configure log filter string named-entry string match vrtr-name eq string</b>
Tree	<a href="#">eq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq string**

Synopsis	Log event router instance to filter out
Context	<b>configure log filter string named-entry string match vrtr-name neq string</b>
Tree	<a href="#">neq</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **regexp boolean**

Synopsis	Match the router instance string
Context	<b>configure log filter string named-entry string match vrtr-name regexp boolean</b>
Tree	<a href="#">regexp</a>
Default	false
Introduced	21.2.R1
Platforms	All

### **log-events**

Synopsis	Enter the <b>log-events</b> context
Context	<b>configure log log-events</b>
Tree	<a href="#">log-events</a>
Introduced	16.0.R1

Platforms All

### **adp event** *keyword*

Synopsis Enter the **adp** list instance  
Context **configure log log-events adp event** *keyword*  
Tree **adp**  
Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure log log-events adp event** *keyword*  
Tree **adp**  
Options tmnxDiscoveryEndNotify, tmnxDiscoveryCellularReq  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure log log-events adp event** *keyword generate* *boolean*  
Tree **generate**  
Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure log log-events adp event** *keyword repeat* *boolean*  
Tree **repeat**  
Default false  
Introduced 16.0.R4

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure log log-events adp event** *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure log log-events adp event** *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure log log-events adp event** *keyword specific-throttle-interval number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure log log-events adp event** *keyword specific-throttle-limit number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1

Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure log log-events adp event** *keyword throttle boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS-7, 7750 SR-1, 7750 SR-7, 7750 SR-1e, 7750 SR-2e, 7750 SR-s

### **anysec event** *keyword*

Synopsis Enter the **anysec** list instance  
 Context **configure log log-events anysec event** *keyword*  
 Tree [anysec](#)  
 Introduced 23.3.R1  
 Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **event** *keyword*

Synopsis ANYSec module event  
 Context **configure log log-events anysec event** *keyword*  
 Tree [anysec](#)  
 Options tmnxAnySecMkaPskRollover, tmnxAnySecMkaOperStateChanged, tmnxAnySecMkaSessionInitiation, tmnxAnySecMkaSessionTermination, tmnxAnySecSessionEnabled, tmnxAnySecSessionDisabled, tmnxAnySecPeerInconsisRxSciDtctd, tmnxAnySecPeerInconsisRxSciClrd  
 Notes This element is part of a list key.  
 Introduced 23.3.R1  
 Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
 Context **configure log log-events anysec event** *keyword generate boolean*

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Tree	<a href="#">generate</a>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">anysec</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">anysec</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">anysec</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
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Context	<b>configure log log-events anysec event keyword specific-throttle-interval number</b>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **specific-throttle-limit number**

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events anysec event keyword specific-throttle-limit number</b>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **throttle boolean**

Synopsis	Throttle log events of this type
Context	<b>configure log log-events anysec event keyword throttle boolean</b>
Tree	<a href="#">throttle</a>
Introduced	23.3.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **application-assurance event keyword**

Synopsis	Enter the <b>application-assurance</b> list instance
Context	<b>configure log log-events application-assurance event keyword</b>
Tree	<a href="#">application-assurance</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">application-assurance</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">application-assurance</a>
Options	tmnxBsxIsaAaGrpFailureV2, tmnxBsxIsaAaGrpFailureClearV2, tmnxBsxIsaAaGrpNonRedundantV2, tmnxBsxIsaAaGrpSwitchover, tmnxBsxIsaAaGrpFlowFull, tmnxBsxIsaAaGrpFlowFullClear, tmnxBsxIsaAaSubLoadBalance, tmnxBsxIsaAaGrpCapCostThres, tmnxBsxIsaAaGrpCapCostThresClear, tmnxBsxAaSubscribersUnassigned, tmnxBsxAaSubscriberAcctDataLoss, tmnxBsxAaSubPolResExceeded, tmnxBsxAaSubPolResExceededClear, tmnxBsxIsaAaGrpFlowSetup, tmnxBsxIsaAaGrpFlowSetupClear, tmnxBsxIsaAaGrpPacketRate, tmnxBsxIsaAaGrpPacketRateClear, tmnxBsxIsaAaGrpBitRate, tmnxBsxIsaAaGrpBitRateClear, tmnxBsxTransIpPolAaSubCreated, tmnxBsxTransIpPolAaSubDeleted, tmnxBsxTransIpPolRadCoAAudit, tmnxBsxTransIpPolRadCoAError, tmnxBsxTransIpPolRadDiscError, tmnxBsxTransIpPolDhcpAddWarning, tmnxBsxTransIpPolDhcpDelWarning, tmnxBsxIsaAaGrpFmSbWaSBufOvld, tmnxBsxIsaAaGrpFmSbWaSBufOvldClr, tmnxBsxIsaAaGrpToSbWaSBufOvld, tmnxBsxIsaAaGrpToSbWaSBufOvldClr, tmnxBsxIsaAaGrpOvrlidCutthru, tmnxBsxIsaAaGrpOvrlidCutthruClr, tmnxBsxTransitIpPersistenceWarn, tmnxBsxAarpInstOperStateChanged, tmnxBsxAarpInstStateChanged, tmnxBsxRadApFailure, tmnxBsxRadApServOperStateChange, tmnxBsxMobileSubModifyFailure, tmnxBsxRadApIntrmUpdateSkipped, tmnxBsxHttpUrlParamLimitExceeded, tmnxBsxUrlFilterOperStateChange, tmnxBsxSubModifyFailure, tmnxBsxDnsIpCacheFull, tmnxBsxDnsIpCacheFullClear, tmnxBsxUrlListUpdate, tmnxBsxUrlListFailure, tmnxBsxIsaAaTimFileProcFailure, tmnxBsxStatTcaThreshCrossed, tmnxBsxStatTcaThreshCrossedClear, tmnxBsxStatPolcrTcaThreshCrossed, tmnxBsxStatPolcrTcaThreshCrClear, tmnxBsxStatFtrTcaThreshCrossed, tmnxBsxStatFtrTcaThreshCrClear, tmnxBsxStatFtrEnTcaThreshCrossed, tmnxBsxStatFtrEnTcaThreshCrClear, tmnxBsxTransIpPolDiamGxError, tmnxBsxDatapathCpuUsage, tmnxBsxDatapathCpuUsageClear, tmnxBsxTcpValTcaCrossed, tmnxBsxTcpValTcaCrossedClear, tmnxBsxCertProfileOperStateChngd, tmnxBsxSubQuarantined, tmnxBsxSubQuarantinedClear, tmnxBsxUrlFiltrWebServOprStateChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">application-assurance</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>



Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events application-assurance event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events application-assurance event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events application-assurance event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events application-assurance event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>

Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events application-assurance event keyword</a> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events application-assurance event keyword</a> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aps event** *keyword*

Synopsis	Enter the <b>aps</b> list instance
Context	<b>configure</b> <a href="#">log log-events aps event keyword</a>
Tree	<a href="#">aps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events aps event keyword</a>
Tree	<a href="#">aps</a>

Options	apsEventSwitchover, apsEventModeMismatch, apsEventChannelMismatch, apsEventPSBF, apsEventFEPLF, tApsModeMismatchClear, tApsChannelMismatchClear, tApsPSBFClear, tApsFEPLFClear, tApsLocalSwitchCommandSet, tApsLocalSwitchCommandClear, tApsRemoteSwitchCommandSet, tApsRemoteSwitchCommandClear, tApsMcApsCtlLinkStateChange, tApsChanTxLaisStateChange, tApsPrimaryChannelChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">aps</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">aps</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">aps</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events aps event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events aps event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events aps event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events aps event</b> <i>keyword throttle boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**auto-prov event keyword**

Synopsis	Enter the <b>auto-prov</b> list instance
Context	<b>configure log log-events auto-prov event keyword</b>
Tree	<a href="#">auto-prov</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events auto-prov event keyword</b>
Tree	<a href="#">auto-prov</a>
Options	autoNodeProv
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events auto-prov event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events auto-prov event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">auto-prov</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">auto-prov</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">auto-prov</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">auto-prov</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">auto-prov</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**bfd** [event](#) *keyword*

Synopsis	Enter the <b>bfd</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">bfd</a>
Options	tmnxBfdOnLspSessDown, tmnxBfdOnLspSessUp, tmnxBfdOnLspSessDeleted, tmnxBfdOnLspSessProtChange, tmnxBfdOnLspSessNoCpmNpResources, tmnxBfdOnLspSessNoTailResources, tmnxBfdOnLspExtSessDown, tmnxBfdOnLspExtSessUp, tmnxBfdOnLspExtSessDeleted, tmnxBfdOnLspExtSessProtChange, tmnxBfdOnLspExtSessNoCpmNpResrcs
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events bfd event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events bfd event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events bfd event keyword specific-throttle boolean</b>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events bfd event keyword specific-throttle-interval number</b>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All



**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bfd</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**bgp** [event](#) *keyword*

Synopsis	Enter the <b>bgp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">bgp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bgp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">bgp</a>
Options	sendNotification, receiveNotification, bgpInterfaceDown, bgpConnNoKA, bgpConnNoOpenRcvd, bgpRejectConnBadLocAddr, bgpRemoteEndClosedConn, bgpPeerNotFound, bgpConnMgrTerminated, bgpTerminated, bgpNoMemoryPeer, bgpVariableRangeViolation, bgpCfgViol, tBgpPeerGRStatusChange, tBgpNgEstablished, tBgpNgBackwardTransition, tBgpPeerNgHoldTimeInconsistent, tBgpFlowspecUnsupportdComAction, tBgp4RouteInvalid, tBgp4PathAttrInvalid, tBgp4WithdrawnRtFromUpdateError,

tBgp4UpdateInvalid, tBgpGeneral, tBgpFibResourceFailPeer, tBgpReceivedInvalidNlri, tBgpMaxNgPfxLmt, tBgpMaxNgPfxLmtThresholdReached, tBgpInstanceDynamicPeerLmtReachd, tBgpPGDynamicPeerLmtReached, bgpEstablishedNotification, bgpBackwardTransNotification, tBgp4PathAttrDiscarded, tBgpPeerNgGRStatusChange, tBgpInstConvStateTransition, tBgpPeerNgGRStatusChange, tBgpPGDynNbrIfMaxSessLmtReachd

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events bgp event</a> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events bgp event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events bgp event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters that throttle this specific event
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>bgp</b> <b>event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>bgp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>bgp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>bgp</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**bier event** *keyword*

Synopsis	Enter the <b>bier</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier event</a> <i>keyword</i>
Tree	<a href="#">bier</a>
Introduced	19.5.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier event</a> <i>keyword</i>
Tree	<a href="#">bier</a>
Options	vRtrBierBfrldCollision, vRtrBierMtMismatch, vRtrBierSubDomainMismatch, vRtrBierUnsupportedNhop
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	19.5.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	19.5.R1
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events bier event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	19.5.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events bier event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	19.5.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events bier event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	19.5.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events bier event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	19.5.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">bier event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	19.5.R1
Platforms	All

**calltrace** [event](#) *keyword*

Synopsis	Enter the <b>calltrace</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace event</a> <i>keyword</i>
Tree	<a href="#">calltrace</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace event</a> <i>keyword</i>
Tree	<a href="#">calltrace</a>
Options	tmnxCallTraceMaxFilesNumReached, tmnxCallTraceLocSizeLimitReached, calltraceDebugEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">calltrace</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cflowd** [event](#) *keyword*

Synopsis	Enter the <b>cflowd</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">cflowd</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">cflowd</a>
Options	tmnCflowdCreateFailure, tmnCflowdStateChange, tmnCflowdFlowCreateFailure, tmnCflowdPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">cflowd</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**chassis** [event](#) *keyword*

Synopsis	Enter the <b>chassis</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">chassis</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">chassis</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>chassis</b> <b>event</b> <i>keyword</i>
Tree	<b>chassis</b>
Options	tmnxEqCardFailure, tmnxEqCardInserted, tmnxEqCardRemoved, tmnxEqWrongCard, tmnxEnvTempTooHigh, tmnxEqPowerSupplyInserted, tmnxEqPowerSupplyRemoved, tmnxRedPrimaryCPMFail, tmnxChassisNotificationClear, tmnxEqSynclfTimingHoldover, tmnxEqSynclfTimingHoldoverClear, tmnxEqSynclfTimingRef1Alarm, tmnxEqSynclfTimingRef1AlarmClear, tmnxEqSynclfTimingRef2Alarm, tmnxEqSynclfTimingRef2AlarmClear, tmnxEqFlashDataLoss, tmnxEqFlashDiskFull, tmnxPeSoftwareVersionMismatch, tmnxPeSoftwareLoadFailed, tmnxPeBootloaderVersionMismatch, tmnxPeBootromVersionMismatch, tmnxPeFPGAVersionMismatch, tmnxEqSynclfTimingBITSAlarm, tmnxEqSynclfTimingBITSAlarmClear, tmnxEqCardFirmwareUpgraded, tmnxChassisUpgradeInProgress, tmnxChassisUpgradeComplete, tmnxChassisHiBwMcastAlarm, tmnxEqOperStateChange, tmnxEqMdaCfgNotCompatible, tmnxCpmCardSyncFileNotPresent, tmnxEqMdaXplError, tmnxEqCardPChipError, tmnxEqCardSoftResetAlarm, tmnxEqMdaSyncENotCompatible, tmnxIPseclsaGrpActivelsaChgd, tmnxEqCardPChipMemoryEvent, tmnxIPseclsaGrpUnableToSwitch, tmnxIPseclsaGrpTnlLowWMark, tmnxIPseclsaGrpTnlHighWMark, tmnxIPseclsaGrpTnlMax, tmnxEqSynclfTimingRef1Quality, tmnxEqSynclfTimingRef2Quality, tmnxEqSynclfTimingBITSQuality, tmnxEqSynclfTimingBITS2Quality, tmnxEqSynclfTimingRefSwitch, tmnxEqSynclfTimingBITS2Alarm, tmnxEqSynclfTimingBITS2AlarmClr, tmnxEqSynclfTimingBITSOutRefChg, tmnxEqCardPChipCamEvent, tmnxEqSynclfTimingSystemQuality, tmnxEqHwEnhancedCapability, tmnxEqSynclfTimingPTPQuality, tmnxEqSynclfTimingPTPAlarm, tmnxEqSynclfTimingPTPAlarmClr, tmnxPeFirmwareVersionWarning, tmnxMDAIsaTunnelGroupChange, tmnxEqPowerCapacityExceeded, tmnxEqPowerCapacityExceededClear, tmnxEqPowerLostCapacity, tmnxEqPowerLostCapacityClear, tmnxEqPowerOverloadState, tmnxEqPowerOverloadStateClear, tmnxEqCardQChipBufMemoryEvent, tmnxEqCardQChipStatsMemoryEvent, tmnxEqCardQChipIntMemoryEvent, tmnxEqCardChipIfDownEvent, tmnxEqCardChipIfCellEvent, tmnxEqLowSwitchFabricCap, tmnxEqLowSwitchFabricCapClear, tmnxEqPowerSafetyAlertThreshold, tmnxEqPowerSafetyAlertClear, tmnxEqPowerSafetyLevelThreshold, tmnxEqPowerSafetyLevelClear, tmnxEqCardTChipParityEvent, tmnxEqProvPowerCapacityAlm, tmnxEqProvPowerCapacityAlmClr, tmnxPlcyAcctStatsPoolExcResource, tmnxPlcyAcctStatsPoolLowResource, tmnxPlcyAcctStatsEventOvrflwClr, tmnxPlcyAcctStatsEventOvrflw, tmnxlomResHighLimitReached, tmnxlomResExhausted, tmnxlomResStateClr, tmnxlomEventOverflow, tmnxlomEventOverflowClr, tmnxEqDataPathFailureProtImpact, tmnxExtStandbyCpmReboot, tmnxExtStandbyCpmRebootFail, tmnxEqMdalngrXplError, tmnxSynclfTimBITS2048khzUnsup, tmnxSynclfTimBITS2048khzUnsupClr, tmnxEqMgmtEthRedStandbyRaise, tmnxEqMgmtEthRedStandbyClear, tmnxEqPhysChassPowerSupOvrTmp, tmnxEqPhysChassPowerSupOvrTmpClr, tmnxEqPhysChassPowerSupAcFail,

tmnxEqPhysChassPowerSupAcFailClr, tmnxEqPhysChassPowerSupDcFail,  
tmnxEqPhysChassPowerSupDcFailClr, tmnxEqPhysChassPowerSupInFail,  
tmnxEqPhysChassPowerSupInFailClr, tmnxEqPhysChassPowerSupOutFail,  
tmnxEqPhysChassPowerSupOutFailCl, tmnxEqPhysChassisFanFailure,  
tmnxEqPhysChassisFanFailureClear, tIPseclsaMemLowWatermark,  
tIPseclsaMemHighWatermark, tIPseclsaMemMax, tmnxCpmMemSizeMismatch,  
tmnxCpmMemSizeMismatchClear, tmnxPhysChassPwrSupWrgFanDir,  
tmnxPhysChassPwrSupWrgFanDirClr, tmnxPhysChassPwrSupPemACRect,  
tmnxPhysChassPwrSupPemACRectClr, tmnxPhysChassPwrSupInputFeed,  
tmnxPhysChassPwrSupInputFeedClr, tmnxEqBpEpromFail,  
tmnxEqBpEpromFailClear, tmnxEqBpEpromWarning, tmnxEqBpEpromWarningClear,  
tmnxPhysChassisPCMIInputFeed, tmnxPhysChassisPCMIInputFeedClr,  
tmnxIPMacQosIngOverload, tmnxIPMacQosIngOverloadClear,  
tmnxIPQosEgrOverload, tmnxIPQosEgrOverloadClear, tmnxIPv6QosIngOverload,  
tmnxIPv6QosIngOverloadClear, tmnxIPv6QosEgrOverload,  
tmnxIPv6QosEgrOverloadClear, tmnxIPMacFilterIngOverload,  
tmnxIPMacFilterIngOverloadClear, tmnxIPMacFilterEgrOverload,  
tmnxIPMacFilterEgrOverloadClear, tmnxIPv6FilterIngOverload,  
tmnxIPv6FilterIngOverloadClear, tmnxIPv6FilterEgrOverload,  
tmnxIPv6FilterEgrOverloadClear, tmnxIPMacCpmFilterOverload,  
tmnxIPMacCpmFilterOverloadClear, tmnxIPv6CpmFilterOverload,  
tmnxIPv6CpmFilterOverloadClear, tmnxBluetoothModuleConnectionChg,  
tmnxGnssAcquiringFix, tmnxGnssAcquiredFix, tmnxPhysChassisPMOutFail,  
tmnxPhysChassisPMOutFailClr, tmnxPhysChassisPMInputFeed,  
tmnxPhysChassisPMInputFeedClr, tmnxPhysChassisFilterDoorOpen,  
tmnxPhysChassisFilterDoorClosed, tmnxPhysChassisPMOverTemp,  
tmnxPhysChassisPMOverTempClr, tmnxEqFpgaSoftError,  
tmnxEqSynclfTimingSyncEQuality, tmnxEqSynclfTimingSyncE2Quality,  
tmnxEqSynclfTimingSyncEAlarm, tmnxEqSynclfTimingSyncEAlarmClr,  
tmnxEqSynclfTimingSyncE2Alarm, tmnxEqSynclfTimingSyncE2AlarmClr,  
tmnxEqHwEventDetected, tmnxTunnelGrpEsaVmActivity, tmnxEsaDiscovered,  
tmnxEsaConnected, tmnxEsaDisconnected, tmnxEsaFailure, tmnxEsaCleared,  
tmnxEsaVmCreated, tmnxEsaVmBooted, tmnxEsaVmRemoved,  
tmnxEsaVmCleared, tmnxEsaVmFailure, tIPsecEsaVmMemLowWatermark,  
tIPsecEsaVmMemHighWatermark, tmnxPeKernelVersionMismatch,  
tmnxFPResourcePolicyModified, tmnxFPResourcePolicyModifiedClr,  
tmnxEqSynclfTimingGnssQuality, tmnxEqSynclfTimingGnss2Quality,  
tmnxEqSynclfTimingGnssAlarm, tmnxEqSynclfTimingGnss2Alarm,  
tmnxEqSynclfTimingGnssAlarmClr, tmnxEqSynclfTimingGnss2AlarmClr,  
tmnxEsaFirmwareUpgradeStarted, tmnxPlcyAcctPlcrPoolExcResource,  
tmnxPlcyAcctPlcrPoolLowResource, tChassisAirflowDirMismatch,  
tChassisAirflowDirMismatchClr, tChassisPowerSupplyMismatch,  
tChassisPowerSupplyMismatchClr, tChassisPowerSupplyUnsup,  
tmnxHwAggShpSchedEventOvrflwClr, tmnxHwAggShpSchedEventOvrflw,  
tmnxFPResOversubscribed, tmnxFPResOversubscribedCleared,  
tmnxIPMacFilterIngNearFull, tmnxIPMacFilterIngNearFullClear,  
tmnxIPMacFilterEgrNearFull, tmnxIPMacFilterEgrNearFullClear,  
tmnxIPv6FilterIngNearFull, tmnxIPv6FilterIngNearFullClear, tmnxIPv6FilterEgrNearFull,  
tmnxIPv6FilterEgrNearFullClear, tmnxEsaHwStatusDegraded,  
tmnxEsaHwStatusDegradedClr, tmnxEsaHwStatusCritical, tmnxEsaHwStatusCriticalClr,  
tmnxEsaHwPwrSup1Degraded, tmnxEsaHwPwrSup1DegradedClr,

tmnxEsaHwPwrSup1Failed, tmnxEsaHwPwrSup1FailedClr,  
 tmnxEsaHwPwrSup2Degraded, tmnxEsaHwPwrSup2DegradedClr,  
 tmnxEsaHwPwrSup2Failed, tmnxEsaHwPwrSup2FailedClr,  
 tmnxEsaHwFanBankNonRedun, tmnxEsaHwFanBankNonRedunClr,  
 tmnxEsaHwFanBankFailRedun, tmnxEsaHwFanBankFailRedunClr,  
 tmnxEsaHwFanStatusDegraded, tmnxEsaHwFanStatusDegradedClr,  
 tmnxEsaHwFanStatusFailed, tmnxEsaHwFanStatusFailedClr,  
 tmnxEsaHwPwrSupMismatch, tmnxEsaHwPwrSupMismatchClr,  
 tmnxEsaHwPwrSupBankNonRedun, tmnxEsaHwPwrSupBankNonRedunClr,  
 tmnxEsaHwPwrSupBankFailRedun, tmnxEsaHwPwrSupBankFailRedunClr,  
 tmnxEsaHwTemperatureDegraded, tmnxEsaHwTemperatureDegradedClr,  
 tmnxEsaHwTemperatureFailed, tmnxEsaHwTemperatureFailedClr,  
 tmnxPowerSupplyFanFailed, tmnxPowerSupplyFanFailedClear,  
 tmnxLxrResourceHighUsage, tmnxLxrResourceExhausted, tmnxLxrResourceRecovered,  
 tmnxLxrResourceHighUsageByOwner, tmnxLxrResourceExhaustedByOwner,  
 tmnxLxrResourceRecoveredByOwner, tmnxSasAlarminput1StateChanged,  
 tmnxSasAlarminput2StateChanged, tmnxSasAlarminput3StateChanged,  
 tmnxSasAlarminput4StateChanged, tmnxAlarmInputVoltageFailure,  
 tmnxlomRsrcUsageHighLimitReached, tmnxlomRsrcUsageExhausted,  
 tmnxlomRsrcUsageRecovered, tmnxlomRsrcEventOverflow,  
 tmnxlomRsrcEventOverflowClr, tmnxlomRsrcOwnerOversubscribed,  
 tmnxlomRsrcOwnerOversubscrbdClr, tmnxInterChassisCommsDown,  
 tmnxInterChassisCommsUp, tmnxCpmlcPortDown, tmnxCpmlcPortUp,  
 tmnxCpmlcPortSFFInserted, tmnxCpmlcPortSFFRemoved, tmnxCpmANoLocallcPort,  
 tmnxCpmBNoLocallcPort, tmnxCpmALocallcPortAvail, tmnxCpmBLocallcPortAvail,  
 CpmlcPortSFFStatusFailure, CpmlcPortSFFStatusDDMCorrupt,  
 CpmlcPortSFFStatusReadError, CpmlcPortSFFStatusUnsupported,  
 tmnxCpmlcPortDDMFailure, tmnxCpmlcPortDDMClear, tmnxSfmlcPortDown,  
 tmnxSfmlcPortUp, tmnxSfmlcPortSFFInserted, tmnxSfmlcPortSFFRemoved,  
 SfmlcPortSFFStatusFailure, SfmlcPortSFFStatusDDMCorrupt,  
 SfmlcPortSFFStatusReadError, SfmlcPortSFFStatusUnsupported,  
 tmnxSfmlcPortDDMFailure, tmnxSfmlcPortDDMClear, tmnxSfmlcPortDegraded,  
 tmnxSfmlcPortDegradedClear, tmnxCardResMacFdbHighUsgSet,  
 tmnxCardResMacFdbHighUsgClr, tmnxPowerShelfInputPwrModeSwitch,  
 tmnxPowerShelfCommsDown, tmnxPowerShelfCommsUp,  
 tmnxPowerShelfOutputStatusSwitch, tmnxPowerShelfOutputStatusDown,  
 tmnxPowerShelfOutputStatusUp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate boolean**

Synopsis Generate log events when the event occurs

Context **configure** [log log-events chassis event keyword generate boolean](#)

Tree [generate](#)

Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log log-events chassis event](#) *keyword repeat boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log log-events chassis event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log log-events chassis event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log log-events chassis event](#) *keyword specific-throttle-interval number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200

Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [chassis](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [chassis](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

### **debug** [event](#) *keyword*

Synopsis Enter the **debug** list instance  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword*  
Tree [debug](#)  
Introduced 16.0.R1  
Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword*  
Tree [debug](#)  
Options `traceEvent`  
Notes This element is part of a list key.

Introduced 16.0.R1  
Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword generate boolean*  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword repeat boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1



Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [debug](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

### **dhcp** [event](#) *keyword*

Synopsis Enter the **dhcp** list instance  
Context **configure** [log](#) [log-events](#) [dhcp](#) [event](#) *keyword*  
Tree [dhcp](#)  
Introduced 16.0.R1  
Platforms All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events dhcp event keyword</b>
Tree	<b>dhcp</b>
Options	svcDHCPLeaseStateRestoreProblem, sapDHCPLeaseEntriesExceeded, sapDHCPLeaseStateOverride, sapDHCPSuspiciousPcktRcvd, sapDHCPLeaseStatePopulateErr, sdpBindDHCPLeaseEntriesExceeded, sdpBindDHCPLeaseStateOverride, sdpBindDHCPSuspiciousPcktRcvd, sdpBindDHCPLeaseStatePopulateErr, tmnxVRtrDHCPSuspiciousPcktRcvd, sapStaticHostDynMacConflict, sapDHCPProxyServerError, tmnxVRtrDHCPIfLseStatesExceeded, sdpBindDHCPProxyServerError, tmnxVRtrDHCP6RelayLseStExceeded, tmnxVRtrDHCP6ServerLseStExceeded, tmnxVRtrDHCP6LseStateOverride, tmnxVRtrDHCP6RelayReplyStripUni, tmnxVRtrDHCP6IllegalClientAddr, tmnxVRtrDHCP6AssignedIllegSubnet, tmnxVRtrDHCP6ClientMacUnresolved, sapDHCPLeaseStateMobilityError, sdpBindDHCPLeaseStateMobilityErr, svcDHCPMiscellaneousProblem, sapStatHost6DynMacConflict
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events dhcp event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events dhcp event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events dhcp event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events dhcp event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events dhcp event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events dhcp event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>dhcp</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**dhcps** *event* *keyword*

Synopsis	Enter the <b>dhcps</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>dhcps</b> <b>event</b> <i>keyword</i>
Tree	<b>dhcps</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>dhcps</b> <b>event</b> <i>keyword</i>
Tree	<b>dhcps</b>
Options	tmnxDhcpSvrSubnetMinFreeExc, tmnxDhcpSvrHostConflict, tmnxDhcpSvrPoolUnknown, tmnxDhcpSvrLeaseNotOwner, tmnxDhcpSvrDeclineStaticAddr, tmnxDhcpSvrMsgTooLong, tmnxDhcpsFoStateChange, tmnxDhcpsFoLeaseUpdateFailed, tmnxDhcpSvrUserDbUnknown, tmnxDhcpSvrMaxLeasesReached, tmnxDhcpSvrNoSubnetFixAddr, tmnxDhcpSvrLeaseDefaultTimers, tmnxDhcpSvrPoolMinFreeExc, tmnxDhcpSvrSubnetDepleted, tmnxDhcpSvrPoolDepleted, tmnxDhcpSvrIntLseConflict, tmnxDhcpSvrLeaseModify, tmnxDhcpSvrLeaseCreate, tmnxDhcpSvrLeaseDelete, tmnxLudbDhcpGroupIfTooLong, tmnxLudbPppoeGroupIfTooLong, tmnxDhcpSvrNoContFreeBlocks, tmnxDhcpsPoolFoStateChange, tmnxDhcpsPoolFoLeaseUpdateFailed, tmnxDhcpSvrPIThTooLowV6, tmnxDhcpSvrPIThDepletedV6, tmnxDhcpSvrPfxThTooLowV6, tmnxDhcpSvrPfxThDepletedV6, tmnxDhcpsLeaseOfferedExpired, tmnxDhcpsAddrAllocationFailure, tmnxDhcpsPacketDropped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dhcp</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**diameter** [event](#) *keyword*

Synopsis	Enter the <b>diameter</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Options	tmnxDiamPolicyPeerStateChange, tmnxDiamAppSessionFailure, tmnxDiamSessionEvent, tmnxDiamPpPrxMcLocStateChanged, tmnxDiamMessageDropped, tmnxDiamNdPeerStatActiveChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">diameter</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [diameter](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All



**dot1x event keyword**

Synopsis	Enter the <b>dot1x</b> list instance
Context	<b>configure log log-events dot1x event keyword</b>
Tree	<b>dot1x</b>
Introduced	21.2.R1
Platforms	All

**event keyword**

Synopsis	Events for dynsvc module.
Context	<b>configure log log-events dot1x event keyword</b>
Tree	<b>dot1x</b>
Options	alxDot1xHostAuthEvent
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events dot1x event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	21.2.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events dot1x event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	21.2.R1
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events dot1x event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events dot1x event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	21.2.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events dot1x event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	21.2.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events dot1x event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	21.2.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dot1x</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	21.2.R1
Platforms	All

**dynsvc** [event](#) *keyword*

Synopsis	Enter the <b>dynsvc</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">dynsvc</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">dynsvc</a>
Options	tmnxDynSvcSapFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">dynsvc</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**efm-oam** [event](#) *keyword*

Synopsis	Enter the <b>efm-oam</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">efm-oam</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">efm-oam</a>
Options	tmnxDot3OamPeerChanged, tmnxDot3OamLoopDetected, tmnxDot3OamLoopCleared, dot3OamThresholdEvent, dot3OamNonThresholdEvent, tmnxDot3OamSdThresholdEvent, tmnxDot3OamThresholdEventClr, tmnxDot3OamNonThresholdEventClr
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">efm-oam</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**elmi** [event](#) *keyword*

Synopsis	Enter the <b>elmi</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">elmi</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">elmi</a>
Options	tmnxElmilfStatusChangeEvent, tmnxElmiEVCStatusChangeEvent
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All



**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">elmi</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**ering event keyword**

Synopsis	Enter the <b>ering</b> list instance
Context	<b>configure log log-events ering event keyword</b>
Tree	<b>ering</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events ering event keyword</b>
Tree	<b>ering</b>
Options	tmnxEthRingPathFwdStateChange, tmnxEthRingApsPrvsnRaiseAlarm, tmnxEthRingApsPrvsnClearAlarm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events ering event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events ering event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ering</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**eth-cfm** [event](#) *keyword*

Synopsis	Enter the <b>eth-cfm</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">eth-cfm</a>
Options	dot1agCfmFaultAlarm, tmnxDot1agCfmMepLbmTestComplete, tmnxDot1agCfmMepLtmTestComplete, tmnxDot1agCfmMepEthTestComplete, tmnxDot1agCfmMepDMTestComplete, tmnxDot1agCfmMepAisStateChanged, tmnxDot1agCfmMipEvaluation, tmnxDot1agCfmMepSLMTestComplete, tmnxDot1agCfmMepCsfStateChanged, tmnxDot1agCfmMepFciltyFaultRaise, tmnxDot1agCfmMepFciltyFaultClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">eth-cfm</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
 Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [repeat](#) *boolean*  
 Tree [repeat](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
 Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [severity](#) *keyword*  
 Tree [severity](#)  
 Options cleared, indeterminate, critical, major, minor, warning  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
 Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [specific-throttle](#) *boolean*  
 Tree [specific-throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
 Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
 Tree [specific-throttle-interval](#)  
 Range 1 to 1200  
 Introduced 16.0.R1

Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 16.0.R1  
 Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [eth-cfm](#) [event](#) *keyword* [throttle](#) *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **etun** [event](#) *keyword*

Synopsis Enter the **etun** list instance  
 Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword*  
 Tree [etun](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword*  
 Tree [etun](#)  
 Options [tmnxEthTunnelApsCfgRaiseAlarm](#), [tmnxEthTunnelApsCfgClearAlarm](#),  
[tmnxEthTunnelApsPrvsnRaiseAlarm](#), [tmnxEthTunnelApsPrvsnClearAlarm](#),  
[tmnxEthTunnelApsNoRspRaiseAlarm](#), [tmnxEthTunnelApsNoRspClearAlarm](#),  
[tmnxEthTunnelApsSwitchoverAlarm](#)

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">etun</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>

Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [etun](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

### **filter** [event](#) *keyword*

Synopsis Enter the **filter** list instance  
Context **configure** [log](#) [log-events](#) [filter](#) [event](#) *keyword*  
Tree [filter](#)  
Introduced 16.0.R1



Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [filter](#) [event](#) *keyword*

Tree [filter](#)

Options tIPFilterPBRPacketsDrop, tFilterSubInsSpaceAlarmRaised, tFilterSubInsSpaceAlarmCleared, tFilterSubInsFltrEntryDropped, tFilterBgpFlowSpecProblem, tFilterApplyPathProblem, tFilterRadSharedFltrAlarmRaised, tFilterRadSharedFltrAlarmClear, tFilterEmbeddingOperStateChange, tFilterEmbedOpenflowOperStateChg, tFilterOpenflowRequestRejected, tFilterEmbedFlowspecOperStateChg, tFilterRPActiveDestChangeEvent

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [filter](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [filter](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">filter</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**gsmp** [event](#) *keyword*

Synopsis	Enter the <b>gsmp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">gsmp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">gsmp</a>
Options	tmnxAncpIngRateMonitorEvent, tmnxAncpIngRateMonitorEventL, tmnxAncpEgrRateMonitorEvent, tmnxAncpEgrRateMonitorEventL, tmnxAncpShcvDisabledEvent, tmnxAncpShcvDisabledEventL, tmnxAncpSesRejected, tmnxAncpStringRejected
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsmp</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsm</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsm</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsm</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">gsm</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events gsmplf event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events gsmplf event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**igmp** *event keyword*

Synopsis	Enter the <b>igmp</b> list instance
Context	<b>configure log log-events igmp event</b> <i>keyword</i>
Tree	<b>igmp</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events igmp event</b> <i>keyword</i>
Tree	<b>igmp</b>
Options	vRtrIgmplfRxQueryVerMismatch, vRtrIgmplfCModeRxQueryMismatch, vRtrIgmplfMaxGrpsLimitExceeded, vRtrIgmplfMcacPlcyDropped, vRtrIgmplfHostInstantiationFail, vRtrIgmplfHostMaxGrpsLimitExceeded, vRtrIgmplfHostMcacPlcyDropped, vRtrIgmplfHostCModeRxQueryMismatch, vRtrIgmplfHostRxQueryVerMismatch, vRtrIgmplfHostMaxSrcsLimitExceeded, vRtrIgmplfMaxSrcsLimitExceeded, vRtrIgmplfGrpIfSapMaxGrpsLimExceed, vRtrIgmplfGrpIfSapMaxSrcsLimExceed, vRtrIgmplfGrpIfSapMcacPlcyDropped,

vRtrIgmPGrpIfSapCModeRxQueryMism, vRtrIgmPGrpIfSapRxQueryVerMism, vRtrIgmPHostMaxGrpSrcsLimitExcd, vRtrIgmPMaxGrpSrcsLimitExceeded, vRtrIgmPGrpIfSapMaxGrpSrcLimExcd, vRtrIgmPHostQryIntervalConflict, vRtrIgmPNotifyNumOfIPseclfLowWm, vRtrIgmPNotifyNumOfIPseclfHighWm, vRtrIgmPNotifyNumOfIPseclfMaxRch, vRtrIgmPSlaProfInstMcacPlyDrop

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events igmp event</a> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events igmp event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events igmp event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">igmp event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**igmp-snooping event keyword**

Synopsis	Enter the <b>igmp-snooping</b> list instance
Context	<b>configure log log-events igmp-snooping event keyword</b>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events igmp-snooping event keyword</b>
Tree	<a href="#">igmp-snooping</a>
Options	sapIgmPsnpgGrpLimitExceeded, sapIgmPsnpgMcacPlyDropped, sdpBndIgmPsnpgGrpLimitExceeded, sdpBndIgmPsnpgMcacPlyDropped, sapIgmPsnpgMcsFailure, sapIgmPsnpgSrcLimitExceeded, sdpBndIgmPsnpgSrcLimitExceeded, sdpBndIgmPsnpgGrpSrcLimitExceed, sapIgmPsnpgGrpSrcLimitExceeded, eMplIgmPsnpgMfibFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events igmp-snooping event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events igmp-snooping event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4



Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
 Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword severity keyword*  
 Tree [severity](#)  
 Options cleared, indeterminate, critical, major, minor, warning  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
 Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword specific-throttle boolean*  
 Tree [specific-throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
 Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword specific-throttle-interval number*  
 Tree [specific-throttle-interval](#)  
 Range 1 to 1200  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword specific-throttle-limit number*  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 16.0.R1

Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [igmp-snooping event](#) *keyword* [throttle](#) *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **ip event** *keyword*

Synopsis Enter the **ip** list instance  
 Context **configure** [log](#) [log-events](#) [ip event](#) *keyword*  
 Tree [ip](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [ip event](#) *keyword*  
 Tree [ip](#)  
 Options clearRTMError, ipEtherBroadcast, ipDuplicateAddress, ipArpInfoOverwritten, fibAddFailed, qosNetworkPolicyMallocFailed, ipArpBadInterface, ipArpDuplicateIpAddress, ipArpDuplicateMacAddress, ipAnyDuplicateAddress, labelIndexAllocFailed  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
 Context **configure** [log](#) [log-events](#) [ip event](#) *keyword* [generate](#) *boolean*  
 Tree [generate](#)

Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure log log-events ip event** *keyword repeat boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure log log-events ip event** *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure log log-events ip event** *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure log log-events ip event** *keyword specific-throttle-interval number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200

Introduced 16.0.R1  
 Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log log-events ip event keyword specific-throttle-limit number](#)  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 16.0.R1  
 Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log log-events ip event keyword throttle boolean](#)  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **ipsec event** *keyword*

Synopsis Enter the **ipsec** list instance  
 Context **configure** [log log-events ipsec event keyword](#)  
 Tree [ipsec](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log log-events ipsec event keyword](#)  
 Tree [ipsec](#)  
 Options tIPsecRUTnIFailToCreate, tIPsecRUSAFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlcyFailure, tIPSecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall, tIPsecRuTnIFailToCreate, tIPsecRuTnIFailToAddRoute, tIPsecBfdIntfSessStateChgd, tIPsecRadAcctPlcyFailure, tIPSecTrustAnchorPrfOprChg, tIPsecTunnelEncapIpMtuTooSmall,

tmnxSecNotifCmptedCertHashChngd, tmnxSecNotifCmptedCertChnChngd, tmnxSecNotifSendChnNotInCmptChn, tmnxIPsecTunnelOperStateChange, tmnxIPsecGWOperStateChange, tIPsecRUTnlRemoved, tIPsecTunnelProtocolFailed

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events ipsec event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events ipsec event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events ipsec event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
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Context	<b>configure log log-events ipsec event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events ipsec event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events ipsec event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events ipsec event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **isis event** *keyword*

Synopsis	Enter the <b>isis</b> list instance
Context	<b>configure log log-events isis event</b> <i>keyword</i>

Tree	<a href="#">isis</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">isis</a> <b>event</b> <i>keyword</i>
Tree	<a href="#">isis</a>
Options	vRtrIIsisSpbNbrMultAdjExists, vRtrIIsisSpbNbrMultAdjExistsClear, vRtrSpbEctFidCfgChg, tmnxIIsisDatabaseOverload, tmnxIIsisManualAddressDrops, tmnxIIsisCorruptedLSPDetected, tmnxIIsisMaxSeqExceedAttempt, tmnxIIsisIDLenMismatch, tmnxIIsisMaxAreaAdrsMismatch, tmnxIIsisOwnLSPPurge, tmnxIIsisSequenceNumberSkip, tmnxIIsisAutTypeFail, tmnxIIsisAuthFail, tmnxIIsisVersionSkew, tmnxIIsisAreaMismatch, tmnxIIsisRejectedAdjacency, tmnxIIsisLSPTooLargeToPropagate, tmnxIIsisOrigLSPBufSizeMismatch, tmnxIIsisProtoSuppMismatch, tmnxIIsisAdjacencyChange, tmnxIIsisCirclIdExhausted, tmnxIIsisAdjRestartStatusChange, tmnxIIsisLdpSyncTimerStarted, tmnxIIsisLdpSyncExit, tmnxIIsisExportLimitReached, tmnxIIsisExportLimitWarning, tmnxIIsisRoutesExpLmtDropped, tmnxIIsisFailureDisabled, tmnxIIsisSidError, tmnxIIsisSidNotInLabelRange, tmnxIIsisRejectedAdjacencySid, tmnxIIsisLSPPurge, tmnxIIsisPfxLimitOverloadWarning, tmnxIIsisAdjBfdSessionSetupFail, tmnxIIsisSrgbBadLabelRange, tmnxIIsisCircMtuTooLow, tmnxIIsisRejectedAdjacencySet, tmnxIIsisCorruptRemainingLifetime, tmnxIIsisSidStatsIndexAlloc, tmnxIIsisFaOperParticipationDown, tmnxIIsisRejectedEndXSid, tmnxIIsisRejectedPgid, tmnxIIsisSrv6LocError, tmnxIIsisSrv6StaticSidIfTypeError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">isis</a> <b>event</b> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">isis</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">isis</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">isis</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">isis</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All



**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>isis</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>isis</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**l2tp** **event** *keyword*

Synopsis	Enter the <b>l2tp</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>l2tp</b> <b>event</b> <i>keyword</i>
Tree	<a href="#">l2tp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>l2tp</b> <b>event</b> <i>keyword</i>
Tree	<a href="#">l2tp</a>
Options	tmnxL2tpPeerUnreachable, tmnxL2tpIlsaMdaVRtrStateChange, tmnxL2tpLnsSePppSessionFailure, tmnxL2tpVappVRtrStateChange, tmnxL2tpTunnelBlacklisted, tmnxL2tpTunnelSelBlacklistFull, tmnxL2tpLnsPppNcpFailure, tmnxL2tpApFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events l2tp event</a> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events l2tp event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events l2tp event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events l2tp event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">l2tp</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">l2tp</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">l2tp</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lag** [event](#) *keyword*

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">lag</a>
Options	DynamicCostOn, DynamicCostOff, LagPortAddFailed, LagSubGroupSelected, LagPortAddFailureCleared, LagStateEvent, tLagMemberStateEvent, tmnxLagBfdMemStateChanged, tLagAdaptiveLoadbalancingChanged
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lag</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [lag event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [lag event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [lag event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [lag event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

**ldap event keyword**

Synopsis	Enter the <b>ldap</b> list instance
Context	<b>configure log log-events ldap event keyword</b>
Tree	<b>ldap</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events ldap event keyword</b>
Tree	<b>ldap</b>
Options	tmnxLdapOperStateChange, tmnxLdapServerOperStateChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events ldap event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events ldap event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldap event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldp event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**ldp event** *keyword*

Synopsis	Enter the <b>ldp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldp event</a> <i>keyword</i>
Tree	<a href="#">ldp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldp event</a> <i>keyword</i>
Tree	<a href="#">ldp</a>
Options	vRtrLdpStateChange, vRtrLdpGroupIdMismatch, vRtrLdpNgIpv4InstStateChange, vRtrLdpNgIpv6InstStateChange, vRtrLdpNgIfStateChange, vRtrLdpNgInetIfStateChange, vRtrLdpNgTargPeerStateChange, vRtrLdpNgSessionStateChange, vRtrLdpNgSessMaxFecThresChanged, vRtrLdpNgSessMaxFecLimitReached, vRtrLdpNgResourceExhaustion, vRtrLdpNgAddrFecCommMismatch
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ldp event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1



Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [repeat](#) *boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [severity](#) *keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1

Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [specific-throttle-limit](#) *number*  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 16.0.R1  
 Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [ldp event](#) *keyword* [throttle](#) *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **li** [event](#) *keyword*

Synopsis Enter the **li** list instance  
 Context **configure** [log](#) [log-events](#) [li event](#) *keyword*  
 Tree [li](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [li event](#) *keyword*  
 Tree [li](#)  
 Options sbiBootLiConfig, sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceSapChange, sourceSubscriberChange, tMirrorSourceIPFitrChangeReject, tMirrorSourceMacFitrChangeReject, tMirrorSourceFilterAssignReject, tMirrorDestinationChangeReject, tMirrorSourceFilterOverruled, tMirrorSourceFilterAssignWarn,

tMirrorFilterAssignToSapWarn, tMirrorFilterAssignToSdpWarn,  
 tMirrorFilterAssignToIrfWarn, tMirrorSourceLiFilterChanged,  
 tMirrorSourceLiSubProblem, tMirrorSourceIPv6FiltrChangeRej,  
 tMirrorLiNatLsnSubOperStateCh, tMirrorLiNatL2awSubOperStateCh,  
 tMirrorLiNat64SubOperStateCh, tMirrorLiX2Alarm, tFiltrLiRsvdBlockRangeChangeEvent,  
 tMirrorLiSrcPortLicInvalid, tMirrorLiXlflLicenseInvalid, tMirrorLiUpSubFailed,  
 tMirrorLiUpSubSuccess, tMirrorLiUpleInvalid, cli\_user\_login, cli\_user\_logout,  
 cli\_user\_login\_failed, cli\_user\_login\_max\_attempts, ftp\_user\_login, ftp\_user\_logout,  
 ftp\_user\_login\_failed, ftp\_user\_login\_max\_attempts, ssh\_user\_login, ssh\_user\_logout,  
 ssh\_user\_login\_failed, ssh\_user\_login\_max\_attempts, cli\_user\_io, snmp\_user\_set,  
 cli\_config\_io, cli\_unauth\_user\_io, cli\_unauth\_config\_io, grpc\_user\_login,  
 grpc\_user\_logout, grpc\_user\_login\_failed, grpc\_user\_login\_max\_attempts,  
 host\_snmp\_attempts, radiusFailed, netconf\_user\_login, netconf\_user\_logout,  
 netconf\_user\_login\_failed, netconf\_user\_login\_max\_attempts,  
 mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed,  
 mdCommitSucceeded, ssiSaveConfigSucceeded, ssiSaveConfigFailed,  
 tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange,  
 mdLiConfigChange, ssiSyncConfigOK, ssiSyncConfigFailed, md\_cli\_io,  
 md\_cli\_unauth\_io, tmnxClear, netconf\_auth, netconf\_unauth, grpc\_auth, grpc\_unauth

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events li event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events li event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">li</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**lldp** [event](#) *keyword*

Synopsis	Enter the <b>lldp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">lldp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">lldp</a>
Options	lldpRemTablesChange, tmnxLldpRemEntryPeerAdded, tmnxLldpRemEntryPeerUpdated, tmnxLldpRemEntryPeerRemoved, tmnxLldpRemManAddrEntryAdded, tmnxLldpRemManAddrEntryRemoved
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<b>severity</b>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>lldp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">lldp</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**logger** [event](#) *keyword*

Synopsis	Enter the <b>logger</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">logger</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">logger</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">logger</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">logger</a>
Options	STARTED, tmnxLogTraceError, tmnxLogSpaceContention, tmnxLogAdminLocFailed, tmnxLogBackupLocFailed, tmnxLogFileRollover, tmnxLogFileDeleted, tmnxClear, tmnxTestEvent, tmnxLogEventThrottled, tmnxSysLogTargetProblem, tmnxLogAccountingDataLoss, tmnxStdEventsReplayed, tmnxLogOnlyEventThrottled, tmnxLogEventOverrun, tmnxLogOnlyEventOverrun
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log](#) [log-events](#) [logger event](#) *keyword generate boolean*  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log](#) [log-events](#) [logger event](#) *keyword repeat boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [logger event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [logger event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All



**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">logger</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">logger</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">logger</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**macsec** [event](#) *keyword*

Synopsis	Enter the <b>macsec</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">macsec</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events macsec event keyword</b>
Tree	<a href="#">macsec</a>
Options	tmnxMacsecConfiguredPortCA, tmnxMacsecUnconfiguredPortCA, tmnxMacsecEnabledPort, tmnxMacsecDisabledPort, tmnxMacsecMaxPeerLimitExceeded, tmnxMkaSessionEstablished, tmnxMkaPskRollover, tmnxMkaSessionEnded, tmnxMkaOperStateChanged, tmnxMacsecMaxPeerLimitCleared, tmnxMacsecCaCreate, tmnxMacsecSakCreate, tmnxMacsecSakInstalledRx, tmnxMacsecSakInstalledTx, tmnxMacsecMkaReplayAttemptDisc, tmnxMacsecDpReplayAttempt, tmnxMacsecSakDelete
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events macsec event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events macsec event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events macsec event keyword severity keyword</b>

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Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">macsec event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>

Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **mc-redundancy event keyword**

Synopsis	Enter the <b>mc-redundancy</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy event keyword</a>
Tree	<a href="#">mc-redundancy</a>
Introduced	16.0.R1
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy event keyword</a>
Tree	<a href="#">mc-redundancy</a>
Options	tmnxMcRedundancyPeerStateChanged, tmnxMcRedundancyMismatchDetected, tmnxMcRedundancyMismatchResolved, tmnxMcPeerSyncStatusChanged, tmnxMcSyncClientAlarmRaised, tmnxMcSyncClientAlarmCleared, tmnxSrrpSubnetMismatch, tmnxSrrpSubnetMismatchCleared, tmnxSrrpInstanceIdMismatch, tmnxSrrpSapMismatch, tmnxSrrpSapTagMismatch, tmnxSrrpRedIfMismatch, tmnxSrrpDualMaster, tmnxMcLagInfoLagChanged, tmnxSrrpSystemIpNotSet, tmnxMcRingOperStateChanged, tmnxMcRingInbCtrlOperStateChgd, tmnxMcRingNodeLocOperStateChgd, tmnxMcSyncClockSkewRaised, tmnxMcSyncClockSkewCleared, tmnxSrrpDuplicateSubIfAddress, tmnxMcPeerRingsOperStateChanged, tmnxSrrpTrapNewMaster, tmnxSrrpBecameBackup, srrpPacketDiscarded, tmnxSrrpBfdIntfSessStateChgd, tmnxMcPeerEPBfdSessionOpen, tmnxMcPeerEPBfdSessionClose, tmnxMcPeerEPBfdSessionUp, tmnxMcPeerEPBfdSessionDown, tmnxMcPeerEPOperDown, tmnxMcPeerEPOperUp, tmnxMCEPSessionPsvModeEnabled, tmnxMCEPSessionPsvModeDisabled, tMcPeerIPsecTnlGrpMasterStateChg, tMcPeerIPsecTnlGrpProtStatusChg, tmnxMcOmcrStatFailedChanged, tmnxMcOmcrClientNumEntriesHigh, tmnxSrrpOperDownInvalidMac, tmnxSrrpOperDownInvalidMacClear, tmnxSrrpPrivRetailMismatch, tMcIPsecDomainActivityStateChg, tMcIPsecDomainProtStatusChg
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mc-redundancy</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**mcpath** [event](#) *keyword*

Synopsis	Enter the <b>mcpath</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mcpath</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mcpath</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events mcpath event keyword</b>
Tree	<a href="#">mcpath</a>
Options	tmnxMcPathSrcGrpBlackHole, tmnxMcPathSrcGrpBlackHoleCleared, tmnxMcPathAvailBwLimitExceeded, tmnxMcPathAvailBwLimitCleared
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events mcpath event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events mcpath event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events mcpath event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events mcpath event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events mcpath event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events mcpath event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events mcpath event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All



**mgmt-core event keyword**

Synopsis	Enter the <b>mgmt-core</b> list instance
Context	<b>configure log log-events mgmt-core event keyword</b>
Tree	<a href="#">mgmt-core</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events mgmt-core event keyword</b>
Tree	<a href="#">mgmt-core</a>
Options	none, mdConfigChange, mdOcConfigChange, mdBofConfigChange, mdDebugConfigChange, asyncOperationStatusChange, syncOperationStatusChange, mdAutomaticRollbackFailed, mdRollbackFailed
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events mgmt-core event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events mgmt-core event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events mgmt-core event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events mgmt-core event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events mgmt-core event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events mgmt-core event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mgmt-core</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**mirror** [event](#) *keyword*

Synopsis	Enter the <b>mirror</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mirror</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mirror</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mirror</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mirror</a>
Options	sourceEnabled, sourceDisabled, destinationEnabled, destinationDisabled, sourceIpFilterChange, sourceMacFilterChange, sourceSapChange, sourceSubscriberChange, tMirrorSourceIpV6FilterChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mirror</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events mirror event</b> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events mirror event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events mirror event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events mirror event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mirror</b> <b>event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mirror</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**mld** *event* *keyword*

Synopsis	Enter the <b>mld</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld</b> <i>event</i> <i>keyword</i>
Tree	<b>mld</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld</b> <i>event</i> <i>keyword</i>
Tree	<b>mld</b>
Options	vRtrMldIfRxQueryVerMismatch, vRtrMldIfCModeRxQueryMismatch, vRtrMldMaxGrpsLimitExceeded, vRtrMldMcacPlcyDropped, vRtrMldHostInstantiationFail, vRtrMldHostMaxGrpsLimitExceeded, vRtrMldHostMcacPlcyDropped, vRtrMldHostCModeRxQueryMismatch, vRtrMldHostRxQueryVerMismatch, vRtrMldHostMaxSrcsLimitExceeded, vRtrMldMaxSrcsLimitExceeded, vRtrMldGrpIfSapMaxGrpsLimExceed, vRtrMldGrpIfSapMaxSrcsLimExceed, vRtrMldGrpIfSapMcacPlcyDropped,

vRtrMldGrpIfSapCModeRxQueryMism, vRtrMldGrpIfSapRxQueryVerMism,  
vRtrMldHostMaxGrpSrcsLimitExcd, vRtrMldMaxGrpSrcsLimitExceeded,  
vRtrMldGrpIfSapMaxGrpSrcLimExcd, vRtrMldHostQryIntervalConflict,  
vRtrMldSlaProfInstMcacPlcyDrop

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events mld event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events mld event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events mld event](#) *keyword severity keyword*

Tree [severity](#)

Options cleared, indeterminate, critical, major, minor, warning

Introduced 16.0.R1

Platforms All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**mld-snooping event keyword**

Synopsis	Enter the <b>mld-snooping</b> list instance
Context	<b>configure log log-events mld-snooping event keyword</b>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events mld-snooping event keyword</b>
Tree	<a href="#">mld-snooping</a>
Options	sapMldSnpgGrpLimitExceeded, sdpBndMldSnpgGrpLimitExceeded, sapMldSnpgMcsFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events mld-snooping event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events mld-snooping event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All



**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mld-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mld-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mld-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mld-snooping</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mld-snooping</b> <b>event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

**mpls** **event** *keyword*

Synopsis	Enter the <b>mpls</b> list instance
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls</b> <b>event</b> <i>keyword</i>
Tree	<b>mpls</b>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>mpls</b> <b>event</b> <i>keyword</i>
Tree	<b>mpls</b>
Options	mplsXCUp, mplsXCDown, mplsTunnelUp, mplsTunnelDown, mplsTunnelRerouted, mplsTunnelReoptimized, vRtrMplsStateChange, vRtrMplsIfStateChange, vRtrMplsLspUp, vRtrMplsLspDown, vRtrMplsLspPathUp, vRtrMplsLspPathDown, vRtrMplsLspPathRerouted, vRtrMplsLspPathResigned, vRtrMplsP2mpInstanceUp, vRtrMplsP2mpInstanceDown, vRtrMplsS2ISubLspUp, vRtrMplsS2ISubLspDown, vRtrMplsS2ISubLspRerouted, vRtrMplsS2ISubLspResigned, vRtrMplsLspPathSoftPreempted, vRtrMplsLspPathLstFillReoptElig, vRtrMplsP2mpInstanceResigned, vRtrMplsResignalTimerExpired, vRtrMplsLspPathMbbStatusEvent, vRtrMplsLspSwitchStbyFailure, vRtrMplsLspActivePathChanged, vRtrMplsXCBundleChange, vRtrMplsNodeInlgpOverload, vRtrMplsIPv6StateChange, vRtrMplsIfIPv6StateChange, vRtrMplsLspResourceExhaustion, vRtrMplsLspManualSwitchFailure, vRtrMplsLspPathManualDegStateChg, vRtrMplsS2ISubLspPreempted, vRtrMplsNodeInlgpOverloadIpv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**mpls-tp** [event](#) *keyword*

Synopsis	Enter the <b>mpls-tp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mpls-tp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">mpls-tp</a>
Options	vRtrMplsTpLspRevertMismatchAlarm, vRtrMplsTpLspRevertMismatchClear, vRtrMplsTpLspPtTypeMismatchAlarm, vRtrMplsTpLspPtTypeMismatchClear, vRtrMplsTpLspActivePathUp, vRtrMplsTpLspActivePathChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">mpls-tp</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [mpls-tp event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [mpls-tp event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [mpls-tp event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [mpls-tp event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

**msdp event keyword**

Synopsis	Enter the <b>msdp</b> list instance
Context	<b>configure log log-events msdp event keyword</b>
Tree	<b>msdp</b>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events msdp event keyword</b>
Tree	<b>msdp</b>
Options	msdpEstablished, msdpBackwardTransition, tmnxMsdpNgActSrcLimExcd, tmnxMsdpNgPeerActSrcLimExcd, tmnxMsdpNgRPFFailure, tmnxMsdpNgSourceSrcActMsgsExcd, tmnxMsdpNgGroupSrcActMsgsExcd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events msdp event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events msdp event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4

Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword specific-throttle-interval number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword specific-throttle-limit number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1



Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [msdp event](#) *keyword* [throttle](#) *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **nat event** *keyword*

Synopsis Enter the **nat** list instance  
 Context **configure** [log](#) [log-events](#) [nat event](#) *keyword*  
 Tree [nat](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [nat event](#) *keyword*  
 Tree [nat](#)  
 Options tmnxNatPIL2AwBlockUsageHigh, tmnxNatIlsaMemberSessionUsageHigh, tmnxNatPILsnMemberBlockUsageHigh, tmnxNatL2AwSublcmpPortUsageHigh, tmnxNatL2AwSubUdpPortUsageHigh, tmnxNatL2AwSubTcpPortUsageHigh, tmnxNatL2AwSubSessionUsageHigh, tmnxNatPIBlockAllocationLsn, tmnxNatPIBlockAllocationL2Aw, tmnxNatResourceProblemDetected, tmnxNatResourceProblemCause, tmnxNatPIAddrFree, tmnxNatPILsnRedActiveChanged, tmnxNatPcpSrvStateChanged, tmnxNatMdaActive, tmnxNatLsnSubBlksFree, tmnxNatDetPlcyChanged, tmnxNatMdaDetectsLoadSharingErr, tmnxNatIlsaGrpOperStateChanged, tmnxNatIlsaGrplsDegraded, tmnxNatLsnSublcmpPortUsgHigh, tmnxNatLsnSubUdpPortUsgHigh, tmnxNatLsnSubTcpPortUsgHigh, tmnxNatLsnSubSessionUsgHigh, tmnxNatInAddrPrefixBlksFree, tmnxNatFwd2EntryAdded, tmnxNatFwd2OperStateChanged, tmnxNatVrtrOutDnatOnlyRoutesHigh, tmnxNatMapRuleChange, tmnxNatMaxNbrSubsOrHostsExceeded, tmnxNatNbrSubsOrHostsBelowThrsh, tmnxNatVappActive, tmnxNatVappDetectsLoadSharingErr, tmnxNatDetPfxMapOperStateChanged, tmnxNatDetMap2OperStateChanged,

	tmnxNatDynamicConfigMismatch, tmnxNatPIL2AwMembrBlockUsageHigh, tmnxNatPIMemberExtBlockUsageHigh, tmnxNatPILsnMemberPortUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events nat event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events nat event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events nat event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events nat event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>

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Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events nat event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events nat event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events nat event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ntp event** *keyword*

Synopsis	Enter the <b>ntp</b> list instance
Context	<b>configure</b> <a href="#">log log-events ntp event</a> <i>keyword</i>
Tree	<a href="#">ntp</a>

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Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">ntp</a>
Options	tmnxNtpAuthMismatch, tmnxNtpNoServersAvail, tmnxNtpServersAvail, tmnxNtpOperChange, tmnxNtpServerChange
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ntp</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>

---

Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events ntp event keyword specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events ntp event keyword specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events ntp event keyword specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events ntp event keyword throttle</a> <i>boolean</i>

Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**oam event keyword**

Synopsis	Enter the <b>oam</b> list instance
Context	<b>configure</b> <a href="#">log log-events oam event keyword</a>
Tree	<a href="#">oam</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events oam event keyword</a>
Tree	<a href="#">oam</a>
Options	tmnxOamPingProbeFailedV3, tmnxOamPingTestFailedV3, tmnxOamPingTestCompletedV3, tmnxAncpLoopbackTestCompleted, tmnxAncpLoopbackTestCompletedL, tmnxOamTrPathChange, tmnxOamTrTestFailed, tmnxOamTrTestCompleted, svcldInvalid, svcldWrongType, tmnxOamLdpTtraceAutoDiscState, tmnxOamLdpTtraceFecProbeState, tmnxOamLdpTtraceFecDisStatus, tmnxOamLdpTtraceFecPFailUpdate, tmnxOamSaaThreshold, tmnxOamDiagTestCompleted, tmnxTwampSrvInactivityTimeout, tmnxTwampSrvMaxConnsExceeded, tmnxTwampSrvPfxMaxConnsExceeded, tmnxTwampSrvMaxSessExceeded, tmnxTwampSrvPfxMaxSessExceeded, tmnxTwampRflInactivityTimeout, tmnxOamPmThrRaise, tmnxOamPmThrClear, tmnxOamSathSvcTestCompleted, tmnxOamSathSvcStrmCompleted
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events oam event keyword generate boolean</a>
Tree	<a href="#">generate</a>

Introduced 16.0.R1  
 Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
 Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [repeat](#) *boolean*  
 Tree [repeat](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
 Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [severity](#) *keyword*  
 Tree [severity](#)  
 Options cleared, indeterminate, critical, major, minor, warning  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
 Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle](#) *boolean*  
 Tree [specific-throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
 Context **configure** [log](#) [log-events](#) [oam](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
 Tree [specific-throttle-interval](#)  
 Range 1 to 1200

Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">oam event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **openflow** [event](#) *keyword*

Synopsis	Enter the <b>openflow</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">openflow event</a> <i>keyword</i>
Tree	<a href="#">openflow</a>
Introduced	16.0.R2
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">openflow event</a> <i>keyword</i>
Tree	<a href="#">openflow</a>
Options	tmnxOFFlowEntryInsertFailed
Notes	This element is part of a list key.



Introduced 16.0.R2  
Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword generate boolean*  
Tree [generate](#)  
Introduced 16.0.R2  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword repeat boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R2  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R2

Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R2  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R2  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [openflow](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R2  
Platforms All

### **ospf** [event](#) *keyword*

Synopsis Enter the **ospf** list instance  
Context **configure** [log](#) [log-events](#) [ospf](#) [event](#) *keyword*  
Tree [ospf](#)  
Introduced 16.0.R1  
Platforms All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events ospf event keyword</a>
Tree	<a href="#">ospf</a>
Options	tmnxOspfVirtIfStateChange, tmnxOspfVirtNbrStateChange, tmnxOspfVirtIfConfigError, tmnxOspfVirtIfAuthFailure, tmnxOspfVirtIfRxBadPacket, tmnxOspfAreaOriginateLsa, tmnxOspfAreaMaxAgeLsa, tmnxOspfLsdbOverflow, tmnxOspfLsdbApproachingOverflow, tmnxOspfNssaTranslatorStatusChg, tmnxOspfRestartStatusChange, tmnxOspfVirtNbrRestartHlprStsChg, tmnxOspfSpfRunsStopped, tmnxOspfSpfRunsRestarted, tmnxOspfOverloadEntered, tmnxOspfOverloadExited, tmnxOspfAsOriginateLsa, tmnxOspfAsMaxAgeLsa, tmnxOspfShamIfStateChange, tmnxOspfShamNbrStateChange, tmnxOspfShamIfConfigError, tmnxOspfShamIfAuthFailure, tmnxOspfShamIfRxBadPacket, tmnxOspfShamNbrRestartHlprStsChg, tmnxOspfFailureDisabled, tmnxOspfExportLimitReached, tmnxOspfExportLimitWarning, tmnxOspfRoutesExpLmtDropped, tmnxOspfNgNbrStateChange, tmnxOspfNgIfConfigError, tmnxOspfNgIfAuthFailure, tmnxOspfNgIfRxBadPacket, tmnxOspfNgIfStateChange, tmnxOspfNgNbrRestartHlprStsChg, tmnxOspfNgLinkOriginateLsa, tmnxOspfNgLinkMaxAgeLsa, tmnxOspfNgLdpSyncTimerStarted, tmnxOspfNgLdpSyncExit, tmnxOspfSrSidError, tmnxOspfSrSidNotInLabelRange, tmnxOspfOverloadWarning, tmnxOspfRejectedAdjacencySid, tmnxOspfAdjBfdSessionSetupFail, tmnxOspfSrgbBadLabelRange, tmnxOspfRejectedAdjacencySet, tmnxOspfSidStatsIndexAlloc, tmnxOspfDynHostnameDuplicate, tmnxOspfDynHostnameInconsistent, tmnxOspfFaOperParticipationDown, tmnxOspfNgNbrStrictBfdBlocked
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events ospf event keyword generate boolean</a>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
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Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ospf</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ospf</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ospf</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ospf</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
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Context	<b>configure log log-events ospf event keyword specific-throttle-limit number</b>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle boolean**

Synopsis	Throttle log events of this type
Context	<b>configure log log-events ospf event keyword throttle boolean</b>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **pcap event keyword**

Synopsis	Enter the <b>pcap</b> list instance
Context	<b>configure log log-events pcap event keyword</b>
Tree	<a href="#">pcap</a>
Introduced	16.0.R1
Platforms	All

### **event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events pcap event keyword</b>
Tree	<a href="#">pcap</a>
Options	tmnxPcapFileError, tmnxPcapBufferFull, tmnxPcapBufferReadWriteFailure, tmnxPcapSoftwareFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcap event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**pcep event** *keyword*

Synopsis	Enter the <b>pcep</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword</i>
Tree	<a href="#">pcep</a>
Introduced	22.2.R1
Platforms	All

**event keyword**

Synopsis	PCEP module events
Context	<b>configure log log-events pcep event keyword</b>
Tree	<a href="#">pcep</a>
Options	tmnxPcepPccPeerStateChange
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events pcep event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	22.2.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events pcep event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	22.2.R1
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events pcep event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	22.2.R1
Platforms	All



**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	22.2.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	22.2.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	22.2.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pcep event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	22.2.R1
Platforms	All

**pfcp event keyword**

Synopsis	Enter the <b>pfcp</b> list instance
Context	<b>configure log log-events pfcp event keyword</b>
Tree	<a href="#">pfcp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	PFCP events
Context	<b>configure log log-events pfcp event keyword</b>
Tree	<a href="#">pfcp</a>
Options	tmnxPfcplInvalidle
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events pfcp event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events pfcp event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events pfcpc event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events pfcpc event keyword specific-throttle boolean</b>
Tree	<a href="#">specific-throttle</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events pfcpc event keyword specific-throttle-interval number</b>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events pfcpc event keyword specific-throttle-limit number</b>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events pfc</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pim event** *keyword*

Synopsis	Enter the <b>pim</b> list instance
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword</i>
Tree	<a href="#">pim</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword</i>
Tree	<a href="#">pim</a>
Options	vRtrPimNgIfNeighborLoss, vRtrPimNgIfNeighborUp, vRtrPimNgInvalidJoinPrune, vRtrPimNgInvalidRegister, vRtrPimNgGrpInSSMRange, vRtrPimNgBSRStateChange, vRtrPimNgHelloDropped, vRtrPimNgSGLimitExceeded, vRtrPimNgReplicationLmtExceeded, vRtrPimNgMDTLimitExceeded, vRtrPimNgMaxGrpsLimitExceeded, vRtrPimNgDataMtReused, vRtrPimNgMcacPlyDropped, vRtrPimNgInvalidIPmsiTunnel, vRtrPimNgMaxGraftRetry, vRtrPimNgBierInbInvSD, vRtrPimNgBierInbInvBfrld, vRtrPimNgUmhBMonFastFailPriToStb, vRtrPimNgUmhBMonFastFailStbToPri, vRtrPimNgInstMaxNbrReached, vRtrPimNgIfMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>

Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events pim event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>

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Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **pim-snooping** [event](#) *keyword*

Synopsis	Enter the <b>pim-snooping</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim-snooping</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">pim-snooping</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pim-snooping</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">pim-snooping</a>

Options	tmnxPimSnpgIfNeighborLoss, tmnxPimSnpgIfNeighborUp, tmnxPimSnpgSGLimitExceeded, tmnxPimSnpgSnoopModeChanged, tmnxPimSnpgIfMaxNbrReached, tmnxPimSnpgMaxNbrReached
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events pim-snooping event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events pim-snooping event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events pim-snooping event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
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Context	<b>configure log log-events pim-snooping event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events pim-snooping event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events pim-snooping event</b> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<b>specific-throttle-limit</b>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure log log-events pim-snooping event</b> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

### **port event** *keyword*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure log log-events port event</b> <i>keyword</i>



Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">port</a>
Options	sonetSDHAlarmSet, sonetSDHAlarmClear, sonetSDHChannelAlarmSet, sonetSDHChannelAlarmClear, SFPInserted, SFPRemoved, SFPStatusFailure, portError, ds3AlarmSet, ds3AlarmClear, ds1AlarmSet, ds1AlarmClear, etherAlarmSet, etherAlarmClear, ds1LoopbackStart, ds1LoopbackStop, ds3LoopbackStart, ds3LoopbackStop, sdhLoopbackStart, sdhLoopbackStop, etherLoopDetected, etherLoopCleared, etherSpeedNotCompatible, etherDuplexNotCompatible, etherIngressRateCfgNotCompatible, digitalDiagnosticMonitorFailed, SFPStatusDDMCorrupt, SFPStatusReadError, SFPStatusUnsupported, dsxClockSyncStateChange, tmnxPortUnsupportedFunction, otuAlarms, tPortAccEgrQGrpHostMatchFailure, tPortEgrVPortHostMatchFailure, digitalDiagnosticMonitorCleared, tmnxEqSonetClockSrcNotCompatible, tmnxEqSonetSfThreshNotCompatible, tmnxEqSonetFramingNotCompatible, tmnxResvCbsPoolThreshGreen, tmnxResvCbsPoolThreshAmber, tmnxResvCbsPoolThreshRed, tmnxEqPortEtherCrcAlarm, tmnxEqPortEtherCrcAlarmClear, tmnxEqPortEtherInternalAlarm, tmnxEqPortEtherInternalAlarmClr, tmnxEqCohOptPortAlarm, tmnxEqPortEtherSymMonAlarm, tmnxEqPortEtherSymMonAlarmClear, SFPStatusCulprit, SFPStatusBlocked, SFPStatusOperational, tmnxRS232ControlLeadSignalChg, tmnxRS232SquelchStatusChange, tmnxRS232SquelchResetIssued, tmnxCellularBearerCreated, tmnxCellularBearerDeleted, tmnxCellularBearerModified, tmnxEqPortEtherEgressRateChange, tmnxCellularNoServiceReset, tmnxCellularActiveSimCardChange, tmnxPortEtherLoopbackStart, tmnxPortEtherLoopbackStop, tmnxPortGnssStatusChange, tmnxWlanNetworkConnected, tmnxWlanNetworkDisconnected, tmnxPortAUIReset, tmnxCellPortCbsdRegistered, tmnxCellPortCbsdUnregistered, tmnxCellPortCbsdGranted, tmnxCellPortCbsdAuthorized, tmnxCellPortCbsdTransDown, tmnxHwAggShpSchedOperColorGreen, tmnxHwAggShpSchedOperColorAmber, tmnxHwAggShpSchedOperColorRed, tmnxCellularRssiAlarm, tmnxCellularRssiAlarmClear, SFPStatusInvalidFormFactor, tmnxDS0ChanGrpLoopbackStarted, tmnxDS0ChanGrpLoopbackStopped
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters that throttle this specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">port</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**pppoe** [event](#) *keyword*

Synopsis	Enter the <b>pppoe</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">pppoe</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events pppoe event keyword</b>
Tree	<a href="#">pppoe</a>
Options	tmnxPppoeSessionFailure, tmnxPppoeNcpFailure, tmnxMlpppBundleIndicatorsChange, tmnxPppoeLacSteeringActive, tmnxPppoeLacSteeringStopped, tmnxPppoeLacSteeringFailed, tmnxPppoeMaxSessionsOvrExceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events pppoe event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events pppoe event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events pppoe event keyword severity keyword</b>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure log log-events pppoe event** *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure log log-events pppoe event** *keyword specific-throttle-interval number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure log log-events pppoe event** *keyword specific-throttle-limit number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure log log-events pppoe event** *keyword throttle boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe-clnt event keyword**

Synopsis	Enter the <b>pppoe-clnt</b> list instance
Context	<b>configure log log-events pppoe-clnt event keyword</b>
Tree	<b>pppoe-clnt</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events pppoe-clnt event keyword</b>
Tree	<b>pppoe-clnt</b>
Options	tmnxPppoeClientSetupFailure, tmnxPppoeClientEchoTimeout, tmnxPppoeClientNcpFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events pppoe-clnt event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events pppoe-clnt event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events pppoe-clnt event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events pppoe-clnt event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events pppoe-clnt event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events pppoe-clnt event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events pppoe-clnt event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ptp event** *keyword*

Synopsis	Enter the <b>ptp</b> list instance
Context	<b>configure</b> <a href="#">log log-events ptp event</a> <i>keyword</i>
Tree	<a href="#">ptp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events ptp event</a> <i>keyword</i>
Tree	<a href="#">ptp</a>
Options	tmnxPtpCardNotSupported, tmnxPtpCardNotSupportedClear, tmnxPtpMasterClockChangedEvent, tmnxPtpClockRecoveryStateChange, tmnxPtpOutOfResources, tmnxPtpOutOfResourcesClear, tmnxPtpDynamicChange, tmnxPtpPortNoTimestamping, tmnxPtpPortPtsfUnusable, tmnxPtpRequiresSystemReboot, tmnxPtpRequiresSystemRebootClear, tmnxPtpTimeRecoveryStateChange, tmnxPtpPeerNoTxTimestamping, tmnxPtpPeerNoTxTimestampingClear, tmnxPtpPeerNoRxTimestamping, tmnxPtpPeerNoRxTimestampingClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events ptp event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>



Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events ptp event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events ptp event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events ptp event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events ptp event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>

Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events ptp event keyword</a> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events ptp event keyword</a> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **python event** *keyword*

Synopsis	Enter the <b>python</b> list instance
Context	<b>configure</b> <a href="#">log log-events python event</a> <i>keyword</i>
Tree	<a href="#">python</a>
Introduced	21.2.R1
Platforms	All

### **event** *keyword*

Synopsis	Python module events
Context	<b>configure</b> <a href="#">log log-events python event</a> <i>keyword</i>
Tree	<a href="#">python</a>
Options	tmnxPythonInterpreterRestarted

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Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">python</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	21.2.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">python</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	21.2.R1
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">python</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.2.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">python</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>

Introduced 21.2.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [python](#) [event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 21.2.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [python](#) [event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 21.2.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [python](#) [event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 21.2.R1  
Platforms All

### **radius** [event](#) *keyword*

Synopsis Enter the **radius** list instance  
Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword*  
Tree [radius](#)  
Introduced 16.0.R1

Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers

Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword*

Tree [radius](#)

Options tmnxRadSrvPlcySrvOperStateCh, tmnxRadRouteDownloadFailed, tmnxRadAcctOnOngoing

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword* [generate](#) *boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword* [repeat](#) *boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type

Context **configure** [log](#) [log-events](#) [radius](#) [event](#) *keyword* [severity](#) *keyword*

Tree [severity](#)

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">radius</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">radius</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">radius</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">radius</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>

Introduced 16.0.R1  
 Platforms All

### **rip event** *keyword*

Synopsis Enter the **rip** list instance  
 Context **configure log log-events rip event** *keyword*  
 Tree **rip**  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure log log-events rip event** *keyword*  
 Tree **rip**  
 Options ripPacketDiscarded, vRtrRipAuthTypeMismatch, vRtrRipAuthTypeFailure, vRtrRipInstanceShuttingDown, vRtrRipInstanceRestarted, vRtrRipInstanceExpLmtReached, vRtrRipInstanceExpLmtWarning, vRtrRipInstanceRtsExpLmtDropped, vRtrRipPeerBfdDown  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
 Context **configure log log-events rip event** *keyword generate* *boolean*  
 Tree **generate**  
 Introduced 16.0.R1  
 Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
 Context **configure log log-events rip event** *keyword repeat* *boolean*

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Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rip event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rip event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rip event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rip event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>



Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events rip event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **ripng event** *keyword*

Synopsis	Enter the <b>ripng</b> list instance
Context	<b>configure</b> <a href="#">log log-events ripng event</a> <i>keyword</i>
Tree	<a href="#">ripng</a>
Introduced	16.0.R3
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events ripng event</a> <i>keyword</i>
Tree	<a href="#">ripng</a>
Options	tmnxRipNgPacketDiscarded, tmnxRipNgAuthTypeMismatch, tmnxRipNgAuthFailure, tmnxRipNgInstShuttingDown, tmnxRipNgInstRestarted, tmnxRipNgInstExpLmtReached, tmnxRipNgInstExpLmtWarning, tmnxRipNgInstRtsExpLmtDropped, tmnxRipNgIfUcastAddrNotUsed, tmnxRipNgPeerBfdDown
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ripng</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R3
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ripng</a> <a href="#">event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ripng</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R3
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ripng</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R3
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ripng</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R3
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ripng</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R3
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">ripng</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R3
Platforms	All

**route-policy** [event](#) *keyword*

Synopsis	Enter the <b>route-policy</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">route-policy</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">route-policy</a>
Options	trigPolicyPrevEval
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">route-policy</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**rpki event keyword**

Synopsis	Enter the <b>rpki</b> list instance
Context	<b>configure log log-events rpki event keyword</b>
Tree	<a href="#">rpki</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events rpki event keyword</b>
Tree	<a href="#">rpki</a>
Options	tmnxRpkiNotifySession, tmnxRpkiStaleTimerExpiry
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events rpki event keyword generate boolean</b>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events rpki event keyword repeat boolean</b>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpk</a> <a href="#">event</a> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpk</a> <a href="#">event</a> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpk</a> <a href="#">event</a> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpk</a> <a href="#">event</a> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rpk</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **rsvp event** *keyword*

Synopsis	Enter the <b>rsvp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rsvp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">rsvp</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rsvp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">rsvp</a>
Options	vRtrRsvpStateChange, vRtrRsvplfStateChange, vRtrRsvplfNbrStateUp, vRtrRsvplfNbrStateDown, vRtrRsvpPEFailOverPriToStdBy, vRtrRsvpPEFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rsvp</a> <a href="#">event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All



**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>rsvp</b> <b>event</b> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>rsvp</b> <b>event</b> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<b>severity</b>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>rsvp</b> <b>event</b> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>rsvp</b> <b>event</b> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<b>specific-throttle-interval</b>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rsvp</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">rsvp</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**satellite** [event](#) *keyword*

Synopsis	Enter the <b>satellite</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">satellite</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">satellite</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">satellite</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">satellite</a>
Options	tmnxSatelliteOperStateChange, tmnxSatSynclfTimRefSwitch, tmnxSatSynclfTimSystemQuality, tmnxSatSynclfTimRef1Quality, tmnxSatSynclfTimRef2Quality, tmnxSatSynclfTimHoldover, tmnxSatSynclfTimHoldoverClear, tmnxSatSynclfTimRef1Alarm, tmnxSatSynclfTimRef1AlarmClear, tmnxSatSynclfTimRef2Alarm, tmnxSatSynclfTimRef2AlarmClear, tmnxSatLocalForwardStateChg, tmnxSatLocalForwardSapStateChg
Notes	This element is part of a list key.

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log log-events satellite event](#) *keyword generate boolean*  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log log-events satellite event](#) *keyword repeat boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log log-events satellite event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log log-events satellite event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
 Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword* [specific-throttle-interval](#) *number*  
 Tree [specific-throttle-interval](#)  
 Range 1 to 1200  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword* [specific-throttle-limit](#) *number*  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [satellite event](#) *keyword* [throttle](#) *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **security event** *keyword*

Synopsis Enter the **security** list instance  
 Context **configure** [log](#) [log-events](#) [security event](#) *keyword*  
 Tree [security](#)  
 Introduced 16.0.R1  
 Platforms All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log log-events security event</b> <i>keyword</i>
Tree	<b>security</b>
Options	cli_user_login, cli_user_logout, cli_user_login_failed, cli_user_login_max_attempts, ftp_user_login, ftp_user_logout, ftp_user_login_failed, ftp_user_login_max_attempts, ssh_user_login, ssh_user_logout, ssh_user_login_failed, ssh_user_login_max_attempts, radiusOperStatusChange, user_disconnect, radiusSystemIpAddrNotSet, tacplusOperStatusChange, mafEntryMatch, ftp_transfer_successful, ftp_transfer_failed, enable_admin, host_snmp_attempts, SSH_server_preserve_key_fail, tacplusInetSvrOperStatusChange, radiusInetServerOperStatusChange, tmnxKeyChainAuthFailure, tmnxCpmProtViolPort, tmnxCpmProtViolPortAgg, tmnxCpmProtViolIf, tmnxCpmProtViolSap, tmnxCpmProtViolMac, tmnxCpmProtViolVdoSvcClient, tmnxCpmProtViolVdoVrtrClient, tmnxMD5AuthFailure, tmnxCpmProtDefPolModified, tmnxCpmProtViolSdpBind, tmnxCpmProtExcdSdpBind, tmnxCpmProtExcdSapEcm, tmnxCpmProtExcdSdpBindEcm, tmnxPkiFileReadFailed, tmnxPkiCertVerificationFailed, tmnxCAProfileStateChange, tmnxCpmProtExcdSapIp, tmnxDcpFpDynPoolUsageHiAlmRaise, tmnxDcpFpDynPoolUsageHiAlmClear, tmnxDcpCardFpEventOvrflwClr, tmnxDcpCardSapEventOvrflwClr, tmnxDcpCardVrtrIfEventOvrflwClr, sapDcpStaticExcd, sapDcpDynamicExcd, sapDcpStaticHoldDownStart, sapDcpDynamicHoldDownStart, sapDcpStaticHoldDownEnd, sapDcpDynamicHoldDownEnd, sapDcpStaticConform, sapDcpDynamicConform, sapDcpLocMonExcd, sapDcpLocMonExcdDynResource, sapDcpLocMonExcdAllDynAlloc, sapDcpLocMonExcdAllDynFreed, sapDcpDynamicEnforceAlloc, sapDcpDynamicEnforceFreed, vRtrIfDcpStaticExcd, vRtrIfDcpDynamicExcd, vRtrIfDcpStaticHoldDownStart, vRtrIfDcpDynamicHoldDownStart, vRtrIfDcpStaticHoldDownEnd, vRtrIfDcpDynamicHoldDownEnd, vRtrIfDcpStaticConform, vRtrIfDcpDynamicConform, vRtrIfDcpLocMonExcd, vRtrIfDcpLocMonExcdDynResource, vRtrIfDcpLocMonExcdAllDynAlloc, vRtrIfDcpLocMonExcdAllDynFreed, vRtrIfDcpDynamicEnforceAlloc, vRtrIfDcpDynamicEnforceFreed, tmnxDcpCardFpEventOvrflw, tmnxDcpCardSapEventOvrflw, tmnxDcpCardVrtrIfEventOvrflw, tmnxPkiCAProfActnStatusChg, tmnxCpmProtViolSapOutProf, tmnxCpmProtViolIfOutProf, sysDNSSecFailedAuthentication, tmnxCpmProtExcdSdpBindIp, tmnxSecComputeCertChainFailure, tmnxCpmProtViolSdpBindOutProf, tmnxSecNotifKeyChainExpired, tmnxSysLicenseInvalid, tmnxSysLicenseExpiresSoon, tmnxPkiCAProfRevokeChkWarning, tmnxCAProfUpDueToRevokeChkCrIOpt, tmnxPkiCertBeforeExpWarning, tmnxPkiCertAfterExpWarning, tmnxPkiCertExpWarningCleared, tmnxPkiCRLBeforeExpWarning, tmnxPkiCRLAfterExpWarning, tmnxPkiCRLExpWarningCleared, tmnxSecNotifFileReloaded, tmnxSysLicenseValid, tmnxSecPwdHistoryFileLoadFailed, tmnxSecPwdHistoryFileWriteFailed, tmnxPkiCAProfCrIUpdateStart, tmnxPkiCAProfCrIUpdateSuccess, tmnxPkiCAProfCrIUpdateUrlFail, tmnxPkiCAProfCrIUpdAllUrlsFail, tmnxPkiFileWriteFailed, tmnxPkiCAProfCrIUpdNoNxtUpdTime, tmnxUsrProfSessionLimitExceeded, tmnxCliGroupSessionLimitExceeded,

tmnxPkiCAProfCriUpdLargPreUpdTm, tmnxPkiCertNotYetValid,  
 tmnxPkiCRLNotYetValid, tmnxAppPkiCertVerificationFailed, grpc\_user\_login,  
 grpc\_user\_logout, grpc\_user\_login\_failed, grpc\_user\_login\_max\_attempts,  
 netconf\_user\_login, netconf\_user\_logout, netconf\_user\_login\_failed,  
 netconf\_user\_login\_max\_attempts, tmnxSysLicenseActivated, tmnxConfigModify,  
 tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, radiusUserProfileInvalid,  
 tmnxSysStandbyLicensingError, tmnxSysStandbyLicensingReady, md\_cli\_io,  
 md\_cli\_unauth\_io, tmnxSysAppLicenseInsufficient, tmnxSysLicenseUpdateRequired,  
 netconf\_auth, netconf\_unauth, grpc\_auth, grpc\_unauth, tmnxCertKeyPairGen,  
 tmnxCertImport, tmnxCertExport, tmnxFileDeleted, tmnxFileMoved, tmnxFileCopied,  
 tmnxFileUnzip, tmnxPasswordHashingChanged, tmnxUserPasswordChangedByAdmin,  
 tmnxSSHSessionFailed, tmnxSecSignedSwCpmBootEvent,  
 tSecSgndSwUefiVarsUpdtReqd, tmnxPkiCertUpdUpdateStarted,  
 tmnxPkiCertUpdUpdateFinished, tmnxPkiCertUpdUpdateFailed,  
 tmnxSystemPasswordChangedByAdmin, tmnxSysLicenseCleared,  
 tmnxSysLicensingStateOk, tmnxPkiCertChainCompareCaNoMatch

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events security event</a> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events security event</a> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
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Context	<b>configure log log-events security event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events security event</b> <i>keyword specific-throttle boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events security event</b> <i>keyword specific-throttle-interval number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure log log-events security event</b> <i>keyword specific-throttle-limit number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
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Context	<b>configure log log-events security event</b> <i>keyword throttle boolean</i>
Tree	<b>throttle</b>
Introduced	16.0.R1
Platforms	All

### **sflow event** *keyword*

Synopsis	Enter the <b>sflow</b> list instance
Context	<b>configure log log-events sflow event</b> <i>keyword</i>
Tree	<b>sflow</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure log log-events sflow event</b> <i>keyword</i>
Tree	<b>sflow</b>
Options	none, tmnxSflowCpEntrySampling, tmnxSflowPacketTxFailure
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events sflow event</b> <i>keyword generate boolean</i>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events sflow event</b> <i>keyword repeat boolean</i>



Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sflow</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sflow</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sflow</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sflow</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>

Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sflow</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS

### **snmp event** *keyword*

Synopsis	Enter the <b>snmp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">snmp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">snmp</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">snmp</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">snmp</a>
Options	coldStart, warmStart, authenticationFailure, linkDown, linkUp, risingAlarm, fallingAlarm, snmpdError
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
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Context	<b>configure log log-events snmp event keyword generate boolean</b>
Tree	<b>generate</b>
Introduced	16.0.R1
Platforms	All

### **repeat boolean**

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events snmp event keyword repeat boolean</b>
Tree	<b>repeat</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity keyword**

Synopsis	Severity level associated with event type
Context	<b>configure log log-events snmp event keyword severity keyword</b>
Tree	<b>severity</b>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle boolean**

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events snmp event keyword specific-throttle boolean</b>
Tree	<b>specific-throttle</b>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval number**

Synopsis	Duration of the event specific throttling interval
Context	<b>configure log log-events snmp event keyword specific-throttle-interval number</b>

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Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events snmp event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events snmp event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **sr-mpls** [event](#) *keyword*

Synopsis	Enter the <b>sr-mpls</b> list instance
Context	<b>configure</b> <a href="#">log log-events sr-mpls event</a> <i>keyword</i>
Tree	<a href="#">sr-mpls</a>
Introduced	21.10.R1
Platforms	All

### **event** *keyword*

Synopsis	SR MPLS event
Context	<b>configure</b> <a href="#">log log-events sr-mpls event</a> <i>keyword</i>
Tree	<a href="#">sr-mpls</a>

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Options	tmnxSrMplsPfxSidFailure
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure log log-events sr-mpls event</b> <i>keyword generate boolean</i>
Tree	<a href="#">generate</a>
Introduced	21.10.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure log log-events sr-mpls event</b> <i>keyword repeat boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	21.10.R1
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure log log-events sr-mpls event</b> <i>keyword severity keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.10.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure log log-events sr-mpls event</b> <i>keyword specific-throttle boolean</i>

Tree	<a href="#">specific-throttle</a>
Introduced	21.10.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events sr-mpls event keyword</a> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	21.10.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events sr-mpls event keyword</a> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	21.10.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events sr-mpls event keyword</a> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	21.10.R1
Platforms	All

### **sr-policy** [event keyword](#)

Synopsis	Enter the <b>sr-policy</b> list instance
Context	<b>configure</b> <a href="#">log log-events sr-policy event keyword</a>
Tree	<a href="#">sr-policy</a>

Introduced 23.10.R2  
Platforms All

### **event** *keyword*

Synopsis Events for sr-policy module.  
Context **configure log log-events sr-policy event** *keyword*  
Tree [sr-policy](#)  
Options vRtrSrPathIsCandPathOperChanged, vRtrSrPlycPathActiveStateChanged  
Notes This element is part of a list key.  
Introduced 23.10.R2  
Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure log log-events sr-policy event** *keyword generate boolean*  
Tree [generate](#)  
Introduced 23.10.R2  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure log log-events sr-policy event** *keyword repeat boolean*  
Tree [repeat](#)  
Default false  
Introduced 23.10.R2  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure log log-events sr-policy event** *keyword severity keyword*  
Tree [severity](#)

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Options	cleared, indeterminate, critical, major, minor, warning
Introduced	23.10.R2
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sr-policy</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	23.10.R2
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sr-policy</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	23.10.R2
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sr-policy</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	23.10.R2
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">sr-policy</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>



Introduced 23.10.R2  
Platforms All

### **srv6 event** keyword

Synopsis Enter the **srv6** list instance  
Context **configure log log-events srv6 event** keyword  
Tree [srv6](#)  
Introduced 21.5.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **event** keyword

Synopsis Log event as a trigger for one or more EHS handlers  
Context **configure log log-events srv6 event** keyword  
Tree [srv6](#)  
Options vRtrSrv6FunctionExhaustion, vRtrSrv6SvcSidIndex, vRtrSrv6LocatorResExhaustion  
Notes This element is part of a list key.  
Introduced 21.5.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **generate** boolean

Synopsis Generate log events when the event occurs  
Context **configure log log-events srv6 event** keyword **generate** boolean  
Tree [generate](#)  
Introduced 21.5.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **repeat** boolean

Synopsis Repeat the log event until the condition is cleared  
Context **configure log log-events srv6 event** keyword **repeat** boolean  
Tree [repeat](#)  
Default false

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6</a> <a href="#">event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">srv6 event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**stp event** *keyword*

Synopsis	Enter the <b>stp</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp event</a> <i>keyword</i>
Tree	<a href="#">stp</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp event</a> <i>keyword</i>
Tree	<a href="#">stp</a>
Options	topologyChangeSapMajorState, newRootSap, topologyChangeVcpState, newRootVcpState, topologyChangeSapState, receivedTCN, newRootBridge, unacknowledgedTCN, higherPriorityBridge, sapEncapPVST, sapEncapDot1d, tmnxSvcTopoChgSdpBindMajorState, tmnxSvcNewRootSdpBind, tmnxSvcTopoChgSdpBindState, tmnxSvcSdpBindRcvdTCN, tmnxSvcSdpBindRcvdHigherBriPrio, tmnxSvcSdpBindEncapPVST, tmnxSvcSdpBindEncapDot1d, tmnxNewCistRegionalRootBridge, tmnxNewMstiRegionalRootBridge, tmnxStpRootGuardViolation, tmnxStpMeshNotInMstRegion, tmnxSapStpExcepCondStateChng, tmnxSdpBndStpExcepCondStateChng, sapActiveProtocolChange, tmnxSvcSdpActiveProtocolChange, vcpActiveProtocolChange, topologyChangePipMajorState, topologyChangePipState, tmnxPipStpExcepCondStateChng, pipActiveProtocolChange
Notes	This element is part of a list key.
Introduced	16.0.R1

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Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log](#) [log-events](#) [stp event](#) *keyword* [generate](#) *boolean*  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log](#) [log-events](#) [stp event](#) *keyword* [repeat](#) *boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [stp event](#) *keyword* [severity](#) *keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [stp event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">stp event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**svcmgr** [event](#) *keyword*

Synopsis	Enter the <b>svcmgr</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">svcmgr event</a> <i>keyword</i>
Tree	<a href="#">svcmgr</a>
Introduced	16.0.R1
Platforms	All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <b>log</b> <b>log-events</b> <b>svcmgr</b> <b>event</b> <i>keyword</i>
Tree	<b>svcmgr</b>
Options	<p>           svcTlsMacPinningViolation, tmnxSubSlaacOverride,            svcEvpnMplsMacMoveExceedNonBlock, svcTlsVxInstReplicatorChgd,            svcArpHostOverride, svcEvpnMHEsEviDFStateChgd, svcEvpnMHEsIsidDFStateChgd,            svcEvpnRcvdProtSrcMac, svcBgpEvpnBHDupMacAddrsDetected,            svcEvpnEtreeBumLabelSysHiUsgSet, svcEvpnEtreeBumLabelSysHiUsgClr,            svcVxlanEvpnMplsDestSysHiUsgSet, svcVxlanEvpnMplsDestSysHiUsgClr,            svcStatusChanged, svcTlsFdbTableFullAlarmRaised, svcTlsFdbTableFullAlarmCleared,            svcSysEvpnESDfPrefOperValChange, tmnxSvcSysFdbTableHighUsgSet,            iesIfStatusChanged, tmnxEndPointTxActiveChanged, tmnxSvcSysFdbTableHighUsgClr,            svcEvpnMHStandbyStatusChg, svcEvpnVxVTepLclBiasAddFailSet,            svcEvpnESVxVTepLclBiasAddFailSet, svcEvpnVxVTepLclBiasAddFailClr,            svcEvpnESVxVTepLclBiasAddFailClr, svcEvpnRcvdPbbProtSrcMac,            svcTlsMrpAttrRegistrationFailed, svcTlsMrpAttrTbIFullAlarmRaised,            svcTlsMrpAttrTbIFullAlarmCleared, svcEvpnMplsTEPEgrLblStateChgd,            svcEpipePbbOperStatusChanged, svcTlsVxInstVTEPEgrVniStateChgd,            svcEvpnVxInstESDstTEPStateChgd, svcSrv6InstTEPSidOperStateChgd,            svcSrv6InstESDstTEPOperStateChgd, svcEvpnMplsESDestTEPStateChgd,            svcBgpEvpnTepStateChgd, svcSrv6FunctionOutOfResources, sapStatusChanged,            sapTlsMacAddrLimitAlarmRaised, sapTlsMacAddrLimitAlarmCleared,            hostConnectivityLost, hostConnectivityRestored, sapReceivedProtSrcMac,            sapTlsMacMoveExceeded, sapPortStateChangeProcessed,            sapCemPacketDefectAlarm, sapCemPacketDefectAlarmClear,            msapStateChanged, msapCreationFailure, sapTlsMacMoveExceedNonBlock,            sapEthLoopbackStarted, sapEthLoopbackStopped, sapTunnelEncapIpMtuTooSmall,            tmnxIpTunnelOperStateChange, sapIfIgnorePortStateStart, sapIfIgnorePortStateStop,            sapReceivedPbbProtSrcMac, sdpStatusChanged, sdpBindStatusChanged,            sdpKeepAliveStarted, sdpKeepAliveStopped, sdpKeepAliveProbeFailure,            sdpKeepAliveLateReply, sdpTlsMacAddrLimitAlarmRaised,            sdpTlsMacAddrLimitAlarmCleared, sdpBindPwPeerStatusBitsChanged,            sdpBindTlsMacMoveExceeded, sdpBindPwPeerFaultAddrChanged,            sdpBindSdpStateChangeProcessed, sdpBandwidthOverbooked,            sdpBindInsufficientBandwidth, dynamicSdpConfigChanged,            dynamicSdpBindConfigChanged, dynamicSdpCreationFailed,            dynamicSdpBindCreationFailed, sdpEgrIfsNetDomInconsCntChanged,            sdpBindIpipeCelpAddressChange, sdpBindReceivedProtSrcMac,            sdpBindPwLocalStatusBitsChanged, sdpBindTlsMacMoveExceedNonBlock,            sdpBindEthLoopbackStarted, sdpBindEthLoopbackStopped,            sdpPbbActvPwWithNonActvCtrlPwChg, svcBgpEvpnDupMacAddrsDetected,            svcBgpEvpnDupMacAddrsCleared, svcTlsVTEPHiUsageAlarmRaised,            svcTlsVTEPHiUsageAlarmCleared, svcTlsVTEPEgrVniSysHiUsgAlarmSet,            svcTlsVTEPEgrVniSysHiUsgAlarmClr, svcTlsVTEPEgrVniSvcHiUsgAlarmSet,            svcTlsVTEPEgrVniSvcHiUsgAlarmClr, svcBindSysHiUsageAlarmRaised,            svcBindSysHiUsageAlarmCleared, sdpControlPwActiveStateChg,            svcTlsProxyArpDupDetect, svcTlsProxyArpDupClear, svcTlsProxyNdDupDetect,            svcTlsProxyNdDupClear, svcTlsEvpnTunnNHopHiUsgAlarmSet,         </p>

svcTlsEvpnTunnNHopHiUsgAlarmClr, svcEvpnMplsTEPHiUsageRaised,  
 svcEvpnMplsTEPHiUsageCleared, svcEvpnMplsTEPEgrBndSysHiUsgSet,  
 svcEvpnMplsTEPEgrBndSysHiUsgClr, svcEvpnMplsTEPEgrBndSvcHiUsgSet,  
 svcEvpnMplsTEPEgrBndSvcHiUsgClr, svcTlsProxyArpSysHiUsgSet,  
 svcTlsProxyArpSvcHiUsgClr, svcTlsProxyArpSvcHiUsgSet,  
 svcTlsProxyArpSvcHiUsgClr, svcTlsProxyNdSysHiUsgSet, svcTlsProxyNdSysHiUsgClr,  
 svcTlsProxyNdSvcHiUsgSet, svcTlsProxyNdSvcHiUsgClr, svcSiteMinDnTimerStateChg,  
 sdpBindReceivedPbbProtSrcMac, svcTlsMfibTableFullAlarmRaised,  
 svcTlsMfibTableFullAlarmCleared, tmnxSubscriberCreated,  
 tmnxSubscriberDeleted, tmnxSubscriberRenamed, tmnxSubAcctPclyFailure,  
 tmnxSubMcsRelatedProblem, tmnxSubAuthPclyRadSerOperStatChg,  
 tmnxSubAcctPclyRadSerOperStatChg, svcEndPointMacLimitAlarmRaised,  
 svcEndPointMacLimitAlarmCleared, tmnxSubRadSapDisconnectError,  
 tmnxSubRadSdpBndDisconnectError, tmnxSubRadSapCoAError,  
 tmnxSubRadSdpBndCoAError, tmnxSubRadSapSubAuthError,  
 tmnxSubRadSdpBndSubAuthError, svcFdbMimDestTblFullAlrm,  
 svcFdbMimDestTblFullAlrmCleared, svcPersistencyProblem, svcArpHostPopulateErr,  
 svcEPMCEPConfigMismatch, svcEPMCEPConfigMismatchResolved,  
 svcEPMCEPPassiveModeActive, svcEPMCEPPassiveModePassive,  
 sapHostBGPPeeringSetupFailed, tmnxSubUserCategoryOutOfCredit,  
 svcRestoreHostProblem, tmnxSubUserCategoryRefreshCredit,  
 tmnxSubUserCategoryError, svcTlsSiteDesigFwdrChg, sapTlsDataSapInstStatusChgd,  
 svcTlsGroupOperStatusChanged, sapTunnelStateChange,  
 tmnxSubHostInconsistentAtmTdOvr, svcMSPwRtMisconfig,  
 svcOperGrpOperStatusChanged, saplpceCelpAddrChange,  
 svcMSPwRetryExpiredNotif, svcVIIISiteDesigFwdrChg, tmnxSubSlaacSetupFailure,  
 tmnxIpTunnelOperRemIpChg, tmnxSubHostLcktLimitReached,  
 tmnxSubHostLcktSapLimitReached, tmnxSubSysChassMemoryUsageHi,  
 tmnxSubVSubnetHostsDeleted, sapHostRipListenerSetupFailed,  
 tmnxSublpoeInvalidSessionKey, tmnxSublpoeInvalidCidRidChange,  
 tmnxSublpoeSessionLimitReached, tmnxSublpoePersistenceRecovery,  
 tmnxSublpoeMigrHostDeleted, tmnxSubMngdHostCreationFail,  
 tmnxSubMngdHostOverride, tmnxSubHostInfoConflict, tmnxSubPIBndFailed,  
 tmnxSubBrgCreated, tmnxSubBrgDeleted, tmnxSubBrgCvInitFailed,  
 tmnxSubBrgRadiusUpdatelpoeSeFail, tmnxSubBrgRadiusCoaError,  
 tmnxSubBrgRadiusAuthError, tmnxSubBrgSessionLimitReached,  
 tmnxSubStatsResourceLimitReached, tmnxSubDhcpOverloadDetected,  
 alulpTransportStateChanged, tmnxSubBrgRadiusProxyAuthError,  
 tmnxSublpoeSessionBrgNotAuth, tmnxSubRadiusCoaNatFwdFailed,  
 tmnxSubSVlanStatsReachedMaximum, svcTlsVxInstMacAdrLimitAlrmRsd,  
 svcTlsVxInstMacAdrLimitAlrmClrd, tmnxSubCupsUpSapCreationFailed,  
 tmnxSubCupsUpIfCreationFailed, tmnxPfcPAssocPathMgmtStateChgd,  
 tmnxSubInfoEgrAggRateLimitLowReq, tmnxSublpoeWppRegistrationFailed,  
 svcEvpnMplsTEPIpSysHiUsgSet, svcEvpnMplsTEPIpSysHiUsgClr,  
 svcEvpnMHAutoEsiCreated, svcEvpnMHAutoEsiConflict,  
 svcSrv6TEPEgrBndSysHiUsgSet, svcSrv6TEPEgrBndSysHiUsgClr,  
 svclFSubForwardingStatsDisNotify, svclFSubForwardingStatsEnNotify,  
 svcRoutedVplsEvpnGWDrStateChgd, svcSrv6TEPEgrBndSvcHiUsgSet,  
 svcSrv6TEPEgrBndSvcHiUsgClr, tmnxSapMRtCpeChkStatusChange

## Notes

This element is part of a list key.

Introduced 16.0.R1  
Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log log-events svcmgr event](#) *keyword* [generate](#) *boolean*  
Tree [generate](#)  
Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log log-events svcmgr event](#) *keyword* [repeat](#) *boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log log-events svcmgr event](#) *keyword* [severity](#) *keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log log-events svcmgr event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1



Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log log-events svcmgr event keyword](#) [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log log-events svcmgr event keyword](#) [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log log-events svcmgr event keyword](#) [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

### **system event** *keyword*

Synopsis Enter the **system** list instance  
Context **configure** [log log-events system event keyword](#)  
Tree [system](#)  
Introduced 16.0.R1  
Platforms All

**event keyword**

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">system</a> <a href="#">event</a> <i>keyword</i>
Tree	<a href="#">system</a>
Options	stiDateAndTimeChanged, ssiSaveConfigSucceeded, ssiSaveConfigFailed, sbiBootConfig, sbiBootSnmpd, tmnxConfigModify, tmnxConfigCreate, tmnxConfigDelete, tmnxStateChange, tmnxModuleMallocFailed, tmnxTrapDropped, ssiSyncConfigOK, ssiSyncConfigFailed, ssiSyncBootEnvOK, ssiSyncBootEnvFailed, socket_bind_failed, socket_conn_accept_failed, sntpTimeDiffExceedsThreshold, tmnxSssiMismatch, tmnxSnmpdStateChange, tmnxRedStandbySyncing, tmnxRedStandbyReady, tmnxRedStandbySyncLost, tmnxRedSwitchover, tmnxRedCpmActive, tmnxRedSingleCpm, persistencyClosedAlarmRaised, persistencyClosedAlarmCleared, tmnxSntpOperChange, tmnxFtpClientFailure, persistencyEventReport, sbiBootConfigFailFileError, sbiBootConfigOKFileError, persistenceRestoreProblem, tmnxSysRollbackStarted, tmnxSysRollbackStatusChange, tmnxSysRollbackSaveStatusChange, tmnxSysRollbackFileDeleteStatus, ssiSyncRollbackOK, ssiSyncRollbackFailed, ssiSyncCertOK, ssiSyncCertFailed, persistencyFileSysThresRaised, persistencyFileSysThresCleared, tmnxSysExecStarted, tmnxSysExecFinished, tmnxSysRollbackSaveStarted, tmnxSysRollbackDeleteStarted, tmnxSysNvsysFileError, tmnxConfigConflict, tmnxSysBaseMacAddressNotSet, tmnxSmLaunchStartFailed, tmnxEhsHandlerInvoked, tmnxEhsDroppedByMinDelay, tmnxSysAppStats24HrsAvailable, tmnxSysAppStatsWeekAvailable, tmnxSysMgmtIfModeChangeStart, tmnxSysMgmtIfModeChangeComplete, tmnxSysMgmtIfModeChangeFailure, tmnxSysMgmtIfLiIncorrectFormat, tmnxSysMgmtIfLiCfgNotEncrypted, stiDateAndTimeChanging, tmnxSysSwFabFailRecStarted, tmnxSysSwFabFailRecCompleted, tmnxSysSwFabFailRecAborted, tmnxSysSwFabFailRecDetected, tMirrorLiXlIfLicenseInvalid, mdSaveCommitHistoryFailed, sbiBootMdReadCommitHistoryFailed, tmnxSysDyingGasp, tmnxSysHttpRdrOutOfSeqLimitExc, schedActionFailure, smScriptAbort, smScriptResult, smScriptException, ssiSaveIncrementConfigSucceeded, ssiSaveIncrementConfigFailed, ssiSaveBackgroundConfigSucceeded, ssiSaveBackgroundConfigFailed, tmnxLastSystemRebootAdmin, mdCommitInProgress, mdCommitSucceeded
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate boolean**

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">system</a> <a href="#">event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>

Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log log-events system event](#) *keyword* [repeat](#) *boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log log-events system event](#) *keyword* [severity](#) *keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log log-events system event](#) *keyword* [specific-throttle](#) *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log log-events system event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200

Introduced 16.0.R1  
 Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log log-events system event keyword](#) [specific-throttle-limit](#) *number*  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 16.0.R1  
 Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log log-events system event keyword](#) [throttle](#) *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **tls** [event](#) *keyword*

Synopsis Enter the **tls** list instance  
 Context **configure** [log log-events](#) [tls event](#) *keyword*  
 Tree [tls](#)  
 Introduced 20.5.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log log-events](#) [tls event](#) *keyword*  
 Tree [tls](#)  
 Options tmnxTlsInitiateSession, tmnxTlsTermination, tmnxTlsFailure  
 Notes This element is part of a list key.

Introduced 20.5.R1  
Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
Context **configure** [log](#) [log-events](#) [tls event](#) *keyword generate boolean*  
Tree [generate](#)  
Introduced 20.5.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure** [log](#) [log-events](#) [tls event](#) *keyword repeat boolean*  
Tree [repeat](#)  
Default false  
Introduced 20.5.R1  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure** [log](#) [log-events](#) [tls event](#) *keyword severity keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 20.5.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure** [log](#) [log-events](#) [tls event](#) *keyword specific-throttle boolean*  
Tree [specific-throttle](#)  
Introduced 20.5.R1

Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log](#) [log-events](#) [tls event](#) *keyword* [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 20.5.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log](#) [log-events](#) [tls event](#) *keyword* [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 20.5.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log](#) [log-events](#) [tls event](#) *keyword* [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 20.5.R1  
Platforms All

### **tree-sid** [event](#) *keyword*

Synopsis Enter the **tree-sid** list instance  
Context **configure** [log](#) [log-events](#) [tree-sid event](#) *keyword*  
Tree [tree-sid](#)  
Introduced 20.10.R1  
Platforms All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <i>event</i> <i>keyword</i>
Tree	<a href="#">tree-sid</a>
Options	vRtrTreeSidCdtPathChanged, vRtrTreeSidCdtPathActInsChanged, vRtrTreeSidInSidRegFailure, vRtrTreeSidTreeldAllocFailure, vRtrTreeSidRepSegResExhaustion, vRtrTreeSidRepSegResExhstCleared, vRtrTreeSidLabelRangeExhaustion, vRtrTreeSidLblRangeExhstCleared, vRtrTreeSidFailOverPriToStdBy, vRtrTreeSidFailOverStdByToPri
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <i>event</i> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	20.10.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <i>event</i> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	20.10.R1
Platforms	All

**severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <i>event</i> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>

Options	cleared, indeterminate, critical, major, minor, warning
Introduced	20.10.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	20.10.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	20.10.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-limit</a> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	20.10.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">tree-sid</a> <a href="#">event</a> <i>keyword</i> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>



Introduced 20.10.R1  
 Platforms All

### **user event** *keyword*

Synopsis Enter the **user** list instance  
 Context **configure log log-events user event** *keyword*  
 Tree **user**  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure log log-events user event** *keyword*  
 Tree **user**  
 Options cli\_user\_login, cli\_user\_logout, cli\_user\_login\_failed, cli\_user\_login\_max\_attempts, ftp\_user\_login, ftp\_user\_logout, ftp\_user\_login\_failed, ftp\_user\_login\_max\_attempts, cli\_user\_io, snmp\_user\_set, cli\_config\_io, cli\_unauth\_user\_io, cli\_unauth\_config\_io, grpc\_user\_login, grpc\_user\_logout, grpc\_user\_login\_failed, grpc\_user\_login\_max\_attempts, netconf\_user\_login, netconf\_user\_logout, netconf\_user\_login\_failed, netconf\_user\_login\_max\_attempts  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **generate** *boolean*

Synopsis Generate log events when the event occurs  
 Context **configure log log-events user event** *keyword generate* *boolean*  
 Tree **generate**  
 Introduced 16.0.R1  
 Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared

Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">user</a> <a href="#">event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">user</a> <a href="#">event</a> <i>keyword</i> <a href="#">severity</a> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">user</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle</a> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">user</a> <a href="#">event</a> <i>keyword</i> <a href="#">specific-throttle-interval</a> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
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Context	<b>configure</b> <a href="#">log log-events user event keyword</a> <a href="#">specific-throttle-limit number</a>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events user event keyword</a> <a href="#">throttle</a> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **video** [event keyword](#)

Synopsis	Enter the <b>video</b> list instance
Context	<b>configure</b> <a href="#">log log-events video event keyword</a>
Tree	<a href="#">video</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events video event keyword</a>
Tree	<a href="#">video</a>
Options	tmnxVdoDuplicateSsrcId, tmnxVdoMdaSessionsLimitExceeded, tmnxVdoMdaSGLimitExceeded, tmnxVdoMdaSessionsLimitCleared, tmnxVdoMdaSGLimitCleared, tmnxVdoAdSpliceAbort, tmnxVdoClientSessionsLmtExceeded, tmnxVdoClientSessionsLmtCleared, tmnxVdoGrpSrcAnlyzrErrState, tmnxVdoGrpSrcAnlyzrStClear, tmnxVdoMdaFccBwLimitExceeded, tmnxVdoMdaFccBwLimitCleared, tmnxVdoMdaRetBwLimitExceeded, tmnxVdoMdaRetBwLimitCleared, tmnxVdoMdaFccRetTotBwLmtExceeded, tmnxVdoMdaFccRetTotBwLmtCleared, tmnxVdoMdaFccSesLimitExceeded, tmnxVdoMdaFccSesLimitCleared, tmnxVdoMdaRetSesLimitExceeded, tmnxVdoMdaRetSesLimitCleared, tmnxVdoMdaFccRetTotSeLmtExceeded, tmnxVdoMdaFccRetTotSeLmtCleared, tmnxVdoVappSessionsLimitExceeded, tmnxVdoVappSGLimitExceeded,

tmnxVdoVappSessionsLimitCleared, tmnxVdoVappSGLimitCleared,  
 tmnxVdoVappFccBwLimitExceeded, tmnxVdoVappFccBwLimitCleared,  
 tmnxVdoVappRetBwLimitExceeded, tmnxVdoVappRetBwLimitCleared,  
 tmnxVdoVappFccRetTotBwLmtExceded, tmnxVdoVappFccRetTotBwLmtCleared,  
 tmnxVdoVappFccSesLimitExceeded, tmnxVdoVappFccSesLimitCleared,  
 tmnxVdoVappRetSesLimitExceeded, tmnxVdoVappRetSesLimitCleared,  
 tmnxVdoVappFccRetTotSeLmtExceded, tmnxVdoVappFccRetTotSeLmtCleared

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events video event</a> <i>keyword</i> <b>generate</b> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events video event</a> <i>keyword</i> <b>repeat</b> <i>boolean</i>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events video event</a> <i>keyword</i> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">video</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle</b> <i>boolean</i>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">video</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-interval</b> <i>number</i>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">video</a> <a href="#">event</a> <i>keyword</i> <b>specific-throttle-limit</b> <i>number</i>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">video</a> <a href="#">event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**vrrip event** *keyword*

Synopsis	Enter the <b>vrrip</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">vrrip event</a> <i>keyword</i>
Tree	<a href="#">vrrip</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">vrrip event</a> <i>keyword</i>
Tree	<a href="#">vrrip</a>
Options	vrripTrapNewMaster, vrripTrapAuthFailure, tmnxVrripIPListMismatch, tmnxVrripIPListMismatchClear, tmnxVrripMultipleOwners, tmnxVrripBecameBackup, vrripPacketDiscarded, tmnxVrripBfdIntfSessStateChgd, vrripTrapProtoError, tVrripBecameBackup, tVrripTrapNewMaster, tVrripIPListMismatch, tVrripIPListMismatchClear, tVrripMultipleOwners, tVrripPacketDiscarded, tVrripRouterAdvNotActivated, tVrripRouterAdvNotActivatedClear, tVrripOperDownInvalidMac, tVrripOperDownInvalidMacClear, tmnxVrripOperDownInvalidMac, tmnxVrripOperDownInvalidMacClear
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">vrrip event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

**repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">vrrip event</a> <i>keyword</i> <a href="#">repeat</a> <i>boolean</i>
Tree	<a href="#">repeat</a>

---

Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events vrrp event keyword severity keyword</a>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events vrrp event keyword specific-throttle boolean</a>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events vrrp event keyword specific-throttle-interval number</a>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events vrrp event keyword specific-throttle-limit number</a>
Tree	<a href="#">specific-throttle-limit</a>

Range	1 to 20000
Introduced	16.0.R1
Platforms	All

**throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">vrrp event</a> <i>keyword</i> <b>throttle</b> <i>boolean</i>
Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

**vrrtr event** *keyword*

Synopsis	Enter the <b>vrrtr</b> list instance
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">vrrtr event</a> <i>keyword</i>
Tree	<a href="#">vrrtr</a>
Introduced	16.0.R1
Platforms	All

**event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-events</a> <a href="#">vrrtr event</a> <i>keyword</i>
Tree	<a href="#">vrrtr</a>
Options	tmnxVRtrMidRouteTCA, tmnxVRtrHighRouteTCA, tmnxVRtrHighRouteCleared, tmnxVRtrMcastMidRouteTCA, tmnxVRtrMcastMaxRoutesTCA, tmnxVRtrMcastMaxRoutesCleared, tmnxVRtrMaxArpEntriesTCA, tmnxVRtrMaxArpEntriesCleared, tmnxVRtrMaxRoutes, tmnxVRtrBfdMaxSessionOnSlot, tmnxVRtrBfdPortTypeNotSupported, tmnxVRtrIPv6MidRouteTCA, tmnxVRtrIPv6HighRouteTCA, tmnxVRtrIPv6HighRouteCleared, tmnxVRtrStaticRouteCPEStatus, tmnxVRtrManagedRouteAddFailed, tmnxVRtrFibOccupancyThreshold, tmnxVRtrInetAddressAttachFailed, tmnxVRtrSingleSfmOverloadStateCh, tmnxVRtrGrExportLimitReached, tmnxVRtrGrRoutesExpLimitDropped, tmnxVRtrIfLdpSyncTimerStart, tmnxVRtrIfLdpSyncTimerStop, tmnxVRtrGrV6ExportLimitReached, tmnxVRtrGrV6RoutesExpLimDropped, tmnxVRtrStaticRouteStatusChanged, tmnxVRtrBfdSessExtDown, tmnxVRtrBfdSessExtUp, tmnxVRtrBfdSessExtDeleted, tmnxVRtrBfdSessExtProtChange, tmnxVRtrBfdExtNoCpmNpResources, tmnxVRtrDnsFault, tmnxVRtrMacAcctLimitReached, tmnxVRtrMacAcctLimitCleared,



tmnxVRtrNgBfdSessDown, tmnxVRtrNgBfdSessUp, tmnxVRtrNgBfdSessDeleted,  
 tmnxVRtrNgBfdSessProtChange, tmnxVRtrNgBfdNoCpmNpResources,  
 tmnxVRtrNHRvplsARPHighUsage, tmnxVRtrNHRvplsARPExhaust,  
 tmnxVRtrNHRvplsARPHighUsageClr, tmnxVRtrArpLmt,  
 tmnxVRtrArpThresholdExceeded, tmnxVRtrIpv6NbrLmt,  
 tmnxVRtrIpv6NbrThresholdExceeded, tmnxVRtrIfIgnorePortState,  
 tmnxVRtrPdnAddrMismatch, tmnxVRtrPdnAddrMismatchCleared,  
 tmnxVRtrLeakExportLimitReached, tmnxVRtrLeakExportLimitDropped,  
 tmnxVRtrDhcpClientStatusChanged, tmnxVRtrDhcp6ClientStatusChanged,  
 tmnxVRtrNeDiscovered, tmnxVRtrNeRemoved, tmnxVRtrNeModified,  
 vRtrIfDhcpCIRtStatusChanged, vRtrIfDhcpCISetDnsChanged,  
 vRtrAutoCfgRaRtStatusChanged, vRtrIfDhcp6CISetDnsChanged,  
 tipNbrAllocFailed, vRtrIfEthLoopbackStarted, vRtrIfEthLoopbackStopped,  
 tmnxVRtrBfdExtNoFreeTxIntrvlSlot, tmnxVRtrFibVPNOccupancyThreshold,  
 tmnxVRtrBfdMultiHopFpMismatch, vRtrBgpInstanceError

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### generate *boolean*

Synopsis Generate log events when the event occurs

Context **configure** [log log-events vrtr event](#) *keyword generate boolean*

Tree [generate](#)

Introduced 16.0.R1

Platforms All

### repeat *boolean*

Synopsis Repeat the log event until the condition is cleared

Context **configure** [log log-events vrtr event](#) *keyword repeat boolean*

Tree [repeat](#)

Default false

Introduced 16.0.R4

Platforms All

### severity *keyword*

Synopsis Severity level associated with event type

Context **configure** [log log-events vrtr event](#) *keyword severity keyword*

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Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events vrtr event keyword specific-throttle boolean</a>
Tree	<a href="#">specific-throttle</a>
Introduced	16.0.R1
Platforms	All

### **specific-throttle-interval** *number*

Synopsis	Duration of the event specific throttling interval
Context	<b>configure</b> <a href="#">log log-events vrtr event keyword specific-throttle-interval number</a>
Tree	<a href="#">specific-throttle-interval</a>
Range	1 to 1200
Introduced	16.0.R1
Platforms	All

### **specific-throttle-limit** *number*

Synopsis	Throttle limit within which events can be logged
Context	<b>configure</b> <a href="#">log log-events vrtr event keyword specific-throttle-limit number</a>
Tree	<a href="#">specific-throttle-limit</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **throttle** *boolean*

Synopsis	Throttle log events of this type
Context	<b>configure</b> <a href="#">log log-events vrtr event keyword throttle boolean</a>

Tree	<a href="#">throttle</a>
Introduced	16.0.R1
Platforms	All

### **wlan-gw event** *keyword*

Synopsis	Enter the <b>wlan-gw</b> list instance
Context	<b>configure</b> <a href="#">log log-events wlan-gw event</a> <i>keyword</i>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	All

### **event** *keyword*

Synopsis	Log event as a trigger for one or more EHS handlers
Context	<b>configure</b> <a href="#">log log-events wlan-gw event</a> <i>keyword</i>
Tree	<a href="#">wlan-gw</a>
Options	tmnxWlanGwResrcProblemDetected, tmnxWlanGwResrcProblemCause, tmnxWlanGwTuQosProblem, tmnxWlanGwGrpOperStateChanged, tmnxWlanGwlomActive, tmnxWlanGwMgwConnected, tmnxWlanGwMgwRestarted, tmnxWlanGwNumMgwHi, tmnxWlanGwMgwStateChanged, tmnxWlanGwQosRadiusGtpMismatch, tmnxWlanGwSubIfRedActiveChanged, tmnxWlanGwDsmGtpTunnelSetupFail, tmnxWlanGwSubIfPmStartD6cFailed, tmnxWlanGwSubIfPmNewPIReqFailed, tmnxWlanGwSubIfPmAddNewPIFailed, tmnxWlanGwSubIfPmCrIntObjFailed, tmnxWlanGwSubIfPmPoolTimeout, tmnxWlanGwSubIfPmPoolUsageLow, tmnxWlanGwSubIfPmLsQryRtryFailed, tmnxWlanGwGtpMessageDropped, tmnxWlanGwSubIfPmPoolPartialUse, tmnxWlanGwBdCreated, tmnxWlanGwBdDeleted, tmnxWlanGwUeCreationFail, tmnxWlanGwUeReplacement, tmnxWlanGwGrpMemberUsageHigh
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events wlan-gw event</a> <i>keyword</i> <a href="#">generate</a> <i>boolean</i>
Tree	<a href="#">generate</a>

Introduced 16.0.R1  
Platforms All

### **repeat** *boolean*

Synopsis Repeat the log event until the condition is cleared  
Context **configure log log-events wlan-gw event** keyword **repeat** *boolean*  
Tree [repeat](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **severity** *keyword*

Synopsis Severity level associated with event type  
Context **configure log log-events wlan-gw event** keyword **severity** *keyword*  
Tree [severity](#)  
Options cleared, indeterminate, critical, major, minor, warning  
Introduced 16.0.R1  
Platforms All

### **specific-throttle** *boolean*

Synopsis Use parameters to throttle the specific event  
Context **configure log log-events wlan-gw event** keyword **specific-throttle** *boolean*  
Tree [specific-throttle](#)  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure log log-events wlan-gw event** keyword **specific-throttle-interval** *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200

Introduced 16.0.R1  
 Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
 Context **configure** [log](#) [log-events](#) [wlan-gw event](#) *keyword* [specific-throttle-limit](#) *number*  
 Tree [specific-throttle-limit](#)  
 Range 1 to 20000  
 Introduced 16.0.R1  
 Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
 Context **configure** [log](#) [log-events](#) [wlan-gw event](#) *keyword* [throttle](#) *boolean*  
 Tree [throttle](#)  
 Introduced 16.0.R1  
 Platforms All

### **wpp event** *keyword*

Synopsis Enter the **wpp** list instance  
 Context **configure** [log](#) [log-events](#) [wpp event](#) *keyword*  
 Tree [wpp](#)  
 Introduced 16.0.R1  
 Platforms All

### **event** *keyword*

Synopsis Log event as a trigger for one or more EHS handlers  
 Context **configure** [log](#) [log-events](#) [wpp event](#) *keyword*  
 Tree [wpp](#)  
 Options [tmnxWppPortalStatChanged](#), [tmnxWppHostAuthenticationFailed](#),  
[tmnxWppPortalUnreachable](#), [tmnxWppPortalGroupStatChanged](#),  
[tmnxWppPGHostAuthFailed](#)

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **generate** *boolean*

Synopsis	Generate log events when the event occurs
Context	<b>configure</b> <a href="#">log log-events wpp event keyword generate boolean</a>
Tree	<a href="#">generate</a>
Introduced	16.0.R1
Platforms	All

### **repeat** *boolean*

Synopsis	Repeat the log event until the condition is cleared
Context	<b>configure</b> <a href="#">log log-events wpp event keyword repeat boolean</a>
Tree	<a href="#">repeat</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **severity** *keyword*

Synopsis	Severity level associated with event type
Context	<b>configure</b> <a href="#">log log-events wpp event keyword severity keyword</a>
Tree	<a href="#">severity</a>
Options	cleared, indeterminate, critical, major, minor, warning
Introduced	16.0.R1
Platforms	All

### **specific-throttle** *boolean*

Synopsis	Use parameters to throttle the specific event
Context	<b>configure</b> <a href="#">log log-events wpp event keyword specific-throttle boolean</a>
Tree	<a href="#">specific-throttle</a>

Introduced 16.0.R1  
Platforms All

### **specific-throttle-interval** *number*

Synopsis Duration of the event specific throttling interval  
Context **configure** [log log-events wpp event keyword](#) [specific-throttle-interval](#) *number*  
Tree [specific-throttle-interval](#)  
Range 1 to 1200  
Introduced 16.0.R1  
Platforms All

### **specific-throttle-limit** *number*

Synopsis Throttle limit within which events can be logged  
Context **configure** [log log-events wpp event keyword](#) [specific-throttle-limit](#) *number*  
Tree [specific-throttle-limit](#)  
Range 1 to 20000  
Introduced 16.0.R1  
Platforms All

### **throttle** *boolean*

Synopsis Throttle log events of this type  
Context **configure** [log log-events wpp event keyword](#) [throttle](#) *boolean*  
Tree [throttle](#)  
Introduced 16.0.R1  
Platforms All

### **log-id** [[name](#)] *string*

Synopsis Enter the **log-id** list instance  
Context **configure** [log log-id](#) *string*  
Tree [log-id](#)  
Max. Instances 30

Introduced 16.0.R1  
Platforms All

### **[name]** *string*

Synopsis Log ID  
Context **configure log log-id string**  
Tree [log-id](#)  
String Length 1 to 64  
Notes This element is part of a list key.  
Introduced 21.2.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the log  
Context **configure log log-id string admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default enable  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure log log-id string description string**  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **destination**

Synopsis Enter the **destination** context



Context	<b>configure log log-id string destination</b>
Tree	<b>destination</b>
Description	Commands in this context specify where log event data is to be sent.
Introduced	16.0.R1
Platforms	All

## cli

Synopsis	Enable the <b>cli</b> context
Context	<b>configure log log-id string destination cli</b>
Tree	<b>cli</b>
Description	Commands in this context configure log events directed to any subscribed CLI session. Subscribe to a CLI log from within a CLI session using the <b>tools perform log subscribe-to log-id</b> command. Events are sent to the CLI session for the duration of the CLI session or until a <b>tools perform log unsubscribe-from</b> command is issued. A local circular memory log is maintained for CLI logs.
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

## max-entries *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this CLI log
Context	<b>configure log log-id string destination cli max-entries number</b>
Tree	<b>max-entries</b>
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

## console



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Send log events to the system console port
Context	<b>configure log log-id string destination console</b>
Tree	<a href="#">console</a>
Description	When specified, the system directs log events to the console port. If the console is not connected, the system drops all entries.
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

## file reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	File to send log events
Context	<b>configure log log-id string destination file reference</b>
Tree	<a href="#">file</a>
Description	This command specifies the file where the system directs log events.  When the command is modified, log files are not written to the new location until a rollover occurs or the log is manually cleared. Use the <b>clear log</b> command to force a rollover. Subsequent log entries are then written to the new location. If a rollover does not occur or the log is not cleared, the system continues to use the old location.
Reference	<b>configure log file string</b>
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

## memory

Synopsis	Enable the <b>memory</b> context
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Context	<b>configure log log-id string destination memory</b>
Tree	<b>memory</b>
Description	Commands in this context configure log events directed to a memory file. A memory file is a circular buffer. When the file is full, each new entry replaces the oldest entry in the log.
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

### **max-entries** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this memory log
Context	<b>configure log log-id string destination memory max-entries number</b>
Tree	<b>max-entries</b>
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

### **netconf**

Synopsis	Enable the <b>netconf</b> context
Context	<b>configure log log-id string destination netconf</b>
Tree	<b>netconf</b>
Description	Commands in this context configure log events directed to a NETCONF session as notifications. A NETCONF client can subscribe to a NETCONF log using the configured <b>netconf-stream</b> for the log in a subscription request. One or more NETCONF sessions can subscribe to a NETCONF log or stream.
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

**max-entries** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this NETCONF log
Context	<b>configure</b> <a href="#">log log-id string destination netconf max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	50 to 3000
Introduced	16.0.R1
Platforms	All

**snmp**

Synopsis	Enable the <b>snmp</b> context
Context	<b>configure</b> <a href="#">log log-id string destination snmp</a>
Tree	<a href="#">snmp</a>
Description	Commands in this context configure log events directed to the <b>snmp-trap-group</b> associated with the log ID. A local circular memory log is maintained for SNMP logs.
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

**max-entries** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in this SNMP log
Context	<b>configure</b> <a href="#">log log-id string destination snmp max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	50 to 3000
Default	100
Introduced	16.0.R1

Platforms All

## syslog reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Syslog collector to send log events
Context	<b>configure log log-id string destination syslog reference</b>
Tree	<a href="#">syslog</a>
Description	This command specifies the syslog collector to direct log events. To remain consistent with the standards governing syslog, messages to syslog are truncated to 1024 bytes.
Reference	<b>configure log syslog string</b>
Notes	The following elements are part of a choice: <b>cli</b> , <b>console</b> , <b>file</b> , <b>memory</b> , <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

## filter reference

Synopsis	Event filter policy with the log destination
Context	<b>configure log log-id string filter reference</b>
Tree	<a href="#">filter</a>
Reference	<b>configure log filter string</b>
Introduced	16.0.R1
Platforms	All

## netconf-stream string

Synopsis	Destination NETCONF stream name
Context	<b>configure log log-id string netconf-stream string</b>
Tree	<a href="#">netconf-stream</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **python-policy** *reference*

Synopsis	Python policy name
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **source**

Synopsis	Enter the <b>source</b> context
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a>
Tree	<a href="#">source</a>
Introduced	16.0.R1
Platforms	All

### **change** *boolean*

Synopsis	Collect log events from change event stream
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> <a href="#">change</a> <i>boolean</i>
Tree	<a href="#">change</a>
Introduced	16.0.R1
Platforms	All

### **debug** *boolean*

Synopsis	Collect log events from the debug event stream
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> <a href="#">debug</a> <i>boolean</i>
Tree	<a href="#">debug</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **main** *boolean*

Synopsis	Collect log events from the main event stream
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> <b>main</b> <i>boolean</i>
Tree	<a href="#">main</a>
Introduced	16.0.R1
Platforms	All

### **security** *boolean*

Synopsis	Collect log events from the security event stream
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a> <b>security</b> <i>boolean</i>
Tree	<a href="#">security</a>
Introduced	16.0.R1
Platforms	All

### **time-format** *keyword*

Synopsis	Time zone output for file log contents and syslog
Context	<b>configure</b> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">time-format</a> <i>keyword</i>
Tree	<a href="#">time-format</a>
Options	utc, local
Default	utc
Introduced	16.0.R1
Platforms	All

### **route-preference**

Synopsis	Enter the <b>route-preference</b> context
Context	<b>configure</b> <a href="#">log</a> <a href="#">route-preference</a>
Tree	<a href="#">route-preference</a>
Introduced	16.0.R1
Platforms	All

**primary** *keyword*

Synopsis	Primary routing preference for traffic that is generated for SNMP notifications and syslog messages
Context	<b>configure</b> <a href="#">log route-preference primary</a> <i>keyword</i>
Tree	<a href="#">primary</a>
Options	inband, outband
Default	outband
Introduced	16.0.R1
Platforms	All

**secondary** *keyword*

Synopsis	Secondary route preference for SNMP and syslog traffic
Context	<b>configure</b> <a href="#">log route-preference secondary</a> <i>keyword</i>
Tree	<a href="#">secondary</a>
Options	inband, outband, none
Default	inband
Introduced	16.0.R1
Platforms	All

**services-all-events**

Synopsis	Enter the <b>services-all-events</b> context
Context	<b>configure</b> <a href="#">log services-all-events</a>
Tree	<a href="#">services-all-events</a>
Introduced	19.10.R1
Platforms	All

**service** [[service-name](#)] *reference*

Synopsis	Add a list entry for <b>service</b>
Context	<b>configure</b> <a href="#">log services-all-events service</a> <i>reference</i>
Tree	<a href="#">service</a>
Introduced	19.10.R1
Platforms	All



**[service-name] reference**

Synopsis	Administrative service name
Context	<b>configure log services-all-events service reference</b>
Tree	<a href="#">service</a>
Reference	<b>configure service vprn string</b>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**snmp-trap-group [log-name] string**

Synopsis	Enter the <b>snmp-trap-group</b> list instance
Context	<b>configure log snmp-trap-group string</b>
Tree	<a href="#">snmp-trap-group</a>
Max. Instances	15
Introduced	16.0.R1
Platforms	All

**[log-name] string**

Synopsis	Log ID
Context	<b>configure log snmp-trap-group string</b>
Tree	<a href="#">snmp-trap-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure log snmp-trap-group string description string</b>
Tree	<a href="#">description</a>

---

String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**trap-target** [*name*] *string*

Synopsis	Enter the <b>trap-target</b> list instance
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i>
Tree	<a href="#">trap-target</a>
Max. Instances	25
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Trap target name
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i>
Tree	<a href="#">trap-target</a>
String Length	1 to 28
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the trap receiver
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**notify-community** *string*

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">notify-community</a> <i>string</i>
Tree	<a href="#">notify-community</a>
String Length	1 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**port** *number*

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	0   1 to 65535
Default	162
Introduced	16.0.R1
Platforms	All

**replay** *boolean*

Synopsis	Retransmit missed notifications
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">replay</a> <i>boolean</i>
Tree	<a href="#">replay</a>
Default	false

Introduced	16.0.R1
Platforms	All

### **security-level** *keyword*

Synopsis	Security level at which SNMP notification messages are sent to SNMP notification collector
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>security-level</b> <i>keyword</i>
Tree	<a href="#">security-level</a>
Options	no-auth-no-privacy, auth-no-privacy, privacy
Default	no-auth-no-privacy
Introduced	16.0.R1
Platforms	All

### **version** *keyword*

Synopsis	SNMP version to format notification messages sent to this SNMP notification collector
Context	<b>configure</b> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	snmpv1, snmpv2c, snmpv3
Default	snmpv3
Introduced	16.0.R1
Platforms	All

### **syslog** [[syslog-name](#)] *string*

Synopsis	Enter the <b>syslog</b> list instance
Context	<b>configure</b> <a href="#">log syslog</a> <i>string</i>
Tree	<a href="#">syslog</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	All

**[syslog-name]** *string*

Synopsis	Syslog name
Context	<b>configure log syslog</b> <i>string</i>
Tree	<a href="#">syslog</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the Syslog target host
Context	<b>configure log syslog</b> <i>string</i> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure log syslog</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**facility** *keyword*

Synopsis	Facility code for messages
Context	<b>configure log syslog</b> <i>string</i> <b>facility</b> <i>keyword</i>
Tree	<a href="#">facility</a>
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local7
Introduced	16.0.R1

Platforms All

## hostname

Synopsis Enter the **hostname** context

Context **configure log syslog** *string* **hostname**

Tree [hostname](#)

Description Commands in this context control how the HOSTNAME field of syslog messages is populated.

Introduced 23.7.R1

Platforms All

## use-system-name

Synopsis Enable the **use-system-name** context

Context **configure log syslog** *string* **hostname use-system-name**

Tree [use-system-name](#)

Description This command configures the system to use the system name configured with the **configure system name** command as the HOSTNAME field of syslog messages.

Do not use any spaces in the system name if it is being used for the syslog HOSTNAME.

Notes The following elements are part of a choice: **use-system-name** or **value**.

Introduced 23.7.R1

Platforms All

## value *string*

Synopsis Syslog HOSTNAME field value

Context **configure log syslog** *string* **hostname value** *string*

Tree [value](#)

Description This command configures the system to use a specified string as the HOSTNAME field of syslog messages.

Do not use any spaces in the string used for the syslog HOSTNAME.

String Length 1 to 255

Notes The following elements are part of a choice: **use-system-name** or **value**.

Introduced 23.7.R1

Platforms All

### **log-prefix** (*keyword* | *string*)

Synopsis String that is prepended to every log message sent to this target syslog host

Context **configure** **log syslog** *string* **log-prefix** (*keyword* | *string*)

Tree [log-prefix](#)

String Length 1 to 32

Options no-prefix

Default TMNX

Introduced 16.0.R1

Platforms All

### **port number**

Synopsis Destination port when sending syslog over UDP

Context **configure** **log syslog** *string* **port number**

Tree [port](#)

Range 0 | 1 to 65535

Default 514

Introduced 16.0.R1

Platforms All

### **severity keyword**

Synopsis Severity level threshold for the syslog message

Context **configure** **log syslog** *string* **severity keyword**

Tree [severity](#)

Options emergency, alert, critical, error, warning, notice, info, debug

Default info

Introduced 16.0.R1

Platforms All

**tls-client-profile** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	TLS client profile used to encrypt syslog communication
Context	<b>configure</b> <a href="#">log syslog</a> <i>string</i> <a href="#">tls-client-profile</a> <i>reference</i>
Tree	<a href="#">tls-client-profile</a>
Description	<p>This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.</p> <p>Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.</p> <p>When this command is unconfigured, the syslog messages are sent over UDP.</p>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">tls client-tls-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

**throttle-rate**

Synopsis	Enter the <b>throttle-rate</b> context
Context	<b>configure</b> <a href="#">log throttle-rate</a>
Tree	<a href="#">throttle-rate</a>
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Duration of an event throttling interval
Context	<b>configure</b> <a href="#">log throttle-rate</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 1200
Default	1
Introduced	16.0.R1
Platforms	All



**limit number**

Synopsis	Number of log events within the throttle interval
Context	<b>configure</b> <a href="#">log throttle-rate</a> <i>limit number</i>
Tree	<a href="#">limit</a>
Range	1 to 20000
Default	2000
Introduced	16.0.R1
Platforms	All

## 3.25 macsec commands

```
configure
- macsec
  - apply-groups reference
  - apply-groups-exclude reference
  - connectivity-association string
    - admin-state keyword
    - anysec boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - cipher-suite keyword
    - clear-tag-mode keyword
    - delay-protection boolean
    - description string
    - encryption-offset number
    - macsec-encrypt boolean
    - replay-protection boolean
    - replay-window-size number
  - static-cak
    - active-psk number
    - apply-groups reference
    - apply-groups-exclude reference
    - mka-hello-interval keyword
    - mka-key-server-priority number
    - pre-shared-key number
      - apply-groups reference
      - apply-groups-exclude reference
      - cak string
      - cak-name string
      - encryption-type keyword
  - mac-policy number
    - apply-groups reference
    - apply-groups-exclude reference
    - destination-mac-address string
```

### 3.25.1 macsec command descriptions

#### macsec

Synopsis	Enter the <b>macsec</b> context
Context	<b>configure macsec</b>
Tree	<a href="#">macsec</a>
Introduced	16.0.R1
Platforms	All

#### connectivity-association [[ca-name](#)] *string*

Synopsis	Enter the <b>connectivity-association</b> list instance
Context	<b>configure macsec connectivity-association</b> <i>string</i>
Tree	<a href="#">connectivity-association</a>
Introduced	16.0.R1
Platforms	All

#### [[ca-name](#)] *string*

Synopsis	Connectivity association name
Context	<b>configure macsec connectivity-association</b> <i>string</i>
Tree	<a href="#">connectivity-association</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### admin-state *keyword*

Synopsis	Administrative state of the connectivity association
Context	<b>configure macsec connectivity-association</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
 Platforms All

### **anysec** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Mark the CA for use by ANYsec encryption only

Context **configure** **macsec connectivity-association** *string anysec boolean*

Tree **anysec**

Description When configured to **true**, the system configures the Connectivity Association (CA) for exclusive use with ANYsec encryption.  
 The following MACsec commands cannot be configured while ANYsec is configured.

- **configure macsec connectivity-association clear-tag-mode**
- **configure macsec connectivity-association delay-protection**
- **configure macsec connectivity-association encryption-offset**
- **configure macsec connectivity-association macsec-encrypt**
- **configure macsec connectivity-association replay-window-size**
- **configure macsec mac-policy**

When configured to **false**, the system removes the CA.

Default false

Introduced 23.3.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **cipher-suite** *keyword*

Synopsis Data path encryption algorithm

Context **configure** **macsec connectivity-association** *string cipher-suite keyword*

Tree **cipher-suite**

Options gcm-aes-128, gcm-aes-256, gcm-aes-xpn-128, gcm-aes-xpn-256

Default gcm-aes-128

Introduced 16.0.R1

Platforms All

**clear-tag-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear tag mode for clear text before the SecTAG
Context	<b>configure</b> <b>macsec connectivity-association</b> <i>string</i> <b>clear-tag-mode</b> <i>keyword</i>
Tree	<b>clear-tag-mode</b>
Options	none, single-tag, dual-tag
Default	none
Introduced	16.0.R1
Platforms	All

**delay-protection** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable delay protection
Context	<b>configure</b> <b>macsec connectivity-association</b> <i>string</i> <b>delay-protection</b> <i>boolean</i>
Tree	<b>delay-protection</b>
Default	false
Introduced	20.10.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>macsec connectivity-association</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**encryption-offset** *number*

Synopsis	Confidentiality (encryption) offset
Context	<b>configure</b> <b>macsec connectivity-association</b> <i>string</i> <b>encryption-offset</b> <i>number</i>
Tree	<a href="#">encryption-offset</a>
Range	0   30   50
Default	0
Introduced	16.0.R1
Platforms	All

**macsec-encrypt** *boolean*

Synopsis	Encrypt and authenticate all PDUs
Context	<b>configure</b> <b>macsec connectivity-association</b> <i>string</i> <b>macsec-encrypt</b> <i>boolean</i>
Tree	<a href="#">macsec-encrypt</a>
Description	When configured to <b>true</b> , all PDUs are encrypted and authenticated. When configured to <b>false</b> , all PDUs are transmitted in clear text, however, they are still authenticated and have the trailing ICV.
Default	true
Introduced	16.0.R1
Platforms	All

**replay-protection** *boolean*

Synopsis	Discard packet when not within the replay window size
Context	<b>configure</b> <b>macsec connectivity-association</b> <i>string</i> <b>replay-protection</b> <i>boolean</i>
Tree	<a href="#">replay-protection</a>
Description	When configured to <b>true</b> , replay protection is enabled and packets are discarded when they are not within the replay window size.  With replay protection, the sequence of the ID number of received packets is checked. If a packet arrives out of sequence and the difference between the packet IDs exceeds the replay protection window size, the packet is counted by the receiving port and discarded. For example if the replay protection window size is configured to five and a packet with an ID of 1006 arrives on the receiving link immediately following the packet assigned an ID of 1000, the packet with ID 1006 is counted and discarded because it is outside the parameter of the window size.  Replay protection is particularly useful for addressing man-in-the-middle attacks. A packet that is replayed by a man-in-the-middle attacker on the Ethernet link that arrives

on the receiving link out of sequence will be detected and dropped instead of forwarded through the network.

Replay protection should not be enabled in cases where packets are expected to arrive out of order.

When configured to **false**, replay protection is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **replay-window-size** *number*

Synopsis	Replay protection window size
Context	<b>configure macsec connectivity-association</b> <i>string</i> <b>replay-window-size</b> <i>number</i>
Tree	<b>replay-window-size</b>
Range	0 to 4294967294
Default	0
Introduced	16.0.R1
Platforms	All

### **static-cak**

Synopsis	Enter the <b>static-cak</b> context
Context	<b>configure macsec connectivity-association</b> <i>string</i> <b>static-cak</b>
Tree	<b>static-cak</b>
Description	Commands in this context configure the Connectivity Association Key (CAK) to manage the MACsec Key Agreement (MKA).
Introduced	16.0.R1
Platforms	All

### **active-psk** *number*

Synopsis	Active pre-shared-key (PSK)
Context	<b>configure macsec connectivity-association</b> <i>string</i> <b>static-cak</b> <b>active-psk</b> <i>number</i>
Tree	<b>active-psk</b>
Description	This command specifies the active transmitting PSK. If two PSKs are configured, the arriving MACsec MKA can be decrypted via CAKs using either PSK; however, only the active PSK is used for TX encryption of MKA PDUs.

Range	1 to 2
Default	1
Introduced	16.0.R1
Platforms	All

### **mka-hello-interval** *keyword*

Synopsis	MKA hello interval
Context	<b>configure</b> <b>macsec</b> <b>connectivity-association</b> <i>string</i> <b>static-cak</b> <b>mka-hello-interval</b> <i>keyword</i>
Tree	<a href="#">mka-hello-interval</a>
Description	This command configures the interval at which MKA hello packets are sent or received for the connectivity association.
Options	1, 2, 3, 4, 5, 6, 500ms
Default	2
Introduced	19.5.R1
Platforms	All

### **mka-key-server-priority** *number*

Synopsis	Key server priority used by the MKA protocol
Context	<b>configure</b> <b>macsec</b> <b>connectivity-association</b> <i>string</i> <b>static-cak</b> <b>mka-key-server-priority</b> <i>number</i>
Tree	<a href="#">mka-key-server-priority</a>
Description	This command specifies the key server priority used by the MACsec Key Agreement (MKA) protocol to select the key server when MACsec is enabled using static connectivity association key (CAK) security mode.
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

### **pre-shared-key** [**psk-id**] *number*

Synopsis	Enter the <b>pre-shared-key</b> list instance
Context	<b>configure</b> <b>macsec</b> <b>connectivity-association</b> <i>string</i> <b>static-cak</b> <b>pre-shared-key</b> <i>number</i>
Tree	<a href="#">pre-shared-key</a>



Description	<p>Commands in this context configure pre-shared key attributes to enable MACsec using static connectivity association key (CAK) security mode.</p> <p>A pre-shared key includes a connectivity association key name (CKN) and a connectivity association key (CAK). The pre-shared key, the CKN and the CAK, must match on both ends of a link.</p> <p>A pre-shared key is configured on both devices at each end of a point-to-point link to enable MACsec via static CAK security mode. The MACsec Key Agreement (MKA) protocol is enabled after the successful MKA liveness negotiation.</p> <p>The encryption type is used to encrypt the SAK and authenticate the MKA packet. The symmetric encryption key SAK (Security Association Key) must be encrypted (wrapped) via the MKA protocols. The AES key is derived from the pre-shared-key.</p>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

### **[psk-id]** *number*

Synopsis	Pre-shared-key (PSK) ID
Context	<b>configure macsec connectivity-association string static-cak pre-shared-key number</b>
Tree	<a href="#">pre-shared-key</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **cak** *string*

Synopsis	Connectivity association key (CAK) for the PSK
Context	<b>configure macsec connectivity-association string static-cak pre-shared-key number cak string</b>
Tree	<a href="#">cak</a>
Description	<p>This command specifies the connectivity association key (CAK) for the pre-shared key. Two values are derived from the CAK:</p> <ul style="list-style-type: none"> <li>• Key Encryption Key (KEK), used to encrypt the MKA and SAK (symmetric key used for data path PDUs) distributed between all members</li> <li>• Integrity Check Value (ICV), used to authenticate the MKA and SAK PDUs distributed between all members</li> </ul>
String Length	1 to 71

Introduced 16.0.R1  
Platforms All

### **cak-name** *string*

Synopsis Connectivity association key name (CKN) for the PSK  
Context **configure** **macsec** **connectivity-association** *string* **static-cak** **pre-shared-key** *number*  
**cak-name** *string*  
Tree **cak-name**  
Description This command specifies the connectivity association key name (CKN) for the pre-shared key. The CKN is appended to the MKA for identification of the appropriate CAK by the peer.  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms All

### **encryption-type** *keyword*

Synopsis Encryption for authentication of the MKA packet  
Context **configure** **macsec** **connectivity-association** *string* **static-cak** **pre-shared-key** *number*  
**encryption-type** *keyword*  
Tree **encryption-type**  
Options aes-128-cmac, aes-256-cmac  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

### **mac-policy** [**mac-policy-id**] *number*

Synopsis Enter the **mac-policy** list instance  
Context **configure** **macsec** **mac-policy** *number*  
Tree **mac-policy**  
Introduced 16.0.R5  
Platforms All

**[mac-policy-id] number**

Synopsis	MAC address policy ID
Context	<b>configure macsec mac-policy number</b>
Tree	<a href="#">mac-policy</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**destination-mac-address [dest-mac-addr] string**

Synopsis	Add a list entry for <b>destination-mac-address</b>
Context	<b>configure macsec mac-policy number destination-mac-address string</b>
Tree	<a href="#">destination-mac-address</a>
Max. Instances	5
Introduced	16.0.R5
Platforms	All

**[dest-mac-addr] string**

Synopsis	Destination MAC address added to the MAC policy
Context	<b>configure macsec mac-policy number destination-mac-address string</b>
Tree	<a href="#">destination-mac-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

## 3.26 mcac commands

```

configure
- mcac
  - apply-groups reference
  - apply-groups-exclude reference
  - interface-policy string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - description string
  - policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - bundle string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone) source (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - priority-class keyword
      - type keyword
    - description string
  - mc-constraints
    - lag-port-down string number-down number
      - apply-groups reference
      - apply-groups-exclude reference
      - level number
    - level number
      - apply-groups reference
      - apply-groups-exclude reference
      - bandwidth number
      - use-lag-port-weight boolean
  - default-action keyword
  - description string

```

### 3.26.1 mcac command descriptions

#### mcac

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure mcac</b>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

#### interface-policy [[policy-name](#)] *string*

Synopsis	Enter the <b>interface-policy</b> list instance
Context	<b>configure mcac interface-policy</b> <i>string</i>
Tree	<a href="#">interface-policy</a>
Introduced	16.0.R1
Platforms	All

#### [\[policy-name\]](#) *string*

Synopsis	MCAC interface policy name
Context	<b>configure mcac interface-policy</b> <i>string</i>
Tree	<a href="#">interface-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the MCAC interface policy
Context	<b>configure mcac interface-policy</b> <i>string admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable

---

Introduced	16.0.R1
Platforms	All

## **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure mcac interface-policy string bandwidth</b>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	All

## **mandatory** (*number | keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure mcac interface-policy string bandwidth mandatory</b> ( <i>number   keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

## **total** (*number | keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure mcac interface-policy string bandwidth total</b> ( <i>number   keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure mcac interface-policy</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**policy** [[policy-name](#)] *string*

Synopsis	Enter the <b>policy</b> list instance
Context	<b>configure mcac policy</b> <i>string</i>
Tree	<a href="#">policy</a>
Introduced	16.0.R1
Platforms	All

**[policy-name]** *string*

Synopsis	Name of the global MCAC channel definition policy
Context	<b>configure mcac policy</b> <i>string</i>
Tree	<a href="#">policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bundle** [[bundle-name](#)] *string*

Synopsis	Enter the <b>bundle</b> list instance
Context	<b>configure mcac policy</b> <i>string bundle string</i>
Tree	<a href="#">bundle</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	All

**[bundle-name]** *string*

Synopsis	Multicast policy bundle name
Context	<b>configure mcac policy string bundle string</b>
Tree	<b>bundle</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the policy bundle
Context	<b>configure mcac policy string bundle string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**bandwidth** *number*

Synopsis	Maximum bandwidth for the MCAC policy bundle
Context	<b>configure mcac policy string bundle string bandwidth number</b>
Tree	<b>bandwidth</b>
Range	1 to 4294967295
Units	kilobps
Default	100
Introduced	16.0.R1
Platforms	All

**channel** **start** (*ipv4-address-no-zone | ipv6-address-no-zone*) **end** (*ipv4-address-no-zone | ipv6-address-no-zone*) **source** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Enter the <b>channel</b> list instance
----------	--



Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>channel</b>
Introduced	16.0.R1
Platforms	All

### **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Starting multicast IP address for a multicast stream
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Ending multicast IP address for a multicast stream
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **source** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the multicast IP stream
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>channel</b>
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

**bandwidth** *number*

Synopsis	Bandwidth required by the channel
Context	<b>configure mcac policy string bundle string channel start</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>bandwidth</b> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	10 to 10000000
Units	kilobps
Default	10
Introduced	16.0.R1
Platforms	All

**priority-class** *keyword*

Synopsis	Channel classification for when LAG ports change state
Context	<b>configure mcac policy string bundle string channel start</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>priority-class</b> <i>keyword</i>
Tree	<a href="#">priority-class</a>
Options	low, high
Default	low
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Channel type
Context	<b>configure mcac policy string bundle string channel start</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>source</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	optional, mandatory
Default	optional

Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [mcac](#) [policy](#) *string* [bundle](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **mc-constraints**

Synopsis Enter the **mc-constraints** context  
 Context **configure** [mcac](#) [policy](#) *string* [bundle](#) *string* [mc-constraints](#)  
 Tree [mc-constraints](#)  
 Introduced 16.0.R1  
 Platforms All

### **lag-port-down** [[lag-name](#)] *string* [number-down](#) *number*

Synopsis Enter the **lag-port-down** list instance  
 Context **configure** [mcac](#) [policy](#) *string* [bundle](#) *string* [mc-constraints](#) [lag-port-down](#) *string* [number-down](#) *number*  
 Tree [lag-port-down](#)  
 Introduced 16.0.R1  
 Platforms All

### **[lag-name]** *string*

Synopsis LAG name  
 Context **configure** [mcac](#) [policy](#) *string* [bundle](#) *string* [mc-constraints](#) [lag-port-down](#) *string* [number-down](#) *number*  
 Tree [lag-port-down](#)  
 String Length 1 to 27

Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **number-down** *number*

Synopsis	Number of LAG ports that are down
Context	<b>configure mcac policy</b> <i>string bundle string mc-constraints lag-port-down string number-down number</i>
Tree	<a href="#">lag-port-down</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level** *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure mcac policy</b> <i>string bundle string mc-constraints lag-port-down string number-down number level number</i>
Tree	<a href="#">level</a>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure mcac policy</b> <i>string bundle string mc-constraints level number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All

**[level-id] *number***

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>mc-constraints level</b> <i>number</i>
Tree	<b>level</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bandwidth *number***

Synopsis	Bandwidth available for this level
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>mc-constraints level</b> <i>number</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**use-lag-port-weight *boolean***

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure mcac policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>mc-constraints use-lag-port-weight</b> <i>boolean</i>
Tree	<b>use-lag-port-weight</b>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

**default-action** *keyword*

Synopsis	Default action for the MCAC policy
Context	<b>configure mcac policy</b> <i>string</i> <b>default-action</b> <i>keyword</i>
Tree	<b>default-action</b>
Options	accept, discard
Default	discard
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure mcac policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## 3.27 mirror commands

```

configure
- mirror
- apply-groups reference
- apply-groups-exclude reference
- global-sampling-rate number
- mirror-dest string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- encap
- layer-3-encap
- apply-groups reference
- apply-groups-exclude reference
- direction-bit boolean
- gateway
- apply-groups reference
- apply-groups-exclude reference
- ip-address
- destination string
- source string
- udp-port
- destination number
- source number
- header-type keyword
- router-instance string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- description string
- revert-time (number | keyword)
- fc keyword
- pcap string
- apply-groups reference
- apply-groups-exclude reference
- file-url string
- per-lag-hashing boolean
- remote-source
- far-end string
- apply-groups reference
- apply-groups-exclude reference
- icb boolean
- ing-vc-label number
- label-signaling keyword
- vc-id number
- spoke-sdp string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- control-word boolean
- egress
- vc-label number
- endpoint
- icb boolean
- name reference
- ingress
- l2tpv3
- cookie
- cookie1 string

```

configure mirror mirror-dest remote-source spoke-sdp ingress l2tpv3 cookie cookie2

```

    - cookie2 string
      - vc-label number
- sampling-rate number
- sap string
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - ip-mirror
    - mac
      - destination string
      - source string
    - qos
      - sap-egress
        - policy-name reference
        - port-redirect-group
          - group-name reference
          - instance number
  - endpoint reference
- service-id number
- slice-size number
- spoke-sdp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - control-word boolean
  - egress
    - l2tpv3
      - cookie string
      - vc-label number
    - endpoint
      - icb boolean
      - name reference
      - precedence (number | keyword)
  - ingress
    - vc-label number
- type keyword
- use-global-sampling-rate boolean
- mirror-source string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - ipv6-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - mac-filter reference
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
  - port string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress boolean
    - ingress boolean
  - sap string
    - apply-groups reference
    - apply-groups-exclude reference
    - egress boolean
    - ingress boolean
- subscriber string

```



---

configure mirror mirror-source subscriber apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **egress** *boolean*
- **fc** *keyword*
- **host-type** *keyword*
- **ingress** *boolean*
- **ip-address** *string*
- **ip-family** *keyword*
- **mac-address** *string*
- **sap-id** *string*
- **sla-profile** *string*

### 3.27.1 mirror command descriptions

#### mirror

Synopsis	Enter the <b>mirror</b> context
Context	<b>configure mirror</b>
Tree	<a href="#">mirror</a>
Introduced	16.0.R1
Platforms	All

#### global-sampling-rate *number*

Synopsis	System wide global sampling rate
Context	<b>configure mirror global-sampling-rate</b> <i>number</i>
Tree	<a href="#">global-sampling-rate</a>
Description	<p>This command configures the global sampling rate. The global sampling rate provides a higher sampling rate than the sampling rate specified on the mirror destination. When set, this command applies to all mirror destination services that have the <b>use-global-sampling-rate</b> command configured.</p> <p>The global sampling rate takes precedence over the rate specified on the mirror destination. This means that when this command and the <b>configure mirror mirror-dest sampling-rate</b> are configured under the same mirror destination, the system automatically samples using the higher rate configured with this command and ignores the lower rate configured with the <b>sampling-rate</b> command.</p> <p>When unconfigured, no mirror destinations are associated to a global sampling rate and all mirror destinations mirror at the full rate, which means every packet is mirrored unless a mirror destination rate is specified.</p>
Range	0   2 to 255
Default	0
Introduced	22.10.R1
Platforms	All

#### mirror-dest [[service-name](#)] *string*

Synopsis	Enter the <b>mirror-dest</b> list instance
Context	<b>configure mirror mirror-dest</b> <i>string</i>
Tree	<a href="#">mirror-dest</a>

Max. Instances	255
Introduced	16.0.R1
Platforms	All

**[service-name] string**

Synopsis	Administrative service name
Context	<b>configure mirror mirror-dest string</b>
Tree	<a href="#">mirror-dest</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the service
Context	<b>configure mirror mirror-dest string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure mirror mirror-dest string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## encap

Synopsis	Enter the <b>encap</b> context
Context	<b>configure mirror mirror-dest string encap</b>
Tree	<a href="#">encap</a>
Introduced	16.0.R1
Platforms	All

## layer-3-encap

Synopsis	Enable the <b>layer-3-encap</b> context
Context	<b>configure mirror mirror-dest string encap layer-3-encap</b>
Tree	<a href="#">layer-3-encap</a>
Introduced	16.0.R1
Platforms	All

## direction-bit *boolean*

Synopsis	Use the highest bit to specify traffic flow direction
Context	<b>configure mirror mirror-dest string encap layer-3-encap direction-bit <i>boolean</i></b>
Tree	<a href="#">direction-bit</a>
Default	false
Introduced	16.0.R1
Platforms	All

## gateway

Synopsis	Enable the <b>gateway</b> context
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway</b>
Tree	<a href="#">gateway</a>
Introduced	16.0.R1
Platforms	All

## ip-address

Synopsis	Enter the <b>ip-address</b> context
----------	-------------------------------------

---

Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway ip-address</b>
Tree	<a href="#">ip-address</a>
Introduced	16.0.R1
Platforms	All

### **destination string**

Synopsis	IPv4 destination address for the gateway
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway ip-address destination string</b>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

### **source string**

Synopsis	IPv4 source address for the gateway
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway ip-address source string</b>
Tree	<a href="#">source</a>
Introduced	16.0.R1
Platforms	All

### **udp-port**

Synopsis	Enter the <b>udp-port</b> context
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway udp-port</b>
Tree	<a href="#">udp-port</a>
Introduced	16.0.R1
Platforms	All

### **destination number**

Synopsis	UDP destination port to use with the gateway
Context	<b>configure mirror mirror-dest string encap layer-3-encap gateway udp-port destination number</b>

Tree	<a href="#">destination</a>
Range	0   1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

### **source number**

Synopsis	UDP source port to use with the gateway
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">encap</a> <a href="#">layer-3-encap</a> <a href="#">gateway</a> <a href="#">udp-port</a> <a href="#">source</a> <i>number</i>
Tree	<a href="#">source</a>
Range	0   1 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

### **header-type keyword**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Header type for Layer 3 encapsulation
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">encap</a> <a href="#">layer-3-encap</a> <a href="#">header-type</a> <i>keyword</i>
Tree	<a href="#">header-type</a>
Options	ip-udp-shim, ip-gre, ip-udp-shim-sampled
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **router-instance string**

Synopsis	Router instance to use with routed encapsulation
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">encap</a> <a href="#">layer-3-encap</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>

Default	Base
Introduced	16.0.R1
Platforms	All

**endpoint** *[name]* *string*

Synopsis	Enter the <b>endpoint</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>endpoint</b> <i>string</i>
Tree	<b>endpoint</b>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Service endpoint name
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>endpoint</b> <i>string</i>
Tree	<b>endpoint</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>endpoint</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**revert-time** (*number* | *keyword*)

Synopsis	Time to wait before reverting back to primary spoke SDP
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>endpoint</b> <i>string</i> <b>revert-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>revert-time</b>
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class for destination traffic
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R1
Platforms	All

**pcap** [*session-name*] *string*

Synopsis	Enter the <b>pcap</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>pcap</b> <i>string</i>
Tree	<b>pcap</b>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[session-name]** *string*

Synopsis	PCAP session name
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>pcap</b> <i>string</i>



Tree	<a href="#">pcap</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **file-url string**

Synopsis	URL and file name for packet capture transfer
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">pcap</a> <i>string</i> <a href="#">file-url</a> <i>string</i>
Tree	<a href="#">file-url</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

### **per-lag-hashing boolean**

Synopsis	Enable per-LAG hashing on the mirror destination
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">per-lag-hashing</a> <i>boolean</i>
Tree	<a href="#">per-lag-hashing</a>
Description	<p>When configured to <b>true</b>, the router enables the use of all link members of the mirror destination SAP or SDP of type LAG. The hashing to link members are based on IP flows.</p> <p>When configured to <b>false</b>, the router disables per-LAG hashing. All mirrored packets sent to a SAP or SDP of type LAG, are sent to only one of the LAG link members. If the link member to which the mirrored packets are being sent fails, another link member takes over and provides mirrored packet forwarding. Although no hashing is performed, resiliency is still provided by this next link member.</p>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **remote-source**

Synopsis	Enable the <b>remote-source</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a>
Tree	<a href="#">remote-source</a>

Introduced 16.0.R1  
 Platforms All

### **far-end** [*far-end-addr*] *string*

Synopsis Enter the **far-end** list instance  
 Context **configure** *mirror mirror-dest string remote-source far-end string*  
 Tree *far-end*  
 Introduced 16.0.R1  
 Platforms All

### **[far-end-addr]** *string*

Synopsis Far end IP address  
 Context **configure** *mirror mirror-dest string remote-source far-end string*  
 Tree *far-end*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **icb** *boolean*

Synopsis Remote source as an inter-chassis backup  
 Context **configure** *mirror mirror-dest string remote-source far-end string icb boolean*  
 Tree *icb*  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ing-vc-label** *number*

Synopsis Ingress virtual circuit label  
 Context **configure** *mirror mirror-dest string remote-source far-end string ing-vc-label number*  
 Tree *ing-vc-label*  
 Range 32 to 18431

Notes	The following elements are part of a choice: <b>ing-vc-label</b> or <b>label-signaling</b> .
Introduced	16.0.R1
Platforms	All

### **label-signaling** *keyword*

Synopsis	Protocol to obtain the ingress labels
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>far-end</b> <i>string</i> <b>label-signaling</b> <i>keyword</i>
Tree	<b>label-signaling</b>
Options	tldp
Default	tldp
Notes	The following elements are part of a choice: <b>ing-vc-label</b> or <b>label-signaling</b> .
Introduced	16.0.R1
Platforms	All

### **vc-id** *number*

Synopsis	Virtual circuit ID associated with the remote source
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>far-end</b> <i>string</i> <b>vc-id</b> <i>number</i>
Tree	<b>vc-id</b>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **spoke-sdp** [**sdp-bind-id**] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
Introduced	16.0.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP ID number
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the service SDP binding
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**control-word** *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>remote-source</b> <b>spoke-sdp</b> <i>string</i> <b>control-word</b> <i>boolean</i>
Tree	<b>control-word</b>
Description	When configured to <b>true</b> , this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type <b>ether</b> . When configured to <b>false</b> , this command disables the PW control word.
Default	false
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

## endpoint

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a>
Tree	<a href="#">endpoint</a>
Introduced	16.0.R1
Platforms	All

## icb *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a> <a href="#">icb</a> <i>boolean</i>

Tree	<a href="#">icb</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **name** *reference*

Synopsis	SAP-associated endpoint name
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint name</a> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

### **I2tpv3**

Synopsis	Enter the <b>I2tpv3</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">I2tpv3</a>
Tree	<a href="#">I2tpv3</a>
Introduced	16.0.R1
Platforms	All

### **cookie**

Synopsis	Enter the <b>cookie</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">remote-source</a> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">I2tpv3</a> <a href="#">cookie</a>

Tree	<a href="#">cookie</a>
Introduced	16.0.R1
Platforms	All

**cookie1 string**

Synopsis	Value of the first cookie for the tunnel
Context	<a href="#">configure mirror mirror-dest string remote-source spoke-sdp string ingress l2tpv3 cookie cookie1 string</a>
Tree	<a href="#">cookie1</a>
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

**cookie2 string**

Synopsis	Value of the second cookie for the tunnel
Context	<a href="#">configure mirror mirror-dest string remote-source spoke-sdp string ingress l2tpv3 cookie cookie2 string</a>
Tree	<a href="#">cookie2</a>
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

**vc-label number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	<a href="#">configure mirror mirror-dest string remote-source spoke-sdp string ingress vc-label number</a>
Tree	<a href="#">vc-label</a>
Range	32 to 18431
Introduced	16.0.R1
Platforms	All

**sampling-rate** *number*

Synopsis	Sampling rate
Context	<b>configure mirror mirror-dest string sampling-rate number</b>
Tree	<b>sampling-rate</b>
Description	This command configures the packet sampling rate value for mirrored traffic and is supported with mirror source configurations. The sampling rate is common to all endpoints on a given line card FP per mirror destination service.
Range	256 to 10000
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sap** [**sap-id**] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure mirror mirror-dest string sap string</b>
Tree	<b>sap</b>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure mirror mirror-dest string sap string</b>
Tree	<b>sap</b>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure mirror mirror-dest string sap string egress</b>



Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## ip-mirror

Synopsis	Enter the <b>ip-mirror</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">ip-mirror</a>
Tree	<a href="#">ip-mirror</a>
Introduced	16.0.R1
Platforms	All

## mac

Synopsis	Enter the <b>mac</b> context
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">ip-mirror</a> <a href="#">mac</a>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	All

## destination *string*

Synopsis	Destination MAC address
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">ip-mirror</a> <a href="#">mac</a> <a href="#">destination</a> <i>string</i>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

## source *string*

Synopsis	Source MAC address
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">ip-mirror</a> <a href="#">mac</a> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure mirror mirror-dest string sap string egress qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	All

## sap-egress

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure mirror mirror-dest string sap string egress qos sap-egress</b>
Tree	<b>sap-egress</b>
Introduced	16.0.R1
Platforms	All

## policy-name *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure mirror mirror-dest string sap string egress qos sap-egress policy-name <i>reference</i></b>
Tree	<b>policy-name</b>
Reference	<b>configure qos sap-egress string</b>
Introduced	16.0.R1
Platforms	All

## port-redirect-group

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure mirror mirror-dest string sap string egress qos sap-egress port-redirect-group</b>
Tree	<b>port-redirect-group</b>
Introduced	16.0.R1
Platforms	All

**group-name** *reference*

Synopsis	Name of the queue group redirect list policy
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**instance** *number*

Synopsis	Port queue group instance
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**endpoint** *reference*

Synopsis	Service endpoint name
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">endpoint</a> <i>reference</i>
Tree	<a href="#">endpoint</a>
Reference	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**service-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">service-id</a> <i>number</i>

Tree	<a href="#">service-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

### **slice-size** *number*

Synopsis	Maximum size of the transmitted mirrored frame
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">slice-size</a> <i>number</i>
Tree	<a href="#">slice-size</a>
Range	0   128 to 9216
Default	0
Introduced	16.0.R1
Platforms	All

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
Introduced	16.0.R1
Platforms	All

### **[sdp-bind-id]** *string*

Synopsis	SDP ID number
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-dest</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the service SDP binding
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**control-word** *boolean*

Synopsis	Enable the PW control word on spoke SDPs
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>control-word</b> <i>boolean</i>
Tree	<b>control-word</b>
Description	When configured to <b>true</b> , this command enables the PW control word on spoke SDPs that are part of a mirror destination. The control word must be enabled to allow MPLS-TP OAM on spoke SDP and is only valid for spoke SDPs that are part of a mirror service of type <b>ether</b> .  When configured to <b>false</b> , this command disables the PW control word.
Default	false
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	All

**I2tpv3**

Synopsis	Enter the <b>I2tpv3</b> context
Context	<b>configure</b> <b>mirror</b> <b>mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress</b> <b>I2tpv3</b>
Tree	<b>I2tpv3</b>

Introduced 16.0.R1  
 Platforms All

### **cookie string**

Synopsis RX or TX cookie for L2TPv3 spoke SDPs  
 Context **configure** [mirror mirror-dest string spoke-sdp string egress l2tpv3 cookie string](#)  
 Tree [cookie](#)  
 String Length 18 to 23  
 Introduced 16.0.R1  
 Platforms All

### **vc-label number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis MPLS VC label that sends packets to the far end device  
 Context **configure** [mirror mirror-dest string spoke-sdp string egress vc-label number](#)  
 Tree [vc-label](#)  
 Range 16 to 1048575  
 Introduced 16.0.R1  
 Platforms All

### **endpoint**

Synopsis Enter the **endpoint** context  
 Context **configure** [mirror mirror-dest string spoke-sdp string endpoint](#)  
 Tree [endpoint](#)  
 Introduced 16.0.R1  
 Platforms All

**icb boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	<b>configure mirror mirror-dest string spoke-sdp string endpoint icb boolean</b>
Tree	<b>icb</b>
Default	false
Introduced	16.0.R1
Platforms	All

**name reference**

Synopsis	Endpoint name associated with the SAP
Context	<b>configure mirror mirror-dest string spoke-sdp string endpoint name reference</b>
Tree	<b>name</b>
Reference	<b>configure mirror mirror-dest string endpoint string</b>
Introduced	16.0.R1
Platforms	All

**precedence (number | keyword)**

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	<b>configure mirror mirror-dest string spoke-sdp string endpoint precedence (number   keyword)</b>
Tree	<b>precedence</b>
Range	1 to 4
Options	primary
Default	4
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
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Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress</b>
Tree	<b>ingress</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vc-label** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS VC label that sends packets to the far end device
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress</b> <b>vc-label</b> <i>number</i>
Tree	<b>vc-label</b>
Range	32 to 18431
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **type** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mirror type information
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	ether, ip-only
Default	ether
Introduced	16.0.R1
Platforms	All

### **use-global-sampling-rate** *boolean*

Synopsis	Enables global sampling rate by mirror destination
Context	<b>configure mirror mirror-dest</b> <i>string</i> <b>use-global-sampling-rate</b> <i>boolean</i>
Tree	<b>use-global-sampling-rate</b>



Description	When configured to <b>true</b> , this command configures each mirror destination service to use the global sampling rate, which allows a single high sampling rate for the entire system.  When configured to <b>false</b> , the mirror destination mirrors at the full rate (all packets) or mirrors based on the sampling rate for the mirror destination if the <b>sampling-rate</b> command is configured.
Default	false
Introduced	22.10.R1
Platforms	All

### **mirror-source** [[service-name](#)] *string*

Synopsis	Enter the <b>mirror-source</b> list instance
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-source</a> <i>string</i>
Tree	<a href="#">mirror-source</a>
Introduced	19.10.R1
Platforms	All

### **[service-name]** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-source</a> <i>string</i>
Tree	<a href="#">mirror-source</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the mirror service
Context	<b>configure</b> <a href="#">mirror</a> <a href="#">mirror-source</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1

Platforms All

### **ip-filter** [**filter-name**] *reference*

Synopsis Enter the **ip-filter** list instance  
 Context **configure mirror mirror-source** *string ip-filter reference*  
 Tree [ip-filter](#)  
 Introduced 19.10.R1  
 Platforms All

### **[filter-name]** *reference*

Synopsis IP filter name  
 Context **configure mirror mirror-source** *string ip-filter reference*  
 Tree [ip-filter](#)  
 Reference **configure filter ip-filter** *string*  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms All

### **entry** [**entry-id**] *number*

Synopsis Add a list entry for **entry**  
 Context **configure mirror mirror-source** *string ip-filter reference entry number*  
 Tree [entry](#)  
 Min. 1  
 Instances  
 Introduced 19.10.R1  
 Platforms All

### **[entry-id]** *number*

Synopsis IP filter entry ID  
 Context **configure mirror mirror-source** *string ip-filter reference entry number*  
 Tree [entry](#)

Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **ipv6-filter** [[filter-name](#)] *reference*

Synopsis	Enter the <b>ipv6-filter</b> list instance
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ipv6-filter</a> <i>reference</i>
Tree	<a href="#">ipv6-filter</a>
Introduced	19.10.R1
Platforms	All

### **[filter-name]** *reference*

Synopsis	IPv6 filter name
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ipv6-filter</a> <i>reference</i>
Tree	<a href="#">ipv6-filter</a>
Reference	<b>configure filter</b> <a href="#">ipv6-filter</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **entry** [[entry-id](#)] *number*

Synopsis	Add a list entry for <b>entry</b>
Context	<b>configure mirror mirror-source</b> <i>string</i> <a href="#">ipv6-filter</a> <i>reference</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Min. Instances	1
Introduced	19.10.R1
Platforms	All

**[entry-id] number**

Synopsis	IPv6 filter entry ID
Context	<b>configure mirror mirror-source</b> <i>string</i> <b>ipv6-filter</b> <i>reference</i> <b>entry</b> <i>number</i>
Tree	<b>entry</b>
Range	1 to 2097151
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**mac-filter [filter-name] reference**

Synopsis	Enter the <b>mac-filter</b> list instance
Context	<b>configure mirror mirror-source</b> <i>string</i> <b>mac-filter</b> <i>reference</i>
Tree	<b>mac-filter</b>
Introduced	19.10.R1
Platforms	All

**[filter-name] reference**

Synopsis	MAC filter name
Context	<b>configure mirror mirror-source</b> <i>string</i> <b>mac-filter</b> <i>reference</i>
Tree	<b>mac-filter</b>
Reference	<b>configure filter mac-filter</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**entry [entry-id] number**

Synopsis	Add a list entry for <b>entry</b>
Context	<b>configure mirror mirror-source</b> <i>string</i> <b>mac-filter</b> <i>reference</i> <b>entry</b> <i>number</i>
Tree	<b>entry</b>
Min.	1
Instances	
Introduced	19.10.R1

Platforms All

### **[entry-id]** *number*

Synopsis MAC filter entry ID  
Context **configure mirror mirror-source** *string mac-filter reference entry number*  
Tree [entry](#)  
Range 1 to 2097151  
Notes This element is part of a list key.  
Introduced 19.10.R1  
Platforms All

### **port** [[port-id](#)] *string*

Synopsis Enter the **port** list instance  
Context **configure mirror mirror-source** *string port string*  
Tree [port](#)  
Introduced 19.10.R1  
Platforms All

### **[port-id]** *string*

Synopsis Port ID  
Context **configure mirror mirror-source** *string port string*  
Tree [port](#)  
Notes This element is part of a list key.  
Introduced 19.10.R1  
Platforms All

### **egress** *boolean*

Synopsis Mirror egress packets  
Context **configure mirror mirror-source** *string port string egress boolean*  
Tree [egress](#)

Description	When configured to <b>true</b> , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

### **ingress** *boolean*

Synopsis	Mirror ingress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>port</b> <i>string</i> <b>ingress</b> <i>boolean</i>
Tree	<b>ingress</b>
Description	When configured to <b>true</b> , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

### **sap** [*sap-id*] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>sap</b> <i>string</i>
Tree	<b>sap</b>
Introduced	19.10.R1
Platforms	All

### **[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>sap</b> <i>string</i>
Tree	<b>sap</b>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**egress** *boolean*

Synopsis	Mirror egress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <i>boolean</i>
Tree	<b>egress</b>
Description	When configured to <b>true</b> , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

**ingress** *boolean*

Synopsis	Mirror ingress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress</b> <i>boolean</i>
Tree	<b>ingress</b>
Description	When configured to <b>true</b> , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

**subscriber** [**subscriber-id**] *string*

Synopsis	Enter the <b>subscriber</b> list instance
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i>
Tree	<b>subscriber</b>
Introduced	19.10.R1
Platforms	All

**[subscriber-id]** *string*

Synopsis	Subscriber ID
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i>
Tree	<b>subscriber</b>
String Length	1 to 64

Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **egress** *boolean*

Synopsis	Mirror egress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>egress</b> <i>boolean</i>
Tree	<a href="#">egress</a>
Description	When configured to <b>true</b> , egressing packets are mirrored. Egress packets are mirrored to the mirror destination after egress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

### **fc** *keyword*

Synopsis	The forwarding classes traffic which should be mirrored
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	19.10.R1
Platforms	All

### **host-type** *keyword*

Synopsis	Host type for mirroring
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>host-type</b> <i>keyword</i>
Tree	<a href="#">host-type</a>
Options	ipoe, ppp
Introduced	19.10.R1
Platforms	All



### **ingress** *boolean*

Synopsis	Mirror ingress packets
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>ingress</b> <i>boolean</i>
Tree	<a href="#">ingress</a>
Description	When configured to <b>true</b> , ingressing packets are mirrored. Ingress packets are mirrored to the mirror destination before ingress packet modification.
Default	false
Introduced	19.10.R1
Platforms	All

### **ip-address** *string*

Synopsis	Service IP address of remote device sending LI traffic
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>ip-address</b> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **ip-family** *keyword*

Synopsis	IP family for mirroring
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>ip-family</b> <i>keyword</i>
Tree	<a href="#">ip-family</a>
Options	ipv4, ipv6
Introduced	19.10.R1
Platforms	All

### **mac-address** *string*

Synopsis	MAC address for the subscriber
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>

---

Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **sap-id** *string*

Synopsis	Subscriber SAP ID
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>sap-id</b> <i>string</i>
Tree	<b>sap-id</b>
String Length	1 to 45
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

### **sla-profile** *string*

Synopsis	SLA profile name
Context	<b>configure</b> <b>mirror</b> <b>mirror-source</b> <i>string</i> <b>subscriber</b> <i>string</i> <b>sla-profile</b> <i>string</i>
Tree	<b>sla-profile</b>
String Length	1 to 32
Notes	The following elements are part of a choice: ( <b>ip-address</b> , <b>mac-address</b> , and <b>sap-id</b> ) or <b>sla-profile</b> .
Introduced	19.10.R1
Platforms	All

## 3.28 multicast-management commands

```

configure
- multicast-management
- apply-groups reference
- apply-groups-exclude reference
- bandwidth-policy string
- admin-bw-threshold number
- apply-groups reference
- apply-groups-exclude reference
- description string
- falling-percent-reset number
- impn-paths
- primary-path
- apply-groups reference
- apply-groups-exclude reference
- queue-parameters
- cbs decimal-number
- drop-tail
- low
- percent-reduction-from-mbs number
- mbs decimal-number
- secondary-path
- apply-groups reference
- apply-groups-exclude reference
- number-paths
- number-of-paths number
- redundant-sfm number
- queue-parameters
- cbs decimal-number
- drop-tail
- low
- percent-reduction-from-mbs number
- mbs decimal-number
- mcast-pool
- percent-of-total number
- resv-cbs number
- slope-policy reference
- chassis-level
- apply-groups reference
- apply-groups-exclude reference
- mmp-impn-override boolean
- per-mcast-plane-capacity
- mcast-capacity
- primary-percentage decimal-number
- secondary-percentage decimal-number
- redundant-mcast-capacity
- primary-percentage decimal-number
- secondary-percentage decimal-number
- total-capacity keyword
- round-robin-inactive-records boolean
- multicast-info-policy string
- apply-groups reference
- apply-groups-exclude reference
- bundle string
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword

```

configure multicast-management multicast-info-policy bundle bw-activity falling-delay

```

- falling-delay number
- channel start (ipv4-address-no-zone | ipv6-address-no-zone) end (ipv4-address-
no-zone | ipv6-address-no-zone)
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword
- falling-delay number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
- ldp-p2mp number
- rsvp-p2mp string
- sender string
- source-override (ipv4-address-no-zone | ipv6-address-no-zone)
- admin-bw number
- apply-groups reference
- apply-groups-exclude reference
- bw-activity
- black-hole-rate number
- bw-activity-type keyword
- falling-delay number
- explicit-sf-path keyword
- keepalive-override number
- preference number
- primary-tunnel-interface
- ldp-p2mp number
- rsvp-p2mp string
- sender string
- video
- analyzer
- alarms
- cc-error boolean
- non-vid-pid-absent number
- pat-repetition
- poa number
- qos number
- tnc number
- pat-syntax boolean
- pcr-repetition
- poa number
- qos number
- tnc number
- pid-pmt-unref boolean
- pmt-repetition
- poa number
- qos number
- tnc number
- pmt-syntax boolean
- report-alarm
- severity keyword
- tei-set boolean
- ts-sync-loss boolean
- vid-pid-absent number
- description string
- fcc-channel-type keyword
- fcc-min-duration number
- fcc-server keyword
- local-rt-server keyword
- reorder-audio number
- rt-buffer-size number

```

---

 configure multicast-management multicast-info-policy bundle channel source-override video rt-server

```

    - rt-server
      - ip-address string
      - port number
      - rt-state keyword
    - stream-selection
      - intf1 string
      - intf2 string
      - source1 string
      - source2 string
      - video-group (number | keyword)
  - video
    - analyzer
    - alarms
      - cc-error boolean
      - non-vid-pid-absent number
      - pat-repetition
        - poa number
        - qos number
        - tnc number
      - pat-syntax boolean
      - pcr-repetition
        - poa number
        - qos number
        - tnc number
      - pid-pmt-unref boolean
      - pmt-repetition
        - poa number
        - qos number
        - tnc number
      - pmt-syntax boolean
      - report-alarm
        - severity keyword
      - tei-set boolean
      - ts-sync-loss boolean
      - vid-pid-absent number
    - description string
    - fcc-channel-type keyword
    - fcc-min-duration number
    - fcc-server keyword
    - local-rt-server keyword
    - reorder-audio number
    - rt-buffer-size number
    - rt-server
      - ip-address string
      - port number
      - rt-state keyword
    - stream-selection
      - intf1 string
      - intf2 string
      - source1 string
      - source2 string
      - video-group (number | keyword)
  - cong-priority-threshold number
  - description string
  - ecmp-opt-threshold number
  - explicit-sf-path keyword
  - keepalive-override number
  - preference number
  - primary-tunnel-interface
    - ldp-p2mp number
    - rsvp-p2mp string
    - sender string
  - video
    - analyzer

```

configure multicast-management multicast-info-policy bundle video analyzer alarms

```

- alarms
- cc-error boolean
- non-vid-pid-absent number
- pat-repetition
-   poa number
-   qos number
-   tnc number
- pat-syntax boolean
- pcr-repetition
-   poa number
-   qos number
-   tnc number
- pid-pmt-unref boolean
- pmt-repetition
-   poa number
-   qos number
-   tnc number
- pmt-syntax boolean
- report-alarm
-   severity keyword
- tei-set boolean
- ts-sync-loss boolean
- vid-pid-absent number
- description string
- fcc-channel-type keyword
- fcc-min-duration number
- fcc-server boolean
- local-fcc-port number
- local-rt-port number
- local-rt-server boolean
- reorder-audio number
- rt-buffer-size number
- rt-server
-   ip-address string
-   port number
- stream-selection
-   intf1 string
-   intf2 string
-   source1 string
-   source2 string
-   video-group number
- description string
- video-policy
-   video-interface string
-   apply-groups reference
-   apply-groups-exclude reference
-   extended-unicast boolean
-   fcc-session-timeout number
-   hd
-     apply-groups reference
-     apply-groups-exclude reference
-     dent-threshold number
-     fcc-burst number
-     fcc-server
-       mode keyword
-     local-rt-server boolean
-     mc-handover number
-     rt-rate number
-   max-igmp-latency number
-   max-sessions number
-   pip
-     apply-groups reference
-     apply-groups-exclude reference
-     dent-threshold number

```

---

configure multicast-management multicast-info-policy video-policy video-interface pip fcc-burst

```
    - fcc-burst number
    - fcc-server
      - mode keyword
    - local-rt-server boolean
    - mc-handover number
    - rt-rate number
  - ret-session-timeout number
  - rt-payload-type number
  - rt-rate number
  - sd
    - apply-groups reference
    - apply-groups-exclude reference
    - dent-threshold number
    - fcc-burst number
    - fcc-server
      - mode keyword
    - local-rt-server boolean
    - mc-handover number
    - rt-rate number
    - subscriber-bw-limit number
- multicast-reporting-destination string
  - address string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - maximum-transmission-delay number
  - udp-port number
```

### 3.28.1 multicast-management command descriptions

#### multicast-management

Synopsis	Enter the <b>multicast-management</b> context
Context	<b>configure</b> <a href="#">multicast-management</a>
Tree	<a href="#">multicast-management</a>
Introduced	16.0.R1
Platforms	All

#### bandwidth-policy [[policy-name](#)] *string*

Synopsis	Enter the <b>bandwidth-policy</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i>
Tree	<a href="#">bandwidth-policy</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

#### [\[policy-name\]](#) *string*

Synopsis	Bandwidth policy name
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i>
Tree	<a href="#">bandwidth-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

#### admin-bw-threshold *number*

Synopsis	Administrative bandwidth threshold
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i> <a href="#">admin-bw-threshold</a> <i>number</i>



Tree	<a href="#">admin-bw-threshold</a>
Range	1 to 40000000
Units	kilobps
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **falling-percent-reset** *number*

Synopsis	Percent of bandwidth that decreases before resetting
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">falling-percent-reset</a> <i>number</i>
Tree	<a href="#">falling-percent-reset</a>
Range	1 to 100
Units	percent
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **impm-paths**

Synopsis	Enter the <b>impm-paths</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a>
Tree	<a href="#">impm-paths</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### primary-path

Synopsis Enter the **primary-path** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#)

Tree [primary-path](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### queue-parameters

Synopsis Enter the **queue-parameters** context

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#) [queue-parameters](#)

Tree [queue-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **cbs** *decimal-number*

Synopsis Override for default CBS for single queue for each path

Context **configure** [multicast-management](#) [bandwidth-policy](#) *string* [impm-paths](#) [primary-path](#) [queue-parameters](#) [cbs](#) *decimal-number*

Tree [cbs](#)

Range 0.00 to 100.00

Units percent

Default 5.00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">primary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">primary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b> <b>low</b>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**percent-reduction-from-mbs** *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">primary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b> <b>low</b> <b>percent-reduction-from-mbs</b> <i>number</i>
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**mbs** *decimal-number*

Synopsis	Override for default MBS for single queue for each path
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">primary-path</a> <a href="#">queue-parameters</a> <b>mbs</b> <i>decimal-number</i>

Tree	<a href="#">mbs</a>
Range	0.00 to 100.00
Units	percent
Default	7.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## secondary-path

Synopsis	Enter the <b>secondary-path</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i> <a href="#">impmpaths</a> <a href="#">secondary-path</a>
Tree	<a href="#">secondary-path</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## number-paths

Synopsis	Enter the <b>number-paths</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i> <a href="#">impmpaths</a> <a href="#">secondary-path</a> <a href="#">number-paths</a>
Tree	<a href="#">number-paths</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## number-of-paths *number*

Synopsis	Number of secondary paths
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">bandwidth-policy</a> <i>string</i> <a href="#">impmpaths</a> <a href="#">secondary-path</a> <a href="#">number-paths</a> <a href="#">number-of-paths</a> <i>number</i>
Tree	<a href="#">number-of-paths</a>
Range	1 to 15
Default	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **redundant-sfm** *number*

Synopsis Number of secondary paths in redundant SFM mode

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path number-paths](#) **redundant-sfm** *number*

Tree [redundant-sfm](#)

Range 1 to 15

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

### **queue-parameters**

Synopsis Enter the **queue-parameters** context

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path queue-parameters](#)

Tree [queue-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **cbs** *decimal-number*

Synopsis Override for default CBS for single queue for each path

Context **configure** [multicast-management bandwidth-policy](#) *string* [impm-paths secondary-path queue-parameters](#) **cbs** *decimal-number*

Tree [cbs](#)

Range 0.00 to 100.00

Units percent

Default 30.00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">secondary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">secondary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b> <b>low</b>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**percent-reduction-from-mbs** *number*

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">impm-paths</a> <a href="#">secondary-path</a> <a href="#">queue-parameters</a> <b>drop-tail</b> <b>low</b> <b>percent-reduction-from-mbs</b> <i>number</i>
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**mbs** *decimal-number*

Synopsis	Override for default MBS for single queue for each path
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Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">imp-path</a> <a href="#">secondary-path</a> <a href="#">queue-parameters</a> <a href="#">mbs</a> <i>decimal-number</i>
Tree	<a href="#">mbs</a>
Range	0.00 to 100.00
Units	percent
Default	40.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **mcast-pool**

Synopsis	Enter the <b>mcast-pool</b> context
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">mcast-pool</a>
Tree	<a href="#">mcast-pool</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **percent-of-total** *number*

Synopsis	Percent of ingress buffers assigned to multicast pool
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">mcast-pool</a> <a href="#">percent-of-total</a> <i>number</i>
Tree	<a href="#">percent-of-total</a>
Range	1 to 50
Units	percent
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **resv-cbs** *number*

Synopsis	Percentage of pool reserved for multicast path queues
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">mcast-pool</a> <a href="#">resv-cbs</a> <i>number</i>
Tree	<a href="#">resv-cbs</a>

Range	1 to 100
Units	percent
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **slope-policy** *reference*

Synopsis	Slope policy name
Context	<b>configure</b> <a href="#">multicast-management bandwidth-policy</a> <i>string</i> <a href="#">mcast-pool slope-policy</a> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **chassis-level**

Synopsis	Enter the <b>chassis-level</b> context
Context	<b>configure</b> <a href="#">multicast-management chassis-level</a>
Tree	<a href="#">chassis-level</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **mmp-imp-override** *boolean*

Synopsis	Manage MMRP traffic by IMPM
Context	<b>configure</b> <a href="#">multicast-management chassis-level mmp-imp-override</a> <i>boolean</i>
Tree	<a href="#">mmp-imp-override</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR



## per-mcast-plane-capacity

Synopsis	Enter the <b>per-mcast-plane-capacity</b> context
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity</a>
Tree	<a href="#">per-mcast-plane-capacity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## mcast-capacity

Synopsis	Enter the <b>mcast-capacity</b> context
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity mcast-capacity</a>
Tree	<a href="#">mcast-capacity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity mcast-capacity primary-percentage <i>decimal-number</i></a>
Tree	<a href="#">primary-percentage</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity mcast-capacity secondary-percentage <i>decimal-number</i></a>
Tree	<a href="#">secondary-percentage</a>

Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### redundant-mcast-capacity

Synopsis	Enter the <b>redundant-mcast-capacity</b> context
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity</a>
Tree	<a href="#">redundant-mcast-capacity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### primary-percentage *decimal-number*

Synopsis	Percent of plane capacity for primary multicast planes
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity primary-percentage <i>decimal-number</i></a>
Tree	<a href="#">primary-percentage</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### secondary-percentage *decimal-number*

Synopsis	Percent of plane capacity for secondary multicast plane
Context	<b>configure</b> <a href="#">multicast-management chassis-level per-mcast-plane-capacity redundant-mcast-capacity secondary-percentage <i>decimal-number</i></a>
Tree	<a href="#">secondary-percentage</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **total-capacity** *keyword*

Synopsis Total multicast plane bandwidth

Context **configure** [multicast-management](#) [chassis-level](#) [per-mcast-plane-capacity](#) **total-capacity** *keyword*

Tree [total-capacity](#)

Units megabps

Options dynamic, 2000, 4000, 5250, 8250, 15000, 17000, 19000, 27000, 42000, 90000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **round-robin-inactive-records** *boolean*

Synopsis Redistribute newly populated inactive records

Context **configure** [multicast-management](#) [chassis-level](#) **round-robin-inactive-records** *boolean*

Tree [round-robin-inactive-records](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **multicast-info-policy** [[policy-name](#)] *string*

Synopsis Enter the **multicast-info-policy** list instance

Context **configure** [multicast-management](#) **multicast-info-policy** *string*

Tree [multicast-info-policy](#)

Max. Instances 32

Introduced 16.0.R1

Platforms All

**[policy-name]** *string*

Synopsis	Multicast information policy name
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i>
Tree	<a href="#">multicast-info-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bundle** [[bundle-name](#)] *string*

Synopsis	Enter the <b>bundle</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <b>bundle</b> <i>string</i>
Tree	<a href="#">bundle</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[bundle-name]** *string*

Synopsis	Bundle name
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <b>bundle</b> <i>string</i>
Tree	<a href="#">bundle</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-bw** *number*

Synopsis	Administrative bandwidth
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <b>bundle</b> <i>string</i> <b>admin-bw</b> <i>number</i>
Tree	<a href="#">admin-bw</a>

Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

## **bw-activity**

Synopsis	Enter the <b>bw-activity</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">bw-activity</a>
Tree	<a href="#">bw-activity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **black-hole-rate** *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">bw-activity</a> <a href="#">black-hole-rate</a> <i>number</i>
Tree	<a href="#">black-hole-rate</a>
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

## **bw-activity-type** *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">bw-activity</a> <a href="#">bw-activity-type</a> <i>keyword</i>
Tree	<a href="#">bw-activity-type</a>
Options	use-admin-bw, dynamic
Default	dynamic
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **falling-delay** *number*

Synopsis Falling delay threshold value until delay time expires

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **bw-activity** **falling-delay** *number*

Tree **falling-delay**

Range 10 to 3600

Units seconds

Default 30

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **channel** list instance

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **channel**

Introduced 16.0.R1

Platforms All

### **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Starting IP address for the channel range

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **channel**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Ending IP address for the channel range
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-bw** *number*

Synopsis	Administrative bandwidth
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-bw</b> <i>number</i>
Tree	<b>admin-bw</b>
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

**bw-activity**

Synopsis	Enter the <b>bw-activity</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b>
Tree	<b>bw-activity</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**black-hole-rate** *number*

Synopsis	Rate that a channel is placed in the blackhole state
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Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>black-hole-rate</b> <i>number</i>
Tree	<b>black-hole-rate</b>
Range	0 to 40000000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **bw-activity-type** *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>bw-activity-type</b> <i>keyword</i>
Tree	<b>bw-activity-type</b>
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

### **falling-delay** *number*

Synopsis	Falling delay threshold value until delay time expires
Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>falling-delay</b> <i>number</i>
Tree	<b>falling-delay</b>
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR



**explicit-sf-path** *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>explicit-sf-path</b> <i>keyword</i>
Tree	<b>explicit-sf-path</b>
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**keepalive-override** *number*

Synopsis	Keepalive timer override
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive-override</b> <i>number</i>
Tree	<b>keepalive-override</b>
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Relative preference level for multicast channels
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 7
Introduced	16.0.R1
Platforms	All

**primary-tunnel-interface**

Synopsis	Enter the <b>primary-tunnel-interface</b> context
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">primary-tunnel-interface</a>
Tree	<a href="#">primary-tunnel-interface</a>
Introduced	16.0.R1
Platforms	All

### **ldp-p2mp** *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">primary-tunnel-interface</a> <a href="#">ldp-p2mp</a> <i>number</i>
Tree	<a href="#">ldp-p2mp</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1
Platforms	All

### **rsvp-p2mp** *string*

Synopsis	P2MP name for the LDP P2MP
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">primary-tunnel-interface</a> <a href="#">rsvp-p2mp</a> <i>string</i>
Tree	<a href="#">rsvp-p2mp</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1
Platforms	All

### **sender** *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">primary-tunnel-interface</a> <a href="#">sender</a> <i>string</i>

Tree	<a href="#">sender</a>
Introduced	16.0.R1
Platforms	All

### **source-override** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>source-override</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-override</a>
Introduced	16.0.R1
Platforms	All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address for the source override
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-override</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-bw** *number*

Synopsis	Administrative bandwidth
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">admin-bw</a> <i>number</i>
Tree	<a href="#">admin-bw</a>
Range	1 to 40000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

**bw-activity**

Synopsis	Enter the <b>bw-activity</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b>
Tree	<b>bw-activity</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**black-hole-rate** *number*

Synopsis	Rate that a channel is placed in the blackhole state
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>black-hole-rate</b> <i>number</i>
Tree	<b>black-hole-rate</b>
Range	0 to 40000000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**bw-activity-type** *keyword*

Synopsis	Bandwidth required by a multicast channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>bw-activity-type</b> <i>keyword</i>
Tree	<b>bw-activity-type</b>
Options	use-admin-bw, dynamic
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**falling-delay** *number*

Synopsis	Falling delay threshold value until delay time expires
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>bw-activity</b> <b>falling-delay</b> <i>number</i>
Tree	<b>falling-delay</b>
Range	10 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**explicit-sf-path** *keyword*

Synopsis	Explicit switch fabric path shared to multicast channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>explicit-sf-path</b> <i>keyword</i>
Tree	<b>explicit-sf-path</b>
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**keepalive-override** *number*

Synopsis	Keepalive timer override
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive-override</b> <i>number</i>
Tree	<b>keepalive-override</b>
Range	10 to 86000
Units	seconds
Introduced	16.0.R1

Platforms All

### preference *number*

Synopsis Relative preference level for multicast channels

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **preference** *number*

Tree [preference](#)

Range 1 to 7

Introduced 16.0.R1

Platforms All

### primary-tunnel-interface

Synopsis Enter the **primary-tunnel-interface** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **primary-tunnel-interface**

Tree [primary-tunnel-interface](#)

Introduced 16.0.R1

Platforms All

### ldp-p2mp *number*

Synopsis ID for signaling MLDP P2MP LSP

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **source-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **primary-tunnel-interface** **ldp-p2mp** *number*

Tree [ldp-p2mp](#)

Range 1 to 4294967295

Notes The following elements are part of a choice: **ldp-p2mp** or **rsvp-p2mp**.

Introduced 16.0.R1

Platforms All

**rsvp-p2mp** *string*

Synopsis	P2MP name for the LDP P2MP
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>primary-tunnel-interface</b> <b>rsvp-p2mp</b> <i>string</i>
Tree	<b>rsvp-p2mp</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1
Platforms	All

**sender** *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>primary-tunnel-interface</b> <b>sender</b> <i>string</i>
Tree	<b>sender</b>
Introduced	16.0.R1
Platforms	All

**video**

Synopsis	Enter the <b>video</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b>
Tree	<b>video</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**analyzer**

Synopsis	Enable the <b>analyzer</b> context
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a>
Tree	<a href="#">analyzer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## alarms

Synopsis	Enter the <b>alarms</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a>
Tree	<a href="#">alarms</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## cc-error *boolean*

Synopsis	Check the continuity counter
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">cc-error</a> <i>boolean</i>
Tree	<a href="#">cc-error</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## non-vid-pid-absent *number*

Synopsis	PID checked within the specified interval
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">non-vid-pid-absent</a> <i>number</i>
Tree	<a href="#">non-vid-pid-absent</a>



Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## pat-repetition

Synopsis	Enable the <b>pat-repetition</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a>
Tree	<a href="#">pat-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## poa number

Synopsis	Time between two PATs for which a POA alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <a href="#">poa</a> <i>number</i>
Tree	<a href="#">poa</a>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## qos number

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <a href="#">qos</a> <i>number</i>
Tree	<a href="#">qos</a>

Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tnc number**

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pat-repetition</b> <b>tnc</b> <b>number</b>
Tree	<b>tnc</b>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pat-syntax boolean**

Synopsis	Check for PAT syntax errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pat-syntax</b> <b>boolean</b>
Tree	<b>pat-syntax</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pcr-repetition**

Synopsis	Enable the <b>pcr-repetition</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-</i>

	<a href="#">address-no-zone</a> ) <a href="#">source-override</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">video analyzer alarms pcr-repetition</a>
Tree	<a href="#">pcr-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**poa number**

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	<b>configure</b> <a href="#">multicast-management multicast-info-policy</a> <a href="#">string bundle</a> <a href="#">string channel</a> <a href="#">start</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">end</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">source-override</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">video analyzer alarms pcr-repetition poa number</a>
Tree	<a href="#">poa</a>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**qos number**

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	<b>configure</b> <a href="#">multicast-management multicast-info-policy</a> <a href="#">string bundle</a> <a href="#">string channel</a> <a href="#">start</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">end</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">source-override</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">video analyzer alarms pcr-repetition qos number</a>
Tree	<a href="#">qos</a>
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PCRs for which a TNC alarm is raised
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Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer</b> <b>alarms</b> <b>pcr-repetition</b> <b>tnc</b> <i>number</i>
Tree	<b>tnc</b>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pid-pmt-unref** *boolean*

Synopsis	Check for unreferenced PIDs in the PMT
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer</b> <b>alarms</b> <b>pid-pmt-unref</b> <i>boolean</i>
Tree	<b>pid-pmt-unref</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pmt-repetition**

Synopsis	Enable the <b>pmt-repetition</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer</b> <b>alarms</b> <b>pmt-repetition</b>
Tree	<b>pmt-repetition</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **poa** *number*

Synopsis	Time between two PMTs for which a POA alarm is raised
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Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pmt-repetition</b> <b>poa</b> <i>number</i>
Tree	<b>poa</b>
Range	300 to 5000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **qos number**

Synopsis	Time between two PMTs for which a QoS alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pmt-repetition</b> <b>qos</b> <i>number</i>
Tree	<b>qos</b>
Range	200 to 4900
Units	milliseconds
Default	800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tnc number**

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pmt-repetition</b> <b>tnc</b> <i>number</i>
Tree	<b>tnc</b>
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pmt-syntax** *boolean*

Synopsis	Check for PMT syntax errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>pmt-syntax</b> <i>boolean</i>
Tree	<b>pmt-syntax</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>report-alarm</b>
Tree	<b>report-alarm</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**severity** *keyword*

Synopsis	Keyword for the type of alarm
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>alarms</b> <b>report-alarm</b> <b>severity</b> <i>keyword</i>
Tree	<b>severity</b>
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tei-set** *boolean*

Synopsis	Check for TEI set errors
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Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>tei-set</b> <i>boolean</i>
Tree	<b>tei-set</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ts-sync-loss** *boolean*

Synopsis	Check for synchronization loss errors
Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>ts-sync-loss</b> <i>boolean</i>
Tree	<b>ts-sync-loss</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **vid-pid-absent** *number*

Synopsis	VID PID checked within the specified time interval
Context	<b>configure multicast-management multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>vid-pid-absent</b> <i>number</i>
Tree	<b>vid-pid-absent</b>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis	Text description
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Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-channel-type** *keyword*

Synopsis	Channel type for the bundle or channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-channel-type</b> <i>keyword</i>
Tree	<b>fcc-channel-type</b>
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-min-duration** *number*

Synopsis	Minimum duration of the FCC burst
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-min-duration</b> <i>number</i>
Tree	<b>fcc-min-duration</b>
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-server** *keyword*

Synopsis	Value to override the parent value of the FCC server
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Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-server</b> <i>keyword</i>
Tree	<b>fcc-server</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **local-rt-server** *keyword*

Synopsis	Value to override the parent value of local RT server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>local-rt-server</b> <i>keyword</i>
Tree	<b>local-rt-server</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **reorder-audio** *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>reorder-audio</b> <i>number</i>
Tree	<b>reorder-audio</b>
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **rt-buffer-size** *number*

Synopsis	Buffer size to store channel packets
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Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-buffer-size</b> <i>number</i>
Tree	<b>rt-buffer-size</b>
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### rt-server

Synopsis	Enter the <b>rt-server</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b>
Tree	<b>rt-server</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b> <b>ip-address</b> <i>string</i>
Tree	<b>ip-address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### port *number*

Synopsis	UDP port to send RET requests to the upstream RET sever
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-</i>

	<i>address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">rt-server</a> <i>port</i> <i>number</i>
Tree	<a href="#">port</a>
Range	1024 to 5999   6251 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-state** *keyword*

Synopsis	Retransmission server state
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-</i> <i>address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">rt-server</a> <b>rt-state</b> <i>keyword</i>
Tree	<a href="#">rt-state</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**stream-selection**

Synopsis	Enter the <b>stream-selection</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-</i> <i>address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">stream-selection</a>
Tree	<a href="#">stream-selection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**intf1** *string*

Synopsis	Primary interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-</i> <i>address-no-zone</i> ) <a href="#">source-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">stream-selection</a> <b>intf1</b> <i>string</i>
Tree	<a href="#">intf1</a>

String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**intf2 string**

Synopsis	Secondary interface
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>stream-selection</b> <b>intf2</b> <i>string</i>
Tree	<b>intf2</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source1 string**

Synopsis	Primary source IP address
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>stream-selection</b> <b>source1</b> <i>string</i>
Tree	<b>source1</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source2 string**

Synopsis	Secondary source IP address
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>stream-selection</b> <b>source2</b> <i>string</i>
Tree	<b>source2</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**video-group** (*number* | *keyword*)

Synopsis	Video group ID
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>video-group</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>video-group</b>
Range	1 to 4
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**video**

Synopsis	Enter the <b>video</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b>
Tree	<b>video</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**analyzer**

Synopsis	Enable the <b>analyzer</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>analyzer</b>
Tree	<b>analyzer</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**alarms**

Synopsis	Enter the <b>alarms</b> context
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Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a>
Tree	<a href="#">alarms</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**cc-error** *boolean*

Synopsis	Check the continuity counter
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">cc-error</a> <i>boolean</i>
Tree	<a href="#">cc-error</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**non-vid-pid-absent** *number*

Synopsis	PID checked within the specified interval
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">non-vid-pid-absent</a> <i>number</i>
Tree	<a href="#">non-vid-pid-absent</a>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pat-repetition**

Synopsis	Enable the <b>pat-repetition</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a>
Tree	<a href="#">pat-repetition</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **poa number**

Synopsis Time between two PATs for which a POA alarm is raised

Context **configure multicast-management multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms pat-repetition poa number**

Tree **poa**

Range 300 to 1000

Units milliseconds

Default 500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **qos number**

Synopsis Time between two PATs for which a QoS alarm is raised

Context **configure multicast-management multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms pat-repetition qos number**

Tree **qos**

Range 200 to 900

Units milliseconds

Default 200

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tnc number**

Synopsis Time between two PATs for which a TNC alarm is raised

Context **configure multicast-management multicast-info-policy** *string* **bundle** *string* **channel** **start** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **video analyzer alarms pat-repetition tnc number**

Tree **tnc**

Range 100 to 800

Units milliseconds

Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pat-syntax** *boolean*

Synopsis	Check for PAT syntax errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>pat-syntax</b> <i>boolean</i>
Tree	<a href="#">pat-syntax</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pcr-repetition**

Synopsis	Enable the <b>pcr-repetition</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>pcr-repetition</b>
Tree	<a href="#">pcr-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **poa** *number*

Synopsis	Time between two PCRs for which a POA alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>pcr-repetition</b> <b>poa</b> <i>number</i>
Tree	<a href="#">poa</a>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



**qos number**

Synopsis	Time between two PCRs for which a QoS alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pcr-repetition qos number</b>
Tree	<b>qos</b>
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PCRs for which a TNC alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pcr-repetition tnc number</b>
Tree	<b>tnc</b>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pid-pmt-unref boolean**

Synopsis	Check for unreferenced PIDs in the PMT
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pid-pmt-unref boolean</b>
Tree	<b>pid-pmt-unref</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## pmt-repetition

Synopsis	Enable the <b>pmt-repetition</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pmt-repetition</b>
Tree	<b>pmt-repetition</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## poa number

Synopsis	Time between two PMTs for which a POA alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pmt-repetition poa number</b>
Tree	<b>poa</b>
Range	300 to 5000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## qos number

Synopsis	Time between two PMTs for which a QoS alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms pmt-repetition qos number</b>
Tree	<b>qos</b>
Range	200 to 4900
Units	milliseconds
Default	800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>pmt-repetition</b> <b>tnc</b> <i>number</i>
Tree	<b>tnc</b>
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pmt-syntax boolean**

Synopsis	Check for PMT syntax errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>pmt-syntax</b> <i>boolean</i>
Tree	<b>pmt-syntax</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms</b> <b>report-alarm</b>
Tree	<b>report-alarm</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**severity keyword**

Synopsis	Keyword for the type of alarm
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Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms report-alarm severity</b> <i>keyword</i>
Tree	<b>severity</b>
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tei-set** *boolean*

Synopsis	Check for TEI set errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms tei-set</b> <i>boolean</i>
Tree	<b>tei-set</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ts-sync-loss** *boolean*

Synopsis	Check for synchronization loss errors
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms ts-sync-loss</b> <i>boolean</i>
Tree	<b>ts-sync-loss</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**vid-pid-absent** *number*

Synopsis	VID PID checked within the specified time interval
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer alarms vid-pid-absent</b> <i>number</i>
Tree	<b>vid-pid-absent</b>
Range	100 to 5000

Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video analyzer</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-channel-type** *keyword*

Synopsis	Channel type for the bundle or channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-channel-type</b> <i>keyword</i>
Tree	<b>fcc-channel-type</b>
Options	hd, sd, pip
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-min-duration** *number*

Synopsis	Minimum duration of the FCC burst
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-min-duration</b> <i>number</i>
Tree	<b>fcc-min-duration</b>
Range	300 to 8000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-server** *keyword*

Synopsis	Value to override the parent value of the FCC server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>fcc-server</b> <i>keyword</i>
Tree	<b>fcc-server</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **local-rt-server** *keyword*

Synopsis	Value to override the parent value of local RT server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>local-rt-server</b> <i>keyword</i>
Tree	<b>local-rt-server</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **reorder-audio** *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>reorder-audio</b> <i>number</i>
Tree	<b>reorder-audio</b>
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **rt-buffer-size** *number*

Synopsis	Buffer size to store channel packets
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Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-buffer-size</b> <i>number</i>
Tree	<b>rt-buffer-size</b>
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### rt-server

Synopsis	Enter the <b>rt-server</b> context
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b>
Tree	<b>rt-server</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b> <b>ip-address</b> <i>string</i>
Tree	<b>ip-address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### port *number*

Synopsis	UDP port to send RET requests to the upstream RET sever
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>rt-server</b> <b>port</b> <i>number</i>
Tree	<b>port</b>
Range	1024 to 5999   6251 to 65535

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **rt-state** *keyword*

Synopsis	Retransmission server state
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">rt-server</a> <b>rt-state</b> <i>keyword</i>
Tree	<a href="#">rt-state</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **stream-selection**

Synopsis	Enter the <b>stream-selection</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <b>stream-selection</b>
Tree	<a href="#">stream-selection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **intf1** *string*

Synopsis	Primary interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">channel</a> <a href="#">start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">video</a> <a href="#">stream-selection</a> <b>intf1</b> <i>string</i>
Tree	<a href="#">intf1</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



**intf2 string**

Synopsis	Secondary interface
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>stream-selection</b> <b>intf2</b> <i>string</i>
Tree	<b>intf2</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source1 string**

Synopsis	Primary source IP address
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>stream-selection</b> <b>source1</b> <i>string</i>
Tree	<b>source1</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source2 string**

Synopsis	Secondary source IP address
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>stream-selection</b> <b>source2</b> <i>string</i>
Tree	<b>source2</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**video-group** (*number* | *keyword*)

Synopsis	Video group ID
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>channel</b> <b>start</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>end</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>video</b> <b>video-group</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>video-group</b>

Range	1 to 4
Options	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **cong-priority-threshold** *number*

Synopsis	Preference level threshold from low to high priority
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <b>cong-priority-threshold</b> <i>number</i>
Tree	<a href="#">cong-priority-threshold</a>
Range	0 to 7
Default	4
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **ecmp-opt-threshold** *number*

Synopsis	ECMP threshold
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <b>ecmp-opt-threshold</b> <i>number</i>
Tree	<a href="#">ecmp-opt-threshold</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

**explicit-sf-path** *keyword*

Synopsis	Explicit ingress switch fabric multicast path
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <b>explicit-sf-path</b> <i>keyword</i>
Tree	<a href="#">explicit-sf-path</a>
Options	primary, secondary
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-7/12/12e, 7750 SR-s, 7950 XRS, VSR

**keepalive-override** *number*

Synopsis	Keepalive timer override
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <b>keepalive-override</b> <i>number</i>
Tree	<a href="#">keepalive-override</a>
Range	10 to 86000
Units	seconds
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Relative preference level for multicast channels
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <b>preference</b> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 7
Introduced	16.0.R1
Platforms	All

**primary-tunnel-interface**

Synopsis	Enter the <b>primary-tunnel-interface</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <b>primary-tunnel-interface</b>

Tree	<a href="#">primary-tunnel-interface</a>
Introduced	16.0.R1
Platforms	All

### **ldp-p2mp** *number*

Synopsis	ID for signaling MLDP P2MP LSP
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">primary-tunnel-interface</a> <b>ldp-p2mp</b> <i>number</i>
Tree	<a href="#">ldp-p2mp</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1
Platforms	All

### **rsvp-p2mp** *string*

Synopsis	P2MP name for the LDP P2MP
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">primary-tunnel-interface</a> <b>rsvp-p2mp</b> <i>string</i>
Tree	<a href="#">rsvp-p2mp</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ldp-p2mp</b> or <b>rsvp-p2mp</b> .
Introduced	16.0.R1
Platforms	All

### **sender** *string*

Synopsis	Bundle set to receive from the primary tunnel interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">primary-tunnel-interface</a> <b>sender</b> <i>string</i>
Tree	<a href="#">sender</a>
Introduced	16.0.R1
Platforms	All

## video

Synopsis	Enter the <b>video</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a>
Tree	<a href="#">video</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## analyzer

Synopsis	Enable the <b>analyzer</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a>
Tree	<a href="#">analyzer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## alarms

Synopsis	Enter the <b>alarms</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a>
Tree	<a href="#">alarms</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## cc-error *boolean*

Synopsis	Check the continuity counter
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">cc-error</a> <i>boolean</i>
Tree	<a href="#">cc-error</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**non-vid-pid-absent** *number*

Synopsis	PID checked within the specified interval
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">non-vid-pid-absent</a> <i>number</i>
Tree	<a href="#">non-vid-pid-absent</a>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pat-repetition**

Synopsis	Enable the <b>pat-repetition</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a>
Tree	<a href="#">pat-repetition</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**poa** *number*

Synopsis	Time between two PATs for which a POA alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <a href="#">poa</a> <i>number</i>
Tree	<a href="#">poa</a>
Range	300 to 1000
Units	milliseconds
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**qos** *number*

Synopsis	Time between two PATs for which a QoS alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <a href="#">qos</a> <i>number</i>

Tree	<a href="#">qos</a>
Range	200 to 900
Units	milliseconds
Default	200
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tnc number**

Synopsis	Time between two PATs for which a TNC alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-repetition</a> <b>tnc</b> <i>number</i>
Tree	<a href="#">tnc</a>
Range	100 to 800
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pat-syntax boolean**

Synopsis	Check for PAT syntax errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pat-syntax</a> <i>boolean</i>
Tree	<a href="#">pat-syntax</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pcr-repetition**

Synopsis	Enable the <b>pcr-repetition</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pcr-repetition</a>
Tree	<a href="#">pcr-repetition</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **poa number**

Synopsis Time between two PCRs for which a POA alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **video analyzer alarms** **pcr-repetition** **poa** *number*

Tree [poa](#)

Range 300 to 1000

Units milliseconds

Default 500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **qos number**

Synopsis Time between two PCRs for which a QoS alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **video analyzer alarms** **pcr-repetition** **qos** *number*

Tree [qos](#)

Range 200 to 900

Units milliseconds

Default 200

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tnc number**

Synopsis Time between two PCRs for which a TNC alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **video analyzer alarms** **pcr-repetition** **tnc** *number*

Tree [tnc](#)

Range 100 to 800

Units milliseconds

Default 100

Introduced 16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pid-pmt-unref** *boolean*

Synopsis Check for unreferenced PIDs in the PMT

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **video**  
**analyzer** **alarms** **pid-pmt-unref** *boolean*

Tree [pid-pmt-unref](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **pmt-repetition**

Synopsis Enable the **pmt-repetition** context

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **video**  
**analyzer** **alarms** **pmt-repetition**

Tree [pmt-repetition](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **poa** *number*

Synopsis Time between two PMTs for which a POA alarm is raised

Context **configure** **multicast-management** **multicast-info-policy** *string* **bundle** *string* **video**  
**analyzer** **alarms** **pmt-repetition** **poa** *number*

Tree [poa](#)

Range 300 to 5000

Units milliseconds

Default 2000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **qos** *number*

Synopsis Time between two PMTs for which a QoS alarm is raised

Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a> <i>qos</i> <i>number</i>
Tree	<a href="#">qos</a>
Range	200 to 4900
Units	milliseconds
Default	800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**tnc number**

Synopsis	Time between two PMTs for which a TNC alarm is raised
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-repetition</a> <a href="#">tnc</a> <i>number</i>
Tree	<a href="#">tnc</a>
Range	100 to 4800
Units	milliseconds
Default	400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**pmt-syntax boolean**

Synopsis	Check for PMT syntax errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">pmt-syntax</a> <i>boolean</i>
Tree	<a href="#">pmt-syntax</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">report-alarm</a>

Tree	<a href="#">report-alarm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **severity** *keyword*

Synopsis	Keyword for the type of alarm
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">report-alarm</a> <b>severity</b> <i>keyword</i>
Tree	<a href="#">severity</a>
Options	tnc, qos, poa
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **tei-set** *boolean*

Synopsis	Check for TEI set errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">tei-set</a> <b>boolean</b>
Tree	<a href="#">tei-set</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **ts-sync-loss** *boolean*

Synopsis	Check for synchronization loss errors
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">analyzer</a> <a href="#">alarms</a> <a href="#">ts-sync-loss</a> <b>boolean</b>
Tree	<a href="#">ts-sync-loss</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**vid-pid-absent** *number*

Synopsis	VID PID checked within the specified time interval
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>video</b> <b>analyzer</b> <b>alarms</b> <b>vid-pid-absent</b> <i>number</i>
Tree	<b>vid-pid-absent</b>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>video</b> <b>analyzer</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-channel-type** *keyword*

Synopsis	Channel type for the bundle or channel
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>video</b> <b>fcc-channel-type</b> <i>keyword</i>
Tree	<b>fcc-channel-type</b>
Options	hd, sd, pip
Default	hd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-min-duration** *number*

Synopsis	Minimum duration of the FCC burst
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>bundle</b> <i>string</i> <b>video</b> <b>fcc-min-duration</b> <i>number</i>

Tree	<a href="#">fcc-min-duration</a>
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-server** *boolean*

Synopsis	Enable the FCC server for a multicast bundle
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string bundle string video</i> <a href="#">fcc-server</a> <i>boolean</i>
Tree	<a href="#">fcc-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **local-fcc-port** *number*

Synopsis	Local port for FCC requests
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string bundle string video</i> <a href="#">local-fcc-port</a> <i>number</i>
Tree	<a href="#">local-fcc-port</a>
Range	1024 to 5999   6251 to 65535
Default	4098
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **local-rt-port** *number*

Synopsis	Local port for RET requests
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string bundle string video</i> <a href="#">local-rt-port</a> <i>number</i>
Tree	<a href="#">local-rt-port</a>
Range	1024 to 5999   6251 to 65535
Default	4096

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **local-rt-server** *boolean*

Synopsis	Enable local retransmission server capability
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">local-rt-server</a> <i>boolean</i>
Tree	<a href="#">local-rt-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **reorder-audio** *number*

Synopsis	Time the audio packets are reordered in the ad stream
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">reorder-audio</a> <i>number</i>
Tree	<a href="#">reorder-audio</a>
Range	100 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **rt-buffer-size** *number*

Synopsis	Buffer size to store channel packets
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">rt-buffer-size</a> <i>number</i>
Tree	<a href="#">rt-buffer-size</a>
Range	300 to 8000
Units	milliseconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## rt-server

Synopsis	Enable the <b>rt-server</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">rt-server</a>
Tree	<a href="#">rt-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## ip-address *string*

Synopsis	IP address of the upstream retransmission server
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">rt-server</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## port *number*

Synopsis	RET server port number
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">rt-server</a> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	1024 to 5999   6251 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## stream-selection

Synopsis	Enter the <b>stream-selection</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">stream-selection</a>
Tree	<a href="#">stream-selection</a>

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **intf1 string**

Synopsis Primary interface  
Context **configure** [multicast-management](#) [multicast-info-policy](#) [string bundle](#) [string video](#) [stream-selection](#) [intf1](#) [string](#)  
Tree [intf1](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **intf2 string**

Synopsis Secondary interface  
Context **configure** [multicast-management](#) [multicast-info-policy](#) [string bundle](#) [string video](#) [stream-selection](#) [intf2](#) [string](#)  
Tree [intf2](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **source1 string**

Synopsis Primary source IP address  
Context **configure** [multicast-management](#) [multicast-info-policy](#) [string bundle](#) [string video](#) [stream-selection](#) [source1](#) [string](#)  
Tree [source1](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **source2 string**

Synopsis Secondary source IP address  
Context **configure** [multicast-management](#) [multicast-info-policy](#) [string bundle](#) [string video](#) [stream-selection](#) [source2](#) [string](#)



Tree	<a href="#">source2</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **video-group** *number*

Synopsis	Video group for the bundle
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">bundle</a> <i>string</i> <a href="#">video</a> <a href="#">video-group</a> <i>number</i>
Tree	<a href="#">video-group</a>
Range	1 to 4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **video-policy**

Synopsis	Enter the <b>video-policy</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a>
Tree	<a href="#">video-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **video-interface** [[ip-address](#)] *string*

Synopsis	Enter the <b>video-interface</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i>

Tree	<a href="#">video-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[ip-address] string**

Synopsis	IP address of the video interface
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i>
Tree	<a href="#">video-interface</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**extended-unicast boolean**

Synopsis	Extend video unicast session
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">extended-unicast</a> <i>boolean</i>
Tree	<a href="#">extended-unicast</a>
Description	<p>When configured to <b>true</b>, video unicast is delayed from switching over to multicast for 5 minutes. The unicast session can be extended further by sending an RTCP extension request, which resets the 5-minute timer. This is ideal for services that require unicast video and end devices that require extended time to switch over from unicast to multicast.</p> <p>When configured to <b>false</b>, the unicast session switches over to multicast 1.5 seconds after the IGMP request is sent. Most Fast Channel Change deployments do not require a time extension.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-session-timeout number**

Synopsis	FCC session timeout
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">fcc-session-timeout</a> <i>number</i>
Tree	<a href="#">fcc-session-timeout</a>

Range	5 to 300
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## hd

Synopsis	Enter the <b>hd</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>hd</b>
Tree	<a href="#">hd</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>hd</b> <b>dent-threshold</b> <i>number</i>
Tree	<a href="#">dent-threshold</a>
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>hd</b> <b>fcc-burst</b> <i>number</i>
Tree	<a href="#">fcc-burst</a>
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **fcc-server**

Synopsis Enter the **fcc-server** context

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [video-policy](#) [video-interface](#) *string* [hd fcc-server](#)

Tree [fcc-server](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **mode** *keyword*

Synopsis Mode the FCC server sends information to the client

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [video-policy](#) [video-interface](#) *string* [hd fcc-server mode](#) *keyword*

Tree [mode](#)

Options burst, dent, hybrid

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **local-rt-server** *boolean*

Synopsis Enable local retransmission server capability

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [video-policy](#) [video-interface](#) *string* [hd local-rt-server](#) *boolean*

Tree [local-rt-server](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **mc-handover** *number*

Synopsis Rate the FCC server sends data during the handover

Context **configure** [multicast-management](#) [multicast-info-policy](#) *string* [video-policy](#) [video-interface](#) *string* [hd mc-handover](#) *number*

Tree [mc-handover](#)

---

Range	0 to 100
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **rt-rate** *number*

Synopsis	Rate the RET packets are sent to client
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>video-policy</b> <b>video-interface</b> <i>string</i> <b>hd</b> <b>rt-rate</b> <i>number</i>
Tree	<b>rt-rate</b>
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **max-igmp-latency** *number*

Synopsis	Maximum IGMP latency per client
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>video-policy</b> <b>video-interface</b> <i>string</i> <b>max-igmp-latency</b> <i>number</i>
Tree	<b>max-igmp-latency</b>
Range	10 to 1000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **max-sessions** *number*

Synopsis	Maximum number of sessions per client
Context	<b>configure</b> <b>multicast-management</b> <b>multicast-info-policy</b> <i>string</i> <b>video-policy</b> <b>video-interface</b> <i>string</i> <b>max-sessions</b> <i>number</i>
Tree	<b>max-sessions</b>

Range	1 to 65536
Default	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## pip

Synopsis	Enter the <b>pip</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>pip</b>
Tree	<a href="#">pip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## dent-threshold *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <b>dent-threshold</b> <i>number</i>
Tree	<a href="#">dent-threshold</a>
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## fcc-burst *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <b>fcc-burst</b> <i>number</i>
Tree	<a href="#">fcc-burst</a>
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **fcc-server**

Synopsis	Enter the <b>fcc-server</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <b>fcc-server</b>
Tree	<a href="#">fcc-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **mode** *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <b>fcc-server</b> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **local-rt-server** *boolean*

Synopsis	Enable local retransmission server capability
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <b>local-rt-server</b> <i>boolean</i>
Tree	<a href="#">local-rt-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## **mc-handover** *number*

Synopsis	Rate the FCC server sends data during the handover
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <b>mc-handover</b> <i>number</i>
Tree	<a href="#">mc-handover</a>
Range	0 to 600

Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-rate** *number*

Synopsis	Rate the RET packets are sent to client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">pip</a> <a href="#">rt-rate</a> <i>number</i>
Tree	<a href="#">rt-rate</a>
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ret-session-timeout** *number*

Synopsis	RET session timeout
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">ret-session-timeout</a> <i>number</i>
Tree	<a href="#">ret-session-timeout</a>
Range	5 to 300
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-payload-type** *number*

Synopsis	Format for the received retransmission packets
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">rt-payload-type</a> <i>number</i>
Tree	<a href="#">rt-payload-type</a>
Range	33   96 to 127



Default	99
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**rt-rate** *number*

Synopsis	Rate the RET packets are sent to client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>rt-rate</b> <i>number</i>
Tree	<a href="#">rt-rate</a>
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**sd**

Synopsis	Enter the <b>sd</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>sd</b>
Tree	<a href="#">sd</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**dent-threshold** *number*

Synopsis	Threshold below which the FCC server dents unicast data
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <b>sd</b> <b>dent-threshold</b> <i>number</i>
Tree	<a href="#">dent-threshold</a>
Range	1 to 31
Default	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-burst** *number*

Synopsis	Burst rate FCC server sends unicast data to FCC client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd</a> <b>fcc-burst</b> <i>number</i>
Tree	<a href="#">fcc-burst</a>
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**fcc-server**

Synopsis	Enter the <b>fcc-server</b> context
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd</a> <b>fcc-server</b>
Tree	<a href="#">fcc-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**mode** *keyword*

Synopsis	Mode the FCC server sends information to the client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd</a> <b>fcc-server</b> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	burst, dent, hybrid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**local-rt-server** *boolean*

Synopsis	Enable local retransmission server capability
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd</a> <b>local-rt-server</b> <i>boolean</i>

Tree	<a href="#">local-rt-server</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **mc-handover** *number*

Synopsis	Rate the FCC server sends data during the handover
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd mc-handover</a> <i>number</i>
Tree	<a href="#">mc-handover</a>
Range	0 to 600
Units	percent
Default	25
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **rt-rate** *number*

Synopsis	Rate the RET packets are sent to client
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">sd rt-rate</a> <i>number</i>
Tree	<a href="#">rt-rate</a>
Range	1 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **subscriber-bw-limit** *number*

Synopsis	Egress bandwidth limit per subscriber
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i> <a href="#">video-policy</a> <a href="#">video-interface</a> <i>string</i> <a href="#">subscriber-bw-limit</a> <i>number</i>
Tree	<a href="#">subscriber-bw-limit</a>
Range	1 to 4294967295

---

Units	kilobps
Default	4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**multicast-reporting-destination** [[name](#)] *string*

Synopsis	Enter the <b>multicast-reporting-destination</b> list instance
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i>
Tree	<a href="#">multicast-reporting-destination</a>
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Multicast reporting destination name
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i>
Tree	<a href="#">multicast-reporting-destination</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	IP address of the multicast reporting destination
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Default	0.0.0.0
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of multicast reporting destination
----------	---

Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **maximum-transmission-delay** *number*

Synopsis	Time delay before packet transmits to the destination
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i> <a href="#">maximum-transmission-delay</a> <i>number</i>
Tree	<a href="#">maximum-transmission-delay</a>
Range	0 to 100
Units	deciseconds
Default	1
Introduced	16.0.R1
Platforms	All

### **udp-port** *number*

Synopsis	UDP port where multicast reports are sent
Context	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-reporting-destination</a> <i>string</i> <a href="#">udp-port</a> <i>number</i>
Tree	<a href="#">udp-port</a>
Range	1 to 65535

Default	1037
Introduced	16.0.R1
Platforms	All

## 3.29 oam-pm commands

```

configure
- oam-pm
  - apply-groups reference
  - apply-groups-exclude reference
  - bin-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bin-type keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - bin number
    - apply-groups reference
    - apply-groups-exclude reference
    - lower-bound number
  - delay-event keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - clear-threshold number
    - exclude-lowest-bin number
    - lowest-bin number
    - raise-threshold number
  - exclude-from-avg keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bins string
  - description string
- session string
  - apply-groups reference
  - apply-groups-exclude reference
  - bin-group reference
  - description string
  - ethernet
    - dest-mac string
  - dmm
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - data-tlv-size number
    - delay-template string
    - interval number
    - test-duration number
    - test-id (number | keyword)
  - lmm
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - availability
      - admin-state keyword
      - flr-threshold number
      - hli-force-count boolean
    - timing
      - chli-threshold number
      - consec-delta-t number
      - frames-per-delta-t number
    - fc-collection boolean
    - interval number
    - loss-events
      - avg-flr-event keyword

```

configure oam-pm session ethernet lmm loss-events avg-flr-event apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- hli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-availability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- test-duration number
- test-id (number | keyword)
- priority number
- remote-mep number
- slm
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- data-tlv-size number
- flr-threshold number
- hli-force-count boolean
- interval number
- loss-events
- avg-flr-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold decimal-number
- raise-threshold decimal-number
- chli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- hli-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- unavailability-event keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-threshold number
- raise-threshold number
- undet-availability-event keyword
- apply-groups reference

```



configure oam-pm session ethernet slm loss-events undet-availability-event apply-groups-exclude

- **apply-groups-exclude** *reference*
- **clear-threshold** *number*
- **raise-threshold** *number*
- **undet-unavailability-event** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **clear-threshold** *number*
- **raise-threshold** *number*
- **test-duration** *number*
- **test-id** (*number* | *keyword*)
- **timing**
  - **chli-threshold** *number*
  - **consec-delta-t** *number*
  - **frames-per-delta-t** *number*
- **source**
  - **ma-admin-name** (*named-item-64* | *admin-name*)
  - **md-admin-name** (*named-item-64* | *admin-name*)
  - **mep** *number*
- **ip**
  - **allow-egress-remark-dscp** *boolean*
  - **destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **destination-udp-port** *number*
  - **do-not-fragment** *boolean*
  - **dscp** (*keyword* | *keyword*)
  - **fc** *keyword*
  - **forwarding**
    - **bypass-routing**
    - **interface** *string*
    - **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **pattern** (*keyword* | *number*)
  - **profile** *keyword*
  - **router-instance** *string*
  - **source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **source-udp-port** *number*
  - **ttl** *number*
  - **tunnel**
    - **mpls**
      - **rsvp-te**
        - **lsp** *string*
      - **rsvp-te-auto**
        - **from** *string*
        - **lsp-template** *string*
        - **to** *string*
      - **sr-isis**
        - **igp-instance** *number*
        - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
      - **sr-ospf**
        - **igp-instance** *number*
        - **prefix** *string*
      - **sr-ospf3**
        - **igp-instance** *number*
        - **prefix** (*ipv4-prefix* | *ipv6-prefix*)
      - **sr-te**
        - **lsp** *string*
  - **twamp-light**
    - **admin-state** *keyword*
    - **allow-ipv6-udp-checksum-zero** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **delay-template** *string*
    - **interval** *number*
    - **loss**
      - **flr-threshold** *number*
      - **hli-force-count** *boolean*

configure oam-pm session ip twamp-light loss timing

```

- timing
  - chli-threshold number
  - consec-delta-t number
  - frames-per-delta-t number
- loss-events
  - avg-flr-event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clear-threshold decimal-number
  - raise-threshold decimal-number
  - chli-event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clear-threshold number
  - raise-threshold number
  - hli-event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clear-threshold number
  - raise-threshold number
  - unavailability-event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clear-threshold number
  - raise-threshold number
  - undet-availability-event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clear-threshold number
  - raise-threshold number
  - undet-unavailability-event keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - clear-threshold number
  - raise-threshold number
- pad-size number
- pad-tlv-size number
- record-stats keyword
- session-sender-type keyword
- test-duration number
- test-id (number | keyword)
- timestamp-format keyword
- measurement-interval keyword
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - boundary-type keyword
  - clock-offset number
  - intervals-stored number
  - threshold-cross-alerts
    - admin-state keyword
    - delay-events boolean
    - loss-events boolean
- mpls
  - dm
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - delay-template string
    - interval number
    - pad-tlv-size number
    - reflect-pad boolean
    - test-duration number
    - test-id number

```

---

configure oam-pm session mpls dscp

- **dscp** *keyword*
- **fc** *keyword*
- **lsp**
  - **mpls-tp-static**
    - **lsp** *string*
  - **rsvp**
    - **lsp** *string*
    - **udp-return-object** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **rsvp-auto**
    - **from** *string*
    - **lsp-template** *string*
    - **to** *string*
    - **udp-return-object** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **pattern** (*keyword* | *number*)
- **profile** *keyword*
- **ttl** *number*
- **session-type** *keyword*
- **streaming**
  - **delay-template** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **fd-avg** *keyword*
  - **ifdv-avg** *keyword*
  - **sample-window** *number*
  - **window-integrity** *number*

### 3.29.1 oam-pm command descriptions

#### **oam-pm**

Synopsis	Enter the <b>oam-pm</b> context
Context	<b>configure oam-pm</b>
Tree	<a href="#">oam-pm</a>
Introduced	16.0.R1
Platforms	All

#### **bin-group** [[bin-group-id](#)] *number*

Synopsis	Enter the <b>bin-group</b> list instance
Context	<b>configure oam-pm bin-group</b> <i>number</i>
Tree	<a href="#">bin-group</a>
Introduced	16.0.R5
Platforms	All

#### **[bin-group-id]** *number*

Synopsis	Bin group ID
Context	<b>configure oam-pm bin-group</b> <i>number</i>
Tree	<a href="#">bin-group</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the bin group
Context	<b>configure oam-pm bin-group</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R5

Platforms All

### **bin-type** [**bin-metric**] *keyword*

Synopsis Enter the **bin-type** list instance  
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword*  
 Tree **bin-type**  
 Introduced 16.0.R5  
 Platforms All

### **[bin-metric]** *keyword*

Synopsis Delay metric bin structure  
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword*  
 Tree **bin-type**  
 Options fd, fdr, ifdv  
 Notes This element is part of a list key.  
 Introduced 16.0.R5  
 Platforms All

### **bin** [**bin-number**] *number*

Synopsis Enter the **bin** list instance  
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword* **bin** *number*  
 Tree **bin**  
 Introduced 16.0.R5  
 Platforms All

### **[bin-number]** *number*

Synopsis Bin number  
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword* **bin** *number*  
 Tree **bin**  
 Range 0 to 9  
 Notes This element is part of a list key.

Introduced 16.0.R5  
 Platforms All

### **lower-bound** *number*

Synopsis Lower bound for the bin  
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword* **bin** *number* **lower-bound** *number*  
 Tree [lower-bound](#)  
 Range 0 | 1 to 4294967295  
 Units microseconds  
 Introduced 16.0.R5  
 Platforms All

### **delay-event** [**direction**] *keyword*

Synopsis Enter the **delay-event** list instance  
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword* **delay-event** *keyword*  
 Tree [delay-event](#)  
 Introduced 16.0.R5  
 Platforms All

### [**direction**] *keyword*

Synopsis Traffic flow direction of the OAM-PM test or metric  
 Context **configure** **oam-pm** **bin-group** *number* **bin-type** *keyword* **delay-event** *keyword*  
 Tree [delay-event](#)  
 Options forward, backward, round-trip  
 Notes This element is part of a list key.  
 Introduced 16.0.R5  
 Platforms All

### **clear-threshold** *number*

Synopsis OAM-PM clear threshold for an excessive delay

Context	<b>configure</b> oam-pm bin-group number bin-type keyword delay-event keyword clear-threshold number
Tree	clear-threshold
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

### **exclude-lowest-bin** number

Synopsis	Lowest bin excluded from the TCA count
Context	<b>configure</b> oam-pm bin-group number bin-type keyword delay-event keyword exclude-lowest-bin number
Tree	exclude-lowest-bin
Range	1 to 9
Introduced	16.0.R5
Platforms	All

### **lowest-bin** number

Synopsis	Lowest delay bin used when applying a delay threshold
Context	<b>configure</b> oam-pm bin-group number bin-type keyword delay-event keyword lowest-bin number
Tree	lowest-bin
Range	0 to 9
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **raise-threshold** number

Synopsis	Raise threshold for excessive delay
Context	<b>configure</b> oam-pm bin-group number bin-type keyword delay-event keyword raise-threshold number
Tree	raise-threshold
Range	1 to 864000
Notes	This element is mandatory.

Introduced 16.0.R5  
 Platforms All

### **exclude-from-avg** [[direction](#)] *keyword*

Synopsis Enter the **exclude-from-avg** list instance  
 Context **configure** [oam-pm](#) [bin-group](#) *number* [bin-type](#) *keyword* [exclude-from-avg](#) *keyword*  
 Tree [exclude-from-avg](#)  
 Introduced 16.0.R5  
 Platforms All

### **[direction]** *keyword*

Synopsis Traffic flow direction of the OAM-PM test or metric  
 Context **configure** [oam-pm](#) [bin-group](#) *number* [bin-type](#) *keyword* [exclude-from-avg](#) *keyword*  
 Tree [exclude-from-avg](#)  
 Options forward, backward, round-trip  
 Notes This element is part of a list key.  
 Introduced 16.0.R5  
 Platforms All

### **bins** *string*

Synopsis Bin numbers excluded from the average calculation  
 Context **configure** [oam-pm](#) [bin-group](#) *number* [bin-type](#) *keyword* [exclude-from-avg](#) *keyword* [bins](#) *string*  
 Tree [bins](#)  
 String Length 1 to 39  
 Notes This element is mandatory.  
 Introduced 16.0.R5  
 Platforms All

### **description** *string*

Synopsis Text description



Context	<b>configure</b> <a href="#">oam-pm bin-group</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R5
Platforms	All

### **session** [[session-name](#)] *string*

Synopsis	Enter the <b>session</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i>
Tree	<a href="#">session</a>
Introduced	16.0.R5
Platforms	All

### **[session-name]** *string*

Synopsis	OAM-PM session name
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i>
Tree	<a href="#">session</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **bin-group** *reference*

Synopsis	Bin group for the session
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">bin-group</a> <i>reference</i>
Tree	<a href="#">bin-group</a>
Reference	<b>configure</b> <a href="#">oam-pm bin-group</a> <i>number</i>
Introduced	16.0.R5
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R5
Platforms	All

### **ethernet**

Synopsis	Enable the <b>ethernet</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet</a>
Tree	<a href="#">ethernet</a>
Notes	The following elements are part of a mandatory choice: <b>ethernet</b> , <b>ip</b> , or <b>mpls</b> .
Introduced	16.0.R5
Platforms	All

### **dest-mac** *string*

Synopsis	Destination MAC address for the session
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dest-mac</a> <i>string</i>
Tree	<a href="#">dest-mac</a>
Introduced	16.0.R5
Platforms	All

### **dmm**

Synopsis	Enable the <b>dmm</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dmm</a>
Tree	<a href="#">dmm</a>
Introduced	16.0.R5
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet dmm admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

**data-tlv-size** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet dmm data-tlv-size</b> <i>number</i>
Tree	<b>data-tlv-size</b>
Range	0   3 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	All

**delay-template** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet dmm delay-template</b> <i>string</i>
Tree	<b>delay-template</b>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet dmm interval</b> <i>number</i>
Tree	<b>interval</b>
Description	This command configures the message period or probe spacing for the transmission of a frame.
Range	50   100   200   300   400   500   600   700   800   900   1000   10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

**test-duration** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet dmm test-duration</b> <i>number</i>
Tree	<b>test-duration</b>
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

**test-id** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet dmm test-id</b> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">test-id</a>
Range	0 to 2147483647
Options	auto – Automatically assigns a test-id
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

## Imm

Synopsis	Enable the <b>Imm</b> context
Context	<b>configure</b> <a href="#">oam-pm session string ethernet Imm</a>
Tree	<a href="#">Imm</a>
Introduced	16.0.R5
Platforms	All

## **admin-state** *keyword*

Synopsis	Administrative state of the test
Context	<b>configure</b> <a href="#">oam-pm session string ethernet Imm admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

## availability



### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>availability</b> context
Context	<b>configure</b> <a href="#">oam-pm session string ethernet Imm availability</a>
Tree	<a href="#">availability</a>
Introduced	16.0.R5
Platforms	All

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of availability statistics
Context	<b>configure</b> <a href="#">oam-pm session string ethernet lmm availability admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

**flr-threshold** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	<b>configure</b> <a href="#">oam-pm session string ethernet lmm availability flr-threshold number</a>
Tree	<a href="#">flr-threshold</a>
Range	0 to 100
Units	percent
Default	50
Introduced	16.0.R5
Platforms	All

**hli-force-count** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	<b>configure</b> <a href="#">oam-pm session string ethernet lmm availability hli-force-count boolean</a>

Tree	<a href="#">hli-force-count</a>
Default	false
Introduced	16.0.R5
Platforms	All

## timing



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>timing</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability timing</a>
Tree	<a href="#">timing</a>
Introduced	16.0.R5
Platforms	All

## chli-threshold *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability timing chli-threshold</a> <i>number</i>
Tree	<a href="#">chli-threshold</a>
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

## consec-delta-t *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
----------	---

Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability timing consec-delta-t</a> <i>number</i>
Tree	<a href="#">consec-delta-t</a>
Range	2 to 10
Default	10
Introduced	16.0.R5
Platforms	All

### **frames-per-delta-t** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of frames sent in one delta-t
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm availability timing frames-per-delta-t</a> <i>number</i>
Tree	<a href="#">frames-per-delta-t</a>
Range	1 to 50
Introduced	16.0.R5
Platforms	All

### **fc-collection** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable collection of per-forwarding class counters
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm fc-collection</a> <i>boolean</i>
Tree	<a href="#">fc-collection</a>
Default	false
Introduced	16.0.R5
Platforms	All



## interval number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Description	This command configures the message period or probe spacing for the transmission of a frame.
Range	100   1000   10000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

## loss-events

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>loss-events</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events</a>
Tree	<a href="#">loss-events</a>
Introduced	16.0.R5
Platforms	All

## avg-flr-event [[direction](#)] *keyword*

Synopsis	Enter the <b>avg-flr-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events avg-flr-event</a> <i>keyword</i>
Tree	<a href="#">avg-flr-event</a>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events avg-flr-event</b> <i>keyword</i>
Tree	<a href="#">avg-flr-event</a>
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events avg-flr-event</b> <i>keyword</i> <b>clear-threshold</b> <i>decimal-number</i>
Tree	<a href="#">clear-threshold</a>
Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

**raise-threshold** *decimal-number*

Synopsis	Raise threshold for the average FLR
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events avg-flr-event</b> <i>keyword</i> <b>raise-threshold</b> <i>decimal-number</i>
Tree	<a href="#">raise-threshold</a>
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**chli-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>chli-event</b> list instance
----------	---

Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events chli-event</a> <i>keyword</i>
Tree	<a href="#">chli-event</a>
Introduced	16.0.R5
Platforms	All

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events chli-event</a> <i>keyword</i>
Tree	<a href="#">chli-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events chli-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

### **raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events chli-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**hli-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>hli-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events</a> <a href="#">hli-event</a> <i>keyword</i>
Tree	<a href="#">hli-event</a>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events</a> <a href="#">hli-event</a> <i>keyword</i>
Tree	<a href="#">hli-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events</a> <a href="#">hli-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events</a> <a href="#">hli-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000

Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **unavailability-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>unavailability-event</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events unavailability-event keyword</b>
Tree	<a href="#">unavailability-event</a>
Introduced	16.0.R5
Platforms	All

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events unavailability-event keyword</b>
Tree	<a href="#">unavailability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events unavailability-event keyword</b> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

### **raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
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Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events unavailability-event</b> <i>keyword</i> <b>raise-threshold</b> <i>number</i>
Tree	<b>raise-threshold</b>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **undet-availability-event** [**direction**] *keyword*

Synopsis	Enter the <b>undet-availability-event</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events undet-availability-event</b> <i>keyword</i>
Tree	<b>undet-availability-event</b>
Introduced	16.0.R5
Platforms	All

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events undet-availability-event</b> <i>keyword</i>
Tree	<b>undet-availability-event</b>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm loss-events undet-availability-event</b> <i>keyword</i> <b>clear-threshold</b> <i>number</i>
Tree	<b>clear-threshold</b>
Range	0 to 863999
Introduced	16.0.R5

Platforms All

### **raise-threshold** *number*

Synopsis Rising threshold that determines when to generate event

Context **configure** [oam-pm session](#) *string* [ethernet lmm loss-events undet-availability-event](#) *keyword* [raise-threshold](#) *number*

Tree [raise-threshold](#)

Range 1 to 864000

Notes This element is mandatory.

Introduced 16.0.R5

Platforms All

### **undet-unavailability-event** [[direction](#)] *keyword*

Synopsis Enter the **undet-unavailability-event** list instance

Context **configure** [oam-pm session](#) *string* [ethernet lmm loss-events undet-unavailability-event](#) *keyword*

Tree [undet-unavailability-event](#)

Introduced 16.0.R5

Platforms All

### **[direction]** *keyword*

Synopsis Traffic flow direction

Context **configure** [oam-pm session](#) *string* [ethernet lmm loss-events undet-unavailability-event](#) *keyword*

Tree [undet-unavailability-event](#)

Options forward, backward, aggregate

Notes This element is part of a list key.

Introduced 16.0.R5

Platforms All

### **clear-threshold** *number*

Synopsis Clear threshold

Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-unavailability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

### **raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm loss-events undet-unavailability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **test-duration** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet lmm test-duration</a> <i>number</i>
Tree	<a href="#">test-duration</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All



**test-id** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet lmm test-id</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">test-id</a>
Range	0 to 2147483647
Options	auto – Automatically assigns a test-id
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**priority** *number*

Synopsis	Priority and forwarding class for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	0
Introduced	16.0.R5
Platforms	All

**remote-mep** *number*

Synopsis	Remote MEP for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet remote-mep</b> <i>number</i>
Tree	<a href="#">remote-mep</a>
Range	1 to 8191
Introduced	16.0.R5
Platforms	All

**slm**

Synopsis	Enable the <b>slm</b> context
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Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm</a>
Tree	<a href="#">slm</a>
Introduced	16.0.R5
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

### **data-tlv-size** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in the frames sent for the test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm</a> <b>data-tlv-size</b> <i>number</i>
Tree	<a href="#">data-tlv-size</a>
Range	0   3 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	All

### **flr-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
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Context	<b>configure</b> <i>oam-pm session string ethernet slm flr-threshold number</i>
Tree	<a href="#">flr-threshold</a>
Range	0 to 100
Units	percent
Default	50
Introduced	16.0.R5
Platforms	All

### **hli-force-count** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increment HLI/CHLI counters regardless of availability
Context	<b>configure</b> <i>oam-pm session string ethernet slm hli-force-count boolean</i>
Tree	<a href="#">hli-force-count</a>
Default	false
Introduced	16.0.R5
Platforms	All

### **interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session test
Context	<b>configure</b> <i>oam-pm session string ethernet slm interval number</i>
Tree	<a href="#">interval</a>
Description	This command configures the message period or probe spacing for the transmission of a frame.
Range	50   100   200   300   400   500   600   700   800   900   1000
Units	milliseconds
Introduced	16.0.R5
Platforms	All

## loss-events



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>loss-events</b> context
Context	<b>configure</b> <a href="#">oam-pm session string ethernet slm loss-events</a>
Tree	<a href="#">loss-events</a>
Introduced	16.0.R5
Platforms	All

## avg-flr-event [[direction](#)] *keyword*

Synopsis	Enter the <b>avg-flr-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session string ethernet slm loss-events avg-flr-event keyword</a>
Tree	<a href="#">avg-flr-event</a>
Introduced	16.0.R5
Platforms	All

## [\[direction\]](#) *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session string ethernet slm loss-events avg-flr-event keyword</a>
Tree	<a href="#">avg-flr-event</a>
Options	forward, backward
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

## clear-threshold *decimal-number*

Synopsis	Clear threshold for the average FLR
Context	<b>configure</b> <a href="#">oam-pm session string ethernet slm loss-events avg-flr-event keyword clear-threshold decimal-number</a>
Tree	<a href="#">clear-threshold</a>

Range	0.000 to 99.999
Units	percent
Introduced	16.0.R5
Platforms	All

### **raise-threshold** *decimal-number*

Synopsis	Raise threshold for the average FLR
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events avg-flr-event</b> <i>keyword</i> <b>raise-threshold</b> <i>decimal-number</i>
Tree	<b>raise-threshold</b>
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **chli-event** [**direction**] *keyword*

Synopsis	Enter the <b>chli-event</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events chli-event</b> <i>keyword</i>
Tree	<b>chli-event</b>
Introduced	16.0.R5
Platforms	All

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events chli-event</b> <i>keyword</i>
Tree	<b>chli-event</b>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events chli-event</b> <i>keyword</i> <b>clear-threshold</b> <i>number</i>
Tree	<b>clear-threshold</b>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events chli-event</b> <i>keyword</i> <b>raise-threshold</b> <i>number</i>
Tree	<b>raise-threshold</b>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**hli-event** [*direction*] *keyword*

Synopsis	Enter the <b>hli-event</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events hli-event</b> <i>keyword</i>
Tree	<b>hli-event</b>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events hli-event</b> <i>keyword</i>
Tree	<b>hli-event</b>
Options	forward, backward, aggregate

Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events hli-event</b> <i>keyword</i> <b>clear-threshold</b> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events hli-event</b> <i>keyword</i> <b>raise-threshold</b> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**unavailability-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>unavailability-event</b> list instance
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events unavailability-event</b> <i>keyword</i>
Tree	<a href="#">unavailability-event</a>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction
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Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events unavailability-event</a> <i>keyword</i>
Tree	<a href="#">unavailability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events unavailability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

### **raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events unavailability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **undet-availability-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>undet-availability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>
Introduced	16.0.R5
Platforms	All



**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events undet-availability-event</b> <i>keyword</i>
Tree	<b>undet-availability-event</b>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events undet-availability-event</b> <i>keyword</i> <b>clear-threshold</b> <i>number</i>
Tree	<b>clear-threshold</b>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm loss-events undet-availability-event</b> <i>keyword</i> <b>raise-threshold</b> <i>number</i>
Tree	<b>raise-threshold</b>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**undet-unavailability-event** [**direction**] *keyword*

Synopsis	Enter the <b>undet-unavailability-event</b> list instance
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Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-unavailability-event</a> <i>keyword</i>
Tree	<a href="#">undet-unavailability-event</a>
Introduced	16.0.R5
Platforms	All

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-unavailability-event</a> <i>keyword</i>
Tree	<a href="#">undet-unavailability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

**clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-unavailability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	All

**raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm loss-events undet-unavailability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5

Platforms All

### test-duration *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm test-duration</b> <i>number</i>
Tree	<b>test-duration</b>
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	All

### test-id (*number* | *keyword*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ethernet slm test-id</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>test-id</b>
Range	0 to 2147483647
Options	auto – Automatically assigns a test-id
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### timing



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>timing</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm timing</a>
Tree	<a href="#">timing</a>
Introduced	16.0.R5
Platforms	All

### **chli-threshold** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm timing chli-threshold</a> <i>number</i>
Tree	<a href="#">chli-threshold</a>
Range	1 to 9
Default	5
Introduced	16.0.R5
Platforms	All

### **consec-delta-t** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of consecutive delta-t intervals
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm timing consec-delta-t</a> <i>number</i>
Tree	<a href="#">consec-delta-t</a>
Range	2 to 10
Default	10
Introduced	16.0.R5
Platforms	All

**frames-per-delta-t** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of frames sent in one delta-t
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet slm timing frames-per-delta-t</a> <i>number</i>
Tree	<a href="#">frames-per-delta-t</a>
Range	1 to 50
Introduced	16.0.R5
Platforms	All

**source**

Synopsis	Enable the <b>source</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet source</a>
Tree	<a href="#">source</a>
Introduced	16.0.R5
Platforms	All

**ma-admin-name** (*named-item-64* | *admin-name*)

Synopsis	Source Ethernet MA name
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet source ma-admin-name</a> ( <i>named-item-64</i>   <i>admin-name</i> )
Tree	<a href="#">ma-admin-name</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

**md-admin-name** (*named-item-64* | *admin-name*)

Synopsis	Source Ethernet MD name
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet source md-admin-name</a> ( <i>named-item-64</i>   <i>admin-name</i> )

Tree	<a href="#">md-admin-name</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **mep number**

Synopsis	Source Ethernet MEP ID
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ethernet source mep number</a>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **ip**

Synopsis	Enable the <b>ip</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip</a>
Tree	<a href="#">ip</a>
Notes	The following elements are part of a mandatory choice: <b>ethernet</b> , <b>ip</b> , or <b>mpls</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **allow-egress-remark-dscp boolean**

Synopsis	Allow DSCP modification by the egress QoS policy
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip allow-egress-remark-dscp</a> <i>boolean</i>
Tree	<a href="#">allow-egress-remark-dscp</a>
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**destination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Destination IP address for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">destination</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**destination-udp-port** *number*

Synopsis	Destination UDP port for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip destination-udp-port number</i>
Tree	<a href="#">destination-udp-port</a>
Range	1 to 65535
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**do-not-fragment** *boolean*

Synopsis	Do not allow packet fragmentation in the IPv4 header
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip do-not-fragment boolean</i>
Tree	<a href="#">do-not-fragment</a>
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dscp** (*keyword* | *keyword*)

Synopsis	DSCP value configured to the DSCP name
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip dscp</i> ( <i>keyword</i>   <i>keyword</i> )
Tree	<a href="#">dscp</a>
Description	This command allows for the explicit setting of the DSCP rather than deriving the DSCP value from the egress network QoS policy 1 using the <b>fc</b> and <b>profile</b> values.  Although disconnected from the <b>fc</b> and <b>profile</b> settings unless required, the three parameters should be aligned to ensure proper treatment within the node and along the path.

Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Options	resolve
Default	resolve
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc keyword**

Synopsis	Forwarding class for the session
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **forwarding**

Synopsis	Enable the <b>forwarding</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip forwarding</a>
Tree	<a href="#">forwarding</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bypass-routing**

Synopsis	Bypass the routing table when sending test packets
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip forwarding bypass-routing</a>
Tree	<a href="#">bypass-routing</a>
Notes	The following elements are part of a mandatory choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop</b> .
Introduced	16.0.R5



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interface** *string*

Synopsis Interface name

Context **configure** [oam-pm session](#) *string* [ip forwarding interface](#) *string*

Tree [interface](#)

String Length 1 to 32

Notes The following elements are part of a mandatory choice: **bypass-routing**, **interface**, or **next-hop**.

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis IP address for forwarding

Context **configure** [oam-pm session](#) *string* [ip forwarding next-hop](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree [next-hop](#)

Notes The following elements are part of a mandatory choice: **bypass-routing**, **interface**, or **next-hop**.

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pattern** (*keyword | number*)

Synopsis Pattern used to fill the packet padding field

Context **configure** [oam-pm session](#) *string* [ip pattern](#) (*keyword | number*)

Tree [pattern](#)

Range 0 to 65535

Options sequential

Default 0

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**profile** *keyword*

Synopsis	Profile type for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip profile keyword</i>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**router-instance** *string*

Synopsis	Router instance for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip router-instance string</i>
Tree	<a href="#">router-instance</a>
Default	Base
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip source (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">source</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source-udp-port** *number*

Synopsis	Source UDP port for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip source-udp-port number</i>
Tree	<a href="#">source-udp-port</a>
Range	64374 to 64383
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ttl number**

Synopsis	TTL value for the session
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip ttl number</i>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	255
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tunnel**

Synopsis	Enter the <b>tunnel</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip tunnel</i>
Tree	<a href="#">tunnel</a>
Description	Commands in this context configure packet tunneling options for the session. This command and the <b>oam-pm session ip forwarding</b> command are mutually exclusive.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mpls**

Synopsis	Enable the <b>mpls</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string ip tunnel mpls</i>
Tree	<a href="#">mpls</a>
Description	Commands in this context configure the MPLS packet tunneling options for the session. Configure the <b>oam-pm session ip router-instance</b> to Base to configure commands in the tunnel MPLS context. When entering a context under MPLS, the system removes any previous configuration of any sibling context. You can only configure one of the contexts for each OAM-PM session.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rsvp-te**

Synopsis	Enable the <b>rsvp-te</b> context
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Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls rsvp-te</b>
Tree	<b>rsvp-te</b>
Description	Commands in this context allow for the specification of RSVP-TE specific tunnel information used to transport the test packets. Entering this context removes all other tunnel-type options configured under the <b>configure oam-pm session ip tunnel mpls</b> context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: <b>rsvp-te</b> , <b>rsvp-te-auto</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , or <b>sr-te</b> .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lsp** *string*

Synopsis	Name of LSP that carries the test packets
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls rsvp-te lsp</b> <i>string</i>
Tree	<b>lsp</b>
String Length	1 to 64
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rsvp-te-auto**

Synopsis	Enable the <b>rsvp-te-auto</b> context
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls rsvp-te-auto</b>
Tree	<b>rsvp-te-auto</b>
Description	Commands in this context configure the RSVP-TE-Auto feature and <b>rsvp-te-auto</b> (RSVP TE with dynamically-created LSPs) packet tunneling options for the session. If you enter a context within the MPLS context, the system removes any previous configuration of any sibling context. You can only configure one of the contexts for each OAM-PM session.
Notes	The following elements are part of a choice: <b>rsvp-te</b> , <b>rsvp-te-auto</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , or <b>sr-te</b> .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**from string**

Synopsis	IPv4 address used to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip tunnel mpls rsvp-te-auto from</b> <i>string</i>
Tree	<b>from</b>
Description	This command configures the headend of the RSV LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: <b>from</b> , <b>to</b> , and <b>lsp-template</b> . When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lsp-template string**

Synopsis	LSP template used to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip tunnel mpls rsvp-te-auto lsp-template</b> <i>string</i>
Tree	<b>lsp-template</b>
Description	This command configures the name of the LSP template used to identify the unique LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: <b>from</b> , <b>to</b> , and <b>lsp-template</b> . When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
String Length	1 to 32
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**to string**

Synopsis	IPv4 unicast address to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip tunnel mpls rsvp-te-auto to</b> <i>string</i>
Tree	<b>to</b>
Description	This command configures the termination point of the RSVP LSP. Configure the following three commands to identify an RSVP-TE Auto LSP: <b>from</b> , <b>to</b> , and <b>lsp-template</b> . When all three of these values are configured, the specific RSVP LSP can be identified and the test packets can be carried across the tunnel.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sr-isis**

Synopsis	Enable the <b>sr-isis</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-isis</b>
Tree	<b>sr-isis</b>
Description	Commands in this context allow for the specification of SR-ISIS specific tunnel information used to transport the test packets. Entering this context removes all the other tunnel type commands configured in the <b>configure oam-pm session ip tunnel mpls</b> context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: <b>rsvp-te</b> , <b>rsvp-te-auto</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , or <b>sr-te</b> .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**igp-instance** *number*

Synopsis	IGP instance used to tunnel IP packets
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-isis igp-instance</b> <i>number</i>
Tree	<b>igp-instance</b>
Description	This command configures the IGP instance to tunnel IP packets for the session test.
Range	0 to 127
Default	0
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-isis prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>prefix</b>
Description	This command configures the IP prefix used with the IGP instance to tunnel IP packets for the session tests.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sr-ospf**

Synopsis	Enable the <b>sr-ospf</b> context
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-ospf</b>
Tree	<a href="#">sr-ospf</a>
Description	Commands in this context allow for the specification of SR-OSPF specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the <b>configure oam-pm session ip tunnel mpls</b> context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: <b>rsvp-te</b> , <b>rsvp-te-auto</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , or <b>sr-te</b> .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**igp-instance** *number*

Synopsis	IGP instance used to tunnel IP packets
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-ospf igp-instance</b> <i>number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 31
Default	0
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**prefix** *string*

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-ospf prefix</b> <i>string</i>
Tree	<a href="#">prefix</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sr-ospf3**

Synopsis	Enable the <b>sr-ospf3</b> context
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-ospf3</b>
Tree	<a href="#">sr-ospf3</a>

Description	Commands in this context allow for the specification of SR-OSPFv3 specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the <b>configure oam-pm session ip tunnel mpls</b> context. Only a single MPLS type can be configured for an OAM-PM session.
Notes	The following elements are part of a choice: <b>rsvp-te</b> , <b>rsvp-te-auto</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , or <b>sr-te</b> .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **igp-instance** *number*

Synopsis	IGP instance used to tunnel IP packets
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-ospf3 igp-instance</b> <i>number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 31   64 to 95
Default	0
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix to tunnel IP packets for the session tests
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-ospf3 prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sr-te**

Synopsis	Enable the <b>sr-te</b> context
Context	<b>configure oam-pm session</b> <i>string</i> <b>ip tunnel mpls sr-te</b>
Tree	<a href="#">sr-te</a>
Description	Commands in this context allow for the specification of SR-TE specific tunnel information used to transport the test packets. Entering this context removes all other tunnel type options configured under the <b>configure oam-pm session ip tunnel mpls</b> context. Only a single MPLS type can be configured for an OAM-PM session.



Notes	The following elements are part of a choice: <b>rsvp-te</b> , <b>rsvp-te-auto</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , or <b>sr-te</b> .
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lsp string**

Synopsis	Name of LSP that carries the test packets
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip tunnel mpls sr-te</a> <a href="#">lsp string</a>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **twamp-light**

Synopsis	Enable the <b>twamp-light</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light</a>
Tree	<a href="#">twamp-light</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state keyword**

Synopsis	Administrative state of the test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**allow-ipv6-udp-checksum-zero** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light</b> <b>allow-ipv6-udp-checksum-zero</b> <i>boolean</i>
Tree	<a href="#">allow-ipv6-udp-checksum-zero</a>
Description	<p>When configured to <b>true</b>, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to <b>false</b>, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**delay-template** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>ip twamp-light</b> <b>delay-template</b> <i>string</i>
Tree	<a href="#">delay-template</a>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between transmission PDUs for the session test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light interval number</i>
Tree	<b>interval</b>
Description	This command configures the message period or probe spacing for the transmission of a frame.
Range	50   100   200   300   400   500   600   700   800   900   1000   10000
Units	milliseconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## loss



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>loss</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss</i>
Tree	<b>loss</b>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## flr-threshold *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FLR threshold for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light loss flr-threshold number</i>
Tree	<b>flr-threshold</b>
Range	0 to 100
Units	percent
Default	50
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## hli-force-count *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Increase HLI/CHLI counters regardless of availability
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss</a> <b>hli-force-count</b> <i>boolean</i>
Tree	<a href="#">hli-force-count</a>
Default	false
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## timing

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>timing</b> context
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss</a> <b>timing</b>
Tree	<a href="#">timing</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## chli-threshold *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CHLI threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss timing</a> <b>chli-threshold</b> <i>number</i>
Tree	<a href="#">chli-threshold</a>
Range	1 to 9
Default	5
Introduced	16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **consec-delta-t** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of consecutive delta-t intervals

Context **configure** [oam-pm session](#) *string ip twamp-light loss timing consec-delta-t number*

Tree [consec-delta-t](#)

Range 2 to 10

Default 10

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **frames-per-delta-t** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Number of frames sent in one delta-t

Context **configure** [oam-pm session](#) *string ip twamp-light loss timing frames-per-delta-t number*

Tree [frames-per-delta-t](#)

Range 1 to 50

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **loss-events**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **loss-events** context

Context **configure** [oam-pm session](#) *string ip twamp-light loss-events*

Tree [loss-events](#)

Introduced 16.0.R5  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **avg-flr-event** [[direction](#)] *keyword*

Synopsis Enter the **avg-flr-event** list instance  
 Context **configure** [oam-pm session](#) *string ip twamp-light loss-events avg-flr-event keyword*  
 Tree [avg-flr-event](#)  
 Introduced 16.0.R5  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[direction]** *keyword*

Synopsis Traffic flow direction  
 Context **configure** [oam-pm session](#) *string ip twamp-light loss-events avg-flr-event keyword*  
 Tree [avg-flr-event](#)  
 Options forward, backward  
 Notes This element is part of a list key.  
 Introduced 16.0.R5  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **clear-threshold** *decimal-number*

Synopsis Clear threshold for the average FLR  
 Context **configure** [oam-pm session](#) *string ip twamp-light loss-events avg-flr-event keyword*  
[clear-threshold](#) *decimal-number*  
 Tree [clear-threshold](#)  
 Range 0.000 to 99.999  
 Units percent  
 Introduced 16.0.R5  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **raise-threshold** *decimal-number*

Synopsis Raise threshold for the average FLR

Context	<b>configure</b> <i>oam-pm session string ip twamp-light loss-events avg-flr-event keyword raise-threshold decimal-number</i>
Tree	<a href="#">raise-threshold</a>
Range	0.000 to 100.000
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **chli-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>chli-event</b> list instance
Context	<b>configure</b> <i>oam-pm session string ip twamp-light loss-events chli-event keyword</i>
Tree	<a href="#">chli-event</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <i>oam-pm session string ip twamp-light loss-events chli-event keyword</i>
Tree	<a href="#">chli-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <i>oam-pm session string ip twamp-light loss-events chli-event keyword clear-threshold number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **raise-threshold** *number*

Synopsis Rising threshold that determines when to generate event

Context **configure** **oam-pm session** *string* **ip twamp-light loss-events chli-event** *keyword* **raise-threshold** *number*

Tree **raise-threshold**

Range 1 to 864000

Notes This element is mandatory.

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **hli-event** [*direction*] *keyword*

Synopsis Enter the **hli-event** list instance

Context **configure** **oam-pm session** *string* **ip twamp-light loss-events hli-event** *keyword*

Tree **hli-event**

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### [*direction*] *keyword*

Synopsis Traffic flow direction

Context **configure** **oam-pm session** *string* **ip twamp-light loss-events hli-event** *keyword*

Tree **hli-event**

Options forward, backward, aggregate

Notes This element is part of a list key.

Introduced 16.0.R5

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **clear-threshold** *number*

Synopsis Clear threshold

Context **configure** **oam-pm session** *string* **ip twamp-light loss-events hli-event** *keyword* **clear-threshold** *number*



Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events hli-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **unavailability-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>unavailability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events unavailability-event</a> <i>keyword</i>
Tree	<a href="#">unavailability-event</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events unavailability-event</a> <i>keyword</i>
Tree	<a href="#">unavailability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events unavailability-event</a> <i>keyword</i> <a href="#">clear-threshold</a> <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events unavailability-event</a> <i>keyword</i> <a href="#">raise-threshold</a> <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**undet-availability-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>undet-availability-event</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">ip twamp-light loss-events undet-availability-event</a> <i>keyword</i>
Tree	<a href="#">undet-availability-event</a>

Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i> clear-threshold <i>number</i>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> oam-pm session <i>string</i> ip twamp-light loss-events undet-availability-event <i>keyword</i> raise-threshold <i>number</i>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **undet-unavailability-event** [[direction](#)] *keyword*

Synopsis	Enter the <b>undet-unavailability-event</b> list instance
Context	<b>configure</b> oam-pm session <i>string</i> ip twamp-light loss-events undet-unavailability-event <i>keyword</i>
Tree	<a href="#">undet-unavailability-event</a>
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[direction]** *keyword*

Synopsis	Traffic flow direction
Context	<b>configure</b> <a href="#">oam-pm session string ip twamp-light loss-events undet-unavailability-event keyword</a>
Tree	<a href="#">undet-unavailability-event</a>
Options	forward, backward, aggregate
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**clear-threshold** *number*

Synopsis	Clear threshold
Context	<b>configure</b> <a href="#">oam-pm session string ip twamp-light loss-events undet-unavailability-event keyword clear-threshold number</a>
Tree	<a href="#">clear-threshold</a>
Range	0 to 863999
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**raise-threshold** *number*

Synopsis	Rising threshold that determines when to generate event
Context	<b>configure</b> <a href="#">oam-pm session string ip twamp-light loss-events undet-unavailability-event keyword raise-threshold number</a>
Tree	<a href="#">raise-threshold</a>
Range	1 to 864000
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pad-size *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Amount of packet padding sent for the TWAMP-Light test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light pad-size number</i>
Tree	<a href="#">pad-size</a>
Range	0 to 2000
Units	octets
Default	0
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pad-tlv-size *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pad TLV size in each sent STAMP packet
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light pad-tlv-size number</i>
Tree	<a href="#">pad-tlv-size</a>
Description	<p>This command configures the PAD TLV included in the STAMP test packet with a total byte count specified by this command.</p> <p>TWAMP Light test packets do not allow TLVs. To pad the size of the TWAMP Light test packet the user must configure the <b>pad-size</b> command. STAMP test packets (the standard form of TWAMP Light) introduces TLVs for padding. Therefore, STAMP test packets must use the <b>pad-tlv-size</b> value.</p>
Range	4 to 2000
Units	octets
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**record-stats** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of statistics recorded for the TWAMP-Light test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light record-stats keyword</i>
Tree	<a href="#">record-stats</a>
Options	delay, loss, delay-and-loss
Default	delay
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**session-sender-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Packet type sent by the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light session-sender-type keyword</i>
Tree	<a href="#">session-sender-type</a>
Description	This command configures the type of test packet format to transmit.  When the <b>stamp</b> option is configured, STAMP transmission, packet formatting, and packet processing is allowed and STAMP test packets support TLVs. When the <b>twamp-light</b> option is configured, TWAMP Light transmission, packet formatting, and packet processing is allowed, but TWAMP Light test packets do not allow TLVs.
Options	twamp-light, stamp
Default	twamp-light
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-duration** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light test-duration number</i>
Tree	<a href="#">test-duration</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **test-id** (*number | keyword*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light test-id (number   keyword)</i>
Tree	<a href="#">test-id</a>
Range	0 to 2147483647
Options	auto – Automatically assigns a test-id
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **timestamp-format** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TWAMP Light or STAMP test packet timestamp format
Context	<b>configure</b> <b>oam-pm session</b> <i>string ip twamp-light timestamp-format keyword</i>
Tree	<a href="#">timestamp-format</a>
Description	This command configures the format of the timestamp structure and epoch to include in the STAMP and TWAMP Light test packets. The command option value also sets the z-bit in the test packet.  When <b>timestamp-format</b> value is <b>ntp</b> , the z-bit in the test packet is 0. When the <b>timestamp-format</b> is <b>ptp</b> , the z-bit in the test packets is 1.

Options	ntp, ptp
Default	ntp
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **measurement-interval** [[duration](#)] *keyword*

Synopsis	Enter the <b>measurement-interval</b> list instance
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i>
Tree	<a href="#">measurement-interval</a>
Description	Commands in this context establish individual measurement intervals to be used by the session. A maximum of three different measurement intervals may be configured under each session.
Introduced	16.0.R5
Platforms	All

### **[duration]** *keyword*

Synopsis	Duration of the measurement interval
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i>
Tree	<a href="#">measurement-interval</a>
Options	15-mins, 1-hour, 1-day, 5-mins, 1-min
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **accounting-policy** *reference*

Synopsis	Accounting policy for the measurement interval
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R5
Platforms	All



**boundary-type** *keyword*

Synopsis	Alignment of the start of the measurement interval
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>measurement-interval</b> <i>keyword</i> <b>boundary-type</b> <i>keyword</i>
Tree	<b>boundary-type</b>
Options	clock-aligned, test-relative
Default	clock-aligned
Introduced	16.0.R5
Platforms	All

**clock-offset** *number*

Synopsis	Offset for a clock-aligned measurement interval
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>measurement-interval</b> <i>keyword</i> <b>clock-offset</b> <i>number</i>
Tree	<b>clock-offset</b>
Range	0 to 86399
Units	seconds
Default	0
Introduced	16.0.R5
Platforms	All

**intervals-stored** *number*

Synopsis	Maximum number of measurement intervals stored
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>measurement-interval</b> <i>keyword</i> <b>intervals-stored</b> <i>number</i>
Tree	<b>intervals-stored</b>
Range	1 to 96
Introduced	16.0.R5
Platforms	All

**threshold-cross-alerts**

Synopsis	Enter the <b>threshold-cross-alerts</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>measurement-interval</b> <i>keyword</i> <b>threshold-cross-alerts</b>

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Tree	<a href="#">threshold-cross-alerts</a>
Introduced	16.0.R5
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of TCAs for measurement interval
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i> <a href="#">threshold-cross-alerts</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

**delay-events** *boolean*

Synopsis	Enable delay TCAs for the measurement interval
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i> <a href="#">threshold-cross-alerts</a> <a href="#">delay-events</a> <i>boolean</i>
Tree	<a href="#">delay-events</a>
Default	false
Introduced	16.0.R5
Platforms	All

**loss-events** *boolean*

Synopsis	Enable loss TCAs for the measurement interval
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">measurement-interval</a> <i>keyword</i> <a href="#">threshold-cross-alerts</a> <a href="#">loss-events</a> <i>boolean</i>
Tree	<a href="#">loss-events</a>
Default	false
Introduced	16.0.R5
Platforms	All

## mpls

Synopsis	Enable the <b>mpls</b> context
Context	<b>configure</b> <a href="#">oam-pm session string mpls</a>
Tree	<a href="#">mpls</a>
Notes	The following elements are part of a mandatory choice: <b>ethernet</b> , <b>ip</b> , or <b>mpls</b> .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## dm

Synopsis	Enable the <b>dm</b> context
Context	<b>configure</b> <a href="#">oam-pm session string mpls dm</a>
Tree	<a href="#">dm</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of the MPLS DM test
Context	<b>configure</b> <a href="#">oam-pm session string mpls dm admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## delay-template *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reference to a streaming delay template for the test
Context	<b>configure</b> <a href="#">oam-pm session string mpls dm delay-template string</a>
Tree	<a href="#">delay-template</a>
String Length	1 to 64

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Elapsed time between query messages sent for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls dm interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1000   2000   3000   4000   5000   6000   7000   8000   9000   10000
Units	milliseconds
Default	1000
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pad-tlv-size** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the pad TLV in query messages sent for the test
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls dm pad-tlv-size</b> <i>number</i>
Tree	<b>pad-tlv-size</b>
Range	0   2 to 257
Units	octets
Default	0
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**reflect-pad** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy the pad TLV in each query to the response
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">mpls dm reflect-pad</a> <i>boolean</i>
Tree	<a href="#">reflect-pad</a>
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-duration** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Duration of an on-demand test
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">mpls dm test-duration</a> <i>number</i>
Tree	<a href="#">test-duration</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-id** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Test ID for query and response messages
Context	<b>configure</b> <a href="#">oam-pm session</a> <i>string</i> <a href="#">mpls dm test-id</a> <i>number</i>
Tree	<a href="#">test-id</a>
Range	0 to 67108863
Notes	This element is mandatory.

Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dscp keyword**

Synopsis	DSCP value for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls dscp keyword</b>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Default	be
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc keyword**

Synopsis	Forwarding class for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lsp**

Synopsis	Enter the <b>lsp</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp</b>
Tree	<b>lsp</b>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mpls-tp-static

Synopsis	Enable the <b>mpls-tp-static</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp mpls-tp-static</b>
Tree	<b>mpls-tp-static</b>
Notes	The following elements are part of a choice: <b>mpls-tp-static</b> , <b>rsvp</b> , or <b>rsvp-auto</b> .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lsp string

Synopsis	LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp mpls-tp-static</b> <i>string</i>
Tree	<b>lsp</b>
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rsvp

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp</b>
Tree	<b>rsvp</b>
Notes	The following elements are part of a choice: <b>mpls-tp-static</b> , <b>rsvp</b> , or <b>rsvp-auto</b> .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lsp string

Synopsis	LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp</b> <b>lsp</b> <i>string</i>
Tree	<b>lsp</b>
String Length	1 to 64
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**udp-return-object** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address used by far end of the test to send response
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp udp-return-object</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">udp-return-object</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rsvp-auto**

Synopsis	Enable the <b>rsvp-auto</b> context
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto</b>
Tree	<a href="#">rsvp-auto</a>
Notes	The following elements are part of a choice: <b>mpls-tp-static</b> , <b>rsvp</b> , or <b>rsvp-auto</b> .
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**from** *string*

Synopsis	IPv4 address used to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto from</b> <i>string</i>
Tree	<a href="#">from</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lsp-template** *string*

Synopsis	LSP template used to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto lsp-template</b> <i>string</i>
Tree	<a href="#">lsp-template</a>
String Length	1 to 32
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**to string**

Synopsis	IPv4 address used to identify the LSP to be tested
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto to</b> <i>string</i>
Tree	<b>to</b>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**udp-return-object** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address used by far end of the test to send response
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls lsp rsvp-auto udp-return-object</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>udp-return-object</b>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern** (*keyword* | *number*)

Synopsis	Pattern value repeated to fill padding field of packet
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls pattern</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>pattern</b>
Range	0 to 65535
Options	sequential
Default	0
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**profile** *keyword*

Synopsis	QoS profile for the session
Context	<b>configure</b> <b>oam-pm session</b> <i>string</i> <b>mpls profile</b> <i>keyword</i>
Tree	<b>profile</b>
Options	in, out
Default	out
Introduced	16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **t**tl *number*

Synopsis MPLS TTL value for the session  
 Context **configure** [oam-pm session](#) *string* [mpls ttl](#) *number*  
 Tree [ttl](#)  
 Range 1 to 255  
 Default 255  
 Introduced 16.0.R6  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **session-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Session type  
 Context **configure** [oam-pm session](#) *string* [session-type](#) *keyword*  
 Tree [session-type](#)  
 Options proactive, on-demand  
 Default proactive  
 Introduced 16.0.R5  
 Platforms All

### **s**treaming

Synopsis Enter the **streaming** context  
 Context **configure** [oam-pm streaming](#)  
 Tree [streaming](#)  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**delay-template** [[delay-template-name](#)] *string*

Synopsis	Enter the <b>delay-template</b> list instance
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i>
Tree	<a href="#">delay-template</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[delay-template-name]** *string*

Synopsis	Streaming delay template name
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i>
Tree	<a href="#">delay-template</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the delay template
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fd-avg** [[direction](#)] *keyword*

Synopsis	Add a list entry for <b>fd-avg</b>
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <b>fd-avg</b> <i>keyword</i>
Tree	<a href="#">fd-avg</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[direction]** *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <b>fd-avg</b> <i>keyword</i>
Tree	<a href="#">fd-avg</a>
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ifdv-avg** [[direction](#)] *keyword*

Synopsis	Add a list entry for <b>ifdv-avg</b>
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <b>ifdv-avg</b> <i>keyword</i>
Tree	<a href="#">ifdv-avg</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[direction]** *keyword*

Synopsis	Traffic flow direction of the OAM-PM test or metric
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <b>ifdv-avg</b> <i>keyword</i>
Tree	<a href="#">ifdv-avg</a>
Options	forward, backward, round-trip
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## sample-window *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Sample window duration for the template
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">sample-window</a> <i>number</i>
Tree	<a href="#">sample-window</a>
Range	10 to 60
Units	seconds
Default	60
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## window-integrity *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Measurements for the sample window validity
Context	<b>configure</b> <a href="#">oam-pm streaming delay-template</a> <i>string</i> <a href="#">window-integrity</a> <i>number</i>
Tree	<a href="#">window-integrity</a>
Range	1 to 100
Units	percent
Default	50
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### 3.30 openflow commands

```

configure
- openflow
  - apply-groups reference
  - apply-groups-exclude reference
  - of-controller number
    - address string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - echo-interval number
    - echo-multiple number
    - ipv6-address string
    - role keyword
    - tls-server-profile reference
    - version keyword
  - of-switch string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - aux-channel boolean
    - controller (ipv4-address-no-zone | ipv6-address-no-zone) port number
      - apply-groups reference
      - apply-groups-exclude reference
      - ofc-loopback (ipv4-address-no-zone | ipv6-address-no-zone)
      - service-name string
      - tls-client-profile reference
    - description string
    - echo-interval number
    - echo-multiple number
    - flowtable number
      - apply-groups reference
      - apply-groups-exclude reference
      - max-size number
      - mismatch-action keyword
      - switch-defined-cookie boolean
    - logical-port-status keyword
    - ofs-id number

```

### 3.30.1 openflow command descriptions

#### openflow

Synopsis	Enter the <b>openflow</b> context
Context	<b>configure</b> <a href="#">openflow</a>
Tree	<a href="#">openflow</a>
Introduced	16.0.R4
Platforms	All

#### of-controller [[controller-id](#)] *number*

Synopsis	Enter the <b>of-controller</b> list instance
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i>
Tree	<a href="#">of-controller</a>
Max. Instances	1
Introduced	16.0.R4
Platforms	VSR-NRC

#### [[controller-id](#)] *number*

Synopsis	OpenFlow controller ID
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i>
Tree	<a href="#">of-controller</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR-NRC

#### address *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address for the OpenFlow controller
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R4
Platforms	VSR-NRC

### **admin-state** *keyword*

Synopsis	Administrative state of OpenFlow controller instance
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	VSR-NRC

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR-NRC

### **echo-interval** *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">echo-interval</a> <i>number</i>
Tree	<a href="#">echo-interval</a>
Range	10 to 3600
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	VSR-NRC



**echo-multiple** *number*

Synopsis	Consecutive lost messages before channel declared down
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">echo-multiple</a> <i>number</i>
Tree	<a href="#">echo-multiple</a>
Range	3 to 100
Default	3
Introduced	16.0.R4
Platforms	VSR-NRC

**ipv6-address** *string*

Synopsis	IPv6 address for the OpenFlow channel to the controller
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Introduced	19.10.R1
Platforms	VSR-NRC

**role** *keyword*

Synopsis	Role when multiple controllers connected to OF switch
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">role</a> <i>keyword</i>
Tree	<a href="#">role</a>
Options	equal
Default	equal
Introduced	16.0.R4
Platforms	VSR-NRC

**tls-server-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Profile name used by the controller
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">tls-server-profile</a> <i>reference</i>

Tree	<a href="#">tls-server-profile</a>
Reference	<b>configure</b> <a href="#">system security tls server-tls-profile</a> <i>string</i>
Introduced	16.0.R4
Platforms	VSR-NRC

**version** *keyword*

Synopsis	Version negotiated between OF controller and switch
Context	<b>configure</b> <a href="#">openflow of-controller</a> <i>number</i> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	version-1-3-1
Default	version-1-3-1
Introduced	16.0.R4
Platforms	VSR-NRC

**of-switch** [[name](#)] *string*

Synopsis	Enter the <b>of-switch</b> list instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i>
Tree	<a href="#">of-switch</a>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

**[name]** *string*

Synopsis	OpenFlow switch name
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i>
Tree	<a href="#">of-switch</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OpenFlow switch instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**aux-channel** *boolean*

Synopsis	Enable the auxiliary connection for the H-OFS instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>aux-channel</b> <i>boolean</i>
Tree	<a href="#">aux-channel</a>
Default	false
Introduced	16.0.R4
Platforms	All

**controller** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Synopsis	Enter the <b>controller</b> list instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>controller</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">controller</a>
Max. Instances	2
Introduced	16.0.R4
Platforms	All

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the OpenFlow channel to the controller
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>controller</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">controller</a>

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **port number**

Synopsis	Controller port ID
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">controller</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>port number</i>
Tree	<a href="#">controller</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **ofc-loopback** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Loopback IP address in the VPRN
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">controller</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>port number</i> <a href="#">ofc-loopback</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ofc-loopback</a>
Introduced	16.0.R4
Platforms	All

### **service-name** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">controller</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <i>port number</i> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

**tls-client-profile** *reference*

Synopsis	TLS profile name for use on the control channel
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">controller</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">port</a> <i>number</i> <b>tls-client-profile</b> <i>reference</i>
Tree	<a href="#">tls-client-profile</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">tls client-tls-profile</a> <i>string</i>
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R4
Platforms	All

**echo-interval** *number*

Synopsis	Interval for monitoring OpenFlow control channels
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">echo-interval</a> <i>number</i>
Tree	<a href="#">echo-interval</a>
Range	1 to 3600
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	All

**echo-multiple** *number*

Synopsis	Consecutive lost messages before channel declared down
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">echo-multiple</a> <i>number</i>
Tree	<a href="#">echo-multiple</a>
Range	3 to 100

---

Default	3
Introduced	16.0.R4
Platforms	All

**flowtable** [*table-id*] *number*

Synopsis	Enter the <b>flowtable</b> list instance
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i>
Tree	<a href="#">flowtable</a>
Max. Instances	1
Introduced	16.0.R4
Platforms	All

**[table-id]** *number*

Synopsis	OpenFlow table ID
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i>
Tree	<a href="#">flowtable</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**max-size** *number*

Synopsis	Maximum size of the flow table
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i> <a href="#">max-size</a> <i>number</i>
Tree	<a href="#">max-size</a>
Range	1 to 524288
Default	1000
Introduced	16.0.R4
Platforms	All

**mismatch-action** *keyword*

Synopsis	Action taken when no match entries found in flow table
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i> <b>mismatch-action</b> <i>keyword</i>
Tree	<a href="#">mismatch-action</a>
Options	drop, fall-through, packet-in
Default	fall-through
Introduced	16.0.R4
Platforms	All

**switch-defined-cookie** *boolean*

Synopsis	Enable switch-defined cookie encoding
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <a href="#">flowtable</a> <i>number</i> <b>switch-defined-cookie</b> <i>boolean</i>
Tree	<a href="#">switch-defined-cookie</a>
Default	false
Introduced	16.0.R4
Platforms	All

**logical-port-status** *keyword*

Synopsis	Logical port type for status change reporting
Context	<b>configure</b> <a href="#">openflow of-switch</a> <i>string</i> <b>logical-port-status</b> <i>keyword</i>
Tree	<a href="#">logical-port-status</a>
Options	rsvp-te, mpls-tp, sr-te
Max. Instances	3
Introduced	16.0.R4
Platforms	All

**ofs-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	OFS switch ID
----------	---------------

---

Context	<b>configure openflow of-switch</b> <i>string ofs-id number</i>
Tree	<i>ofs-id</i>
Range	1 to 8
Introduced	16.0.R6
Platforms	All



### 3.31 policy-options commands

```

configure
- policy-options
  - apply-groups reference
  - apply-groups-exclude reference
  - as-path string
    - apply-groups reference
    - apply-groups-exclude reference
    - expression string
  - as-path-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - entry number
      - apply-groups reference
      - apply-groups-exclude reference
      - expression string
  - community string
    - apply-groups reference
    - apply-groups-exclude reference
    - expression
      - apply-groups reference
      - apply-groups-exclude reference
      - exact boolean
      - expr string
    - member string
  - damping string
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress number
    - reuse number
    - suppress number
  - global-variables
    - name string
      - address (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - decimal decimal-number
      - number number
      - prefix (ipv4-prefix | ipv6-prefix)
      - value string
  - policy-statement string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action
      - action-type keyword
      - add-paths-send-limit (number | keyword)
      - admin-tag-policy (param-midstring-64 | string)
      - advertise-label keyword
      - aigp-metric
        - add (number | string)
        - set (keyword | number | string)
      - apply-groups reference
      - apply-groups-exclude reference
      - as-path
        - add (param-midstring | string)
        - replace (param-midstring | string)
      - as-path-prepend
        - as-path (number | string | keyword)
        - repeat (number | string)

```

configure policy-options policy-statement default-action bgp-high-priority

```

- bgp-high-priority boolean
- bgp-leak boolean
- bgp-med
  - adjust string
  - set (keyword | number | string)
- bgp-tunnel-metric
  - prefer-aigp boolean
  - prefer-med boolean
  - value (string | number)
- community
  - add (param-midstring-64 | string)
  - apply-groups reference
  - apply-groups-exclude reference
  - remove (param-midstring-64 | string)
  - replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- multicast-redirect
  - fwd-service string
  - ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sr-return-path-bfd-label (policy-var-name | number)
- srv6-locator (param-midstring-64 | string)
- srv6-micro-segment-locator (param-midstring-64 | string)
- srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- description string
- entry number
  - action
    - action-type keyword
    - add-paths-send-limit (number | keyword)
    - admin-tag-policy (param-midstring-64 | string)
    - advertise-label keyword
    - aigp-metric
      - add (number | string)
      - set (keyword | number | string)
    - apply-groups reference
    - apply-groups-exclude reference
    - as-path
      - add (param-midstring | string)

```

configure policy-options policy-statement entry action as-path replace

```

- replace (param-midstring | string)
- as-path-prepend
- as-path (number | string | keyword)
- repeat (number | string)
- bgp-high-priority boolean
- bgp-leak boolean
- bgp-med
- adjust string
- set (keyword | number | string)
- bgp-tunnel-metric
- prefer-aigp boolean
- prefer-med boolean
- value (string | number)
- community
- add (param-midstring-64 | string)
- apply-groups reference
- apply-groups-exclude reference
- remove (param-midstring-64 | string)
- replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- forwarding-class
- fc keyword
- priority keyword
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
- add (number | string)
- set (number | string)
- subtract (number | string)
- multicast-redirect
- fwd-service string
- ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
- prefer-igp boolean
- value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sr-return-path-bfd-label (policy-var-name | number)
- srv6-locator (param-midstring-64 | string)
- srv6-micro-segment-locator (param-midstring-64 | string)
- srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
- apply-groups reference
- apply-groups-exclude reference
- route-exists string
- description string

```

configure policy-options policy-statement entry from

```

- from
- aggregate-contributor boolean
- apply-groups reference
- apply-groups-exclude reference
- area string
- as-path
- group (param-midstring | string)
- length
- qualifier keyword
- unique boolean
- value (number | string)
- name (param-midstring | string)
- cluster-id
- ip-address string
- none-cluster-list boolean
- color number
- community
- count
- qualifier keyword
- type keyword
- value (number | string)
- expression string
- name (param-midstring-64 | string)
- distinguisher number
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- evpn-type keyword
- external boolean
- family keyword
- flowspec
- dest (param-midstring | string)
- source (param-midstring | string)
- group-address (param-midstring | string)
- host-ip (param-midstring | string)
- interface (named-item | interface-name | interface-name | interface-name)
- interface-subnets
- ip-int-name string
- service string
- level number
- local-preference
- qualifier keyword
- value (number | string)
- metric
- qualifier keyword
- value (number | string)
- mvpn-type keyword
- neighbor
- ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
- prefix-list (param-midstring | string)
- next-hop
- ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
- name string
- address (ipv4-address-no-zone | ipv6-address-no-zone)
- apply-groups reference
- apply-groups-exclude reference
- decimal decimal-number
- number number

```

configure policy-options policy-statement entry from policy-variables name prefix

```

    - prefix (ipv4-prefix | ipv6-prefix)
      - value string
    - prefix-list (param-midstring-64 | string)
    - prefix-list-override string
      - apply-groups reference
      - apply-groups-exclude reference
      - end-length number
      - start-length number
      - through-length number
      - type keyword
    - protocol
      - instance (keyword | number)
      - name keyword
    - route-distinguisher-list (param-midstring-64 | string)
    - source-address
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - prefix-list (param-midstring | string)
    - srv6-sid-prefix (policy-var-name | ipv6-unicast-prefix)
    - srv6-tlv keyword
    - state keyword
    - tag (number | keyword)
  - to
    - apply-groups reference
    - apply-groups-exclude reference
    - level number
    - neighbor
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
      - prefix-list (param-midstring | string)
    - prefix-list (param-midstring-64 | string)
    - protocol
      - instance (keyword | number)
      - name keyword
  - entry-type keyword
  - named-entry string
  - action
    - action-type keyword
    - add-paths-send-limit (number | keyword)
    - admin-tag-policy (param-midstring-64 | string)
    - advertise-label keyword
    - aigp-metric
      - add (number | string)
      - set (keyword | number | string)
    - apply-groups reference
    - apply-groups-exclude reference
    - as-path
      - add (param-midstring | string)
      - replace (param-midstring | string)
    - as-path-prepend
      - as-path (number | string | keyword)
      - repeat (number | string)
    - bgp-high-priority boolean
    - bgp-leak boolean
    - bgp-med
      - adjust string
      - set (keyword | number | string)
    - bgp-tunnel-metric
      - prefer-aigp boolean
      - prefer-med boolean
      - value (string | number)
    - community
      - add (param-midstring-64 | string)
      - apply-groups reference
      - apply-groups-exclude reference

```

configure policy-options policy-statement named-entry action community remove

```

- remove (param-midstring-64 | string)
- replace (param-midstring-64 | string)
- create-mpls-tunnel boolean
- create-udp-tunnel boolean
- damping (keyword | param-midstring | string)
- dest-class number
- egress-statistics boolean
- flex-algo (string | number)
- forwarding-class
  - fc keyword
  - priority keyword
- ingress-statistics boolean
- install-backup-path boolean
- local-preference (number | string)
- metric
  - add (number | string)
  - set (number | string)
  - subtract (number | string)
- multicast-redirect
  - fwd-service string
  - ip-int-name string
- nat-policy (param-midstring | string)
- next-hop (keyword | ipv4-address-no-zone | ipv6-address-no-zone | string)
- origin (keyword | string)
- origin-validation-state (keyword | string)
- preference (number | string)
- resolve-static boolean
- route-table-install boolean
- source-class number
- sr-label-index
  - prefer-igp boolean
  - value (string | number)
- sr-maintenance-policy (param-midstring | string)
- sr-return-path-bfd-label (policy-var-name | number)
- srv6-locator (param-midstring-64 | string)
- srv6-micro-segment-locator (param-midstring-64 | string)
- srv6-return-path-bfd-sid (policy-var-name | ipv6-address)
- sticky-ecmp boolean
- tag (number | string)
- type (number | string)
- apply-groups reference
- apply-groups-exclude reference
- conditional-expression
  - apply-groups reference
  - apply-groups-exclude reference
  - route-exists string
- description string
- from
  - aggregate-contributor boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
- as-path
  - group (param-midstring | string)
  - length
    - qualifier keyword
    - unique boolean
    - value (number | string)
  - name (param-midstring | string)
- cluster-id
  - ip-address string
  - none-cluster-list boolean
- color number
- community

```

configure policy-options policy-statement named-entry from community count

```

- count
  - qualifier keyword
  - type keyword
  - value (number | string)
- expression string
- name (param-midstring-64 | string)
- distinguisher number
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- evpn-type keyword
- external boolean
- family keyword
- flowspec
  - dest (param-midstring | string)
  - source (param-midstring | string)
- group-address (param-midstring | string)
- host-ip (param-midstring | string)
- interface (named-item | interface-name | interface-name | interface-name)
- interface-subnets
  - ip-int-name string
  - service string
- level number
- local-preference
  - qualifier keyword
  - value (number | string)
- metric
  - qualifier keyword
  - value (number | string)
- mvpn-type keyword
- neighbor
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
  - prefix-list (param-midstring | string)
- next-hop
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)
- origin keyword
- origin-validation-state keyword
- ospf-type number
- path-type keyword
- policy (string | string)
- policy-variables
  - name string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - decimal decimal-number
  - number number
  - prefix (ipv4-prefix | ipv6-prefix)
  - value string
- prefix-list (param-midstring-64 | string)
- prefix-list-override string
  - apply-groups reference
  - apply-groups-exclude reference
  - end-length number
  - start-length number
  - through-length number
  - type keyword
- protocol
  - instance (keyword | number)
  - name keyword
- route-distinguisher-list (param-midstring-64 | string)
- source-address
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - prefix-list (param-midstring | string)

```

configure policy-options policy-statement named-entry from srv6-sid-prefix

```

- srv6-sid-prefix (policy-var-name | ipv6-unicast-prefix)
- srv6-tlv keyword
- state keyword
- tag (number | keyword)
- to
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
  - neighbor
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-
with-zone | ipv6-address-with-zone)
    - prefix-list (param-midstring | string)
    - prefix-list (param-midstring-64 | string)
    - protocol
      - instance (keyword | number)
      - name keyword
  - prefix-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix (ipv4-prefix | ipv6-prefix) type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - end-length number
    - mask-pattern (ipv4-address-no-zone | ipv6-address-no-zone)
    - start-length number
    - through-length number
    - to-prefix (ipv4-prefix | ipv6-prefix)
  - route-distinguisher-list string
    - apply-groups reference
    - apply-groups-exclude reference
    - rd-entry string

```



### 3.31.1 policy-options command descriptions

#### policy-options

Synopsis	Enter the <b>policy-options</b> context
Context	<b>configure</b> <a href="#">policy-options</a>
Tree	<a href="#">policy-options</a>
Introduced	16.0.R1
Platforms	All

#### as-path [[name](#)] *string*

Synopsis	Enter the <b>as-path</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path</a> <i>string</i>
Tree	<a href="#">as-path</a>
Introduced	16.0.R1
Platforms	All

#### [\[name\]](#) *string*

Synopsis	AS path name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path</a> <i>string</i>
Tree	<a href="#">as-path</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### expression *string*

Synopsis	Regular expression string
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path</a> <i>string</i> <a href="#">expression</a> <i>string</i>
Tree	<a href="#">expression</a>
Description	This command configures a route policy AS path regular expression statement to use in route policy entries.

An AS path in a BGP route matches an AS path regular expression, if the path matches the pattern of the regular expression. A regular expression incorporates terms and operators that use the terms. An individual AS number is an elementary term in the AS path regular expression. More complex terms can be built from elementary terms. The following are key operators supported by SR OS:

- .
- \*
- ?
- {n}
- {m,n}
- {m, }

To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.

String Length	1 to 255
Introduced	16.0.R1
Platforms	All

### **as-path-group** [[name](#)] *string*

Synopsis	Enter the <b>as-path-group</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path-group</a> <i>string</i>
Tree	<a href="#">as-path-group</a>
Introduced	16.0.R1
Platforms	All

### **[name]** *string*

Synopsis	AS path group name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path-group</a> <i>string</i>
Tree	<a href="#">as-path-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**entry** [*entry*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path-group</a> <i>string</i> <i>entry</i> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[entry]** *number*

Synopsis	AS path entry ID
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path-group</a> <i>string</i> <i>entry</i> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**expression** *string*

Synopsis	Regular expression string
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">as-path-group</a> <i>string</i> <i>entry</i> <i>number</i> <a href="#">expression</a> <i>string</i>
Tree	<a href="#">expression</a>

Description This command configures an AS path group regular expression.

An AS path in a BGP route matches an AS path group, if the pattern of the path matches the concatenation of all regular expressions in the group. A regular expression incorporates terms and operators that use the terms. An individual AS number is an elementary term in the AS path regular expression. More complex terms can be built from elementary terms. The following are key operators supported by SR OS:

- .
- \*
- ?
- {n}
- {m,n}
- {m, }

To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.

---

String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **community** [[name](#)] *string*

Synopsis	Enter the <b>community</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i>
Tree	<a href="#">community</a>
Introduced	16.0.R1
Platforms	All

### **[name]** *string*

Synopsis	Community name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i>
Tree	<a href="#">community</a>
Description	This command configures a route policy community name.  String values must be composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **expression**

Synopsis	Enable the <b>expression</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <a href="#">expression</a>
Tree	<a href="#">expression</a>
Introduced	16.0.R1
Platforms	All

**exact** *boolean*

Synopsis	Match exactly for the specified expression
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <a href="#">expression</a> <b>exact</b> <i>boolean</i>
Tree	<a href="#">exact</a>
Default	false
Introduced	16.0.R1
Platforms	All

**expr** *string*

Synopsis	Community expression value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <a href="#">expression</a> <b>expr</b> <i>string</i>
Tree	<a href="#">expr</a>
String Length	1 to 900
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**member** [[member](#)] *string*

Synopsis	Add a list entry for <b>member</b>
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <a href="#">member</a> <i>string</i>
Tree	<a href="#">member</a>
Introduced	16.0.R1
Platforms	All

**[member]** *string*

Synopsis	Community member value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">community</a> <i>string</i> <a href="#">member</a> <i>string</i>
Tree	<a href="#">member</a>
Description	This command configures a BGP community value.

Each member of a community list is a standard, extended, or large community value or a regular expression that potentially matches many community values. A regular expression incorporates terms and operators that use the terms. An individual numerical digit is an elementary term in the community regular expression. More complex terms

can be built from elementary terms. The following are key operators supported by SR OS:

- .
- \*
- ?
- {n}
- {m,n}
- {m, }

To reverse the match criteria when specifying a list of ranges or single values using square brackets, use the non-match operator (^) before the elements within the square brackets.

String Length	1 to 72
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **damping** [name] *string*

Synopsis	Enter the <b>damping</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <b>damping</b> <i>string</i>
Tree	<a href="#">damping</a>
Introduced	16.0.R1
Platforms	All

### **[name]** *string*

Synopsis	Damping profile name
Context	<b>configure</b> <a href="#">policy-options</a> <b>damping</b> <i>string</i>
Tree	<a href="#">damping</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **half-life** *number*

Synopsis	Time after the FOM value is halved
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">damping</a> <i>string</i> <a href="#">half-life</a> <i>number</i>
Tree	<a href="#">half-life</a>
Range	1 to 45
Units	minutes
Introduced	16.0.R1
Platforms	All

### **max-suppress** *number*

Synopsis	Maximum time for a route to remain suppressed
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">damping</a> <i>string</i> <a href="#">max-suppress</a> <i>number</i>
Tree	<a href="#">max-suppress</a>
Range	1 to 720
Units	minutes
Introduced	16.0.R1
Platforms	All

### **reuse** *number*

Synopsis	Value below which a suppressed route can be used again
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">damping</a> <i>string</i> <a href="#">reuse</a> <i>number</i>
Tree	<a href="#">reuse</a>
Range	1 to 20000
Introduced	16.0.R1
Platforms	All

### **suppress** *number*

Synopsis	Value above which a route is suppressed
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">damping</a> <i>string</i> <a href="#">suppress</a> <i>number</i>
Tree	<a href="#">suppress</a>
Range	1 to 20000
Introduced	16.0.R1

Platforms All

## global-variables

Synopsis Enter the **global-variables** context  
 Context **configure** [policy-options](#) [global-variables](#)  
 Tree [global-variables](#)  
 Introduced 16.0.R4  
 Platforms All

### name [[variable-name](#)] *string*

Synopsis Enter the **name** list instance  
 Context **configure** [policy-options](#) [global-variables](#) [name](#) *string*  
 Tree [name](#)  
 Max. 1000  
 Instances  
 Introduced 16.0.R4  
 Platforms All

### [\[variable-name\]](#) *string*

Synopsis Global variable name used to reference policy functions  
 Context **configure** [policy-options](#) [global-variables](#) [name](#) *string*  
 Tree [name](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the policy variable  
 Context **configure** [policy-options](#) [global-variables](#) [name](#) *string* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [address](#)



Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	16.0.R4
Platforms	All

### **decimal** *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">global-variables</a> <a href="#">name</a> <i>string</i> <b>decimal</b> <i>decimal-number</i>
Tree	<a href="#">decimal</a>
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	19.7.R1
Platforms	All

### **number** *number*

Synopsis	Numerical value of the policy variable
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">global-variables</a> <a href="#">name</a> <i>string</i> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	16.0.R4
Platforms	All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix value associated with the variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">global-variables</a> <a href="#">name</a> <i>string</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value string**

Synopsis	Policy variable value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">global-variables</a> <a href="#">name</a> <i>string</i> <b>value</b> <i>string</i>
Tree	<a href="#">value</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	16.0.R4
Platforms	All

**policy-statement [name] string**

Synopsis	Enter the <b>policy-statement</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Tree	<a href="#">policy-statement</a>
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

**[name] string**

Synopsis	Route policy statement name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Tree	<a href="#">policy-statement</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**default-action**

Synopsis	Enable the <b>default-action</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <b>default-action</b>

Tree	<a href="#">default-action</a>
Introduced	16.0.R1
Platforms	All

### **action-type** *keyword*

Synopsis	Action type for routes matching the route policy entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">action-type</a> <i>keyword</i>
Tree	<a href="#">action-type</a>
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **add-paths-send-limit** (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">add-paths-send-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">add-paths-send-limit</a>
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

### **admin-tag-policy** (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">admin-tag-policy</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">admin-tag-policy</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**advertise-label** *keyword*

Synopsis	Label allocation for matched BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">advertise-label</a> <i>keyword</i>
Tree	<a href="#">advertise-label</a>
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

**aigp-metric**

Synopsis	Enter the <b>aigp-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">aigp-metric</a>
Tree	<a href="#">aigp-metric</a>
Introduced	16.0.R1
Platforms	All

**add** (*number* | *string*)

Synopsis	AIGP metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">aigp-metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	16.0.R1
Platforms	All

**set** (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">aigp-metric</a> <a href="#">set</a> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>

String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	16.0.R1
Platforms	All

## as-path

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">as-path</a>
Tree	<a href="#">as-path</a>
Introduced	16.0.R1
Platforms	All

## add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">as-path</a> <b>add</b> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>add</b> or <b>replace</b> .
Introduced	16.0.R1
Platforms	All

## replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">as-path</a> <b>replace</b> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">replace</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>add</b> or <b>replace</b> .
Introduced	16.0.R1

Platforms All

### **as-path-prepend**

Synopsis Enter the **as-path-prepend** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path-prepend](#)

Tree [as-path-prepend](#)

Introduced 16.0.R1

Platforms All

### **as-path** (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path-prepend](#) [as-path](#) (*number* | *string* | *keyword*)

Tree [as-path](#)

String Length 1 to 32

Range 1 to 4294967295

Options most-recent

Introduced 16.0.R1

Platforms All

### **repeat** (*number* | *string*)

Synopsis Number of times to prepend the specified AS number

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [as-path-prepend](#) [repeat](#) (*number* | *string*)

Tree [repeat](#)

String Length 1 to 32

Range 1 to 50

Default 1

Introduced 16.0.R1

Platforms All

**bgp-high-priority** *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-high-priority</a> <i>boolean</i>
Tree	<a href="#">bgp-high-priority</a>
Description	<p>When configured to <b>true</b>, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p> <ul style="list-style-type: none"> <li>• IPv4</li> <li>• label-IPv4</li> <li>• IPv6</li> <li>• label-IPv6</li> </ul> <p>This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.</p> <p>When configured to <b>false</b>, no routes are tagged for faster route table updates.</p>
Default	false
Introduced	20.5.R1
Platforms	All

**bgp-leak** *boolean*

Synopsis	Allow leaking for BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-leak</a> <i>boolean</i>
Tree	<a href="#">bgp-leak</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bgp-med**

Synopsis	Enter the <b>bgp-med</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-med</a>
Tree	<a href="#">bgp-med</a>
Introduced	19.7.R1
Platforms	All

## **adjust** *string*

Synopsis	BGP-MED adjustment
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-med</a> <b>adjust</b> <i>string</i>
Tree	<a href="#">adjust</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .
Introduced	19.7.R1
Platforms	All

## **set** (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-med</a> <b>set</b> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .
Introduced	19.7.R1
Platforms	All

## **bgp-tunnel-metric**

Synopsis	Enter the <b>bgp-tunnel-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <b>bgp-tunnel-metric</b>
Tree	<a href="#">bgp-tunnel-metric</a>
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All



**prefer-aigp** *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-tunnel-metric</a> <a href="#">prefer-aigp</a> <i>boolean</i>
Tree	<a href="#">prefer-aigp</a>
Description	<p>When configured to <b>true</b>, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.</p> <p>When configured to <b>false</b>, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.</p>
Default	false
Introduced	20.5.R1
Platforms	All

**prefer-med** *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-tunnel-metric</a> <a href="#">prefer-med</a> <i>boolean</i>
Tree	<a href="#">prefer-med</a>
Description	<p>When configured to <b>true</b>, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.</p> <p>When configured to <b>false</b>, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.</p>
Default	false
Introduced	23.3.R1
Platforms	All

**value** (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">bgp-tunnel-metric</a> <i>value</i> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	This command configures a BGP tunnel metric is assigned to routes that do not match any entry.

If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:

- the `prefer-aigp` option is set to `false`
- the `prefer-aigp` option is set to `true` but the BGP-LU route does not have an AIGP attribute

String Length	1 to 32
Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

## community

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">community</a>
Tree	<a href="#">community</a>
Introduced	16.0.R1
Platforms	All

## add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">community</a> <b>add</b> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">community</a> <a href="#">remove</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">remove</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **replace** (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">community</a> <a href="#">replace</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">replace</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **create-mpls-tunnel** *boolean*

Synopsis	Create an MPLS tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">create-mpls-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-mpls-tunnel</a>
Description	When configured to <b>true</b> , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> <li>• evpn</li> <li>• ipv4</li> <li>• ipv6</li> <li>• label-ipv4</li> </ul>

- label-ipv6
- vpn-ipv4
- vpn-ipv6

Default	false
Introduced	21.10.R1
Platforms	All

### **create-udp-tunnel** *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">create-udp-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-udp-tunnel</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **damping** (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">damping</a> ( <i>keyword</i>   <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">damping</a>
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

### **dest-class** *number*

Synopsis	Default destination class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">dest-class</a> <i>number</i>
Tree	<a href="#">dest-class</a>
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **egress-statistics** *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">egress-statistics</a> <i>boolean</i>
Tree	<a href="#">egress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

### **flex-algo** (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">flex-algo</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">flex-algo</a>
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry.  Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU.  This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

### **ingress-statistics** *boolean*

Synopsis	Enable ingress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">ingress-statistics</a> <i>boolean</i>

Tree	<a href="#">ingress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

### **install-backup-path** *boolean*

Synopsis	Install a preprogrammed backup path for the prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">install-backup-path</a> <i>boolean</i>
Tree	<a href="#">install-backup-path</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **local-preference** (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">local-preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">local-preference</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **metric**

Synopsis	Enter the <b>metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">metric</a>
Tree	<a href="#">metric</a>
Introduced	16.0.R1

Platforms All

### **add** (*number* | *string*)

Synopsis Metric to add

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) [add](#) (*number* | *string*)

Tree [add](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 16.0.R1

Platforms All

### **set** (*number* | *string*)

Synopsis Metric to assign

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) [set](#) (*number* | *string*)

Tree [set](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 16.0.R1

Platforms All

### **subtract** (*number* | *string*)

Synopsis Metric to subtract

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [metric](#) [subtract](#) (*number* | *string*)

Tree [subtract](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 16.0.R1

Platforms All

## multicast-redirect

Synopsis Enter the **multicast-redirect** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [multicast-redirect](#)

Tree [multicast-redirect](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fwd-service *string*

Synopsis Service ID for multicast redirection

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [multicast-redirect](#) [fwd-service](#) *string*

Tree [fwd-service](#)

Default Base

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-int-name *string*

Synopsis Alternate interface where IGMP messages are redirected

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [multicast-redirect](#) [ip-int-name](#) *string*

Tree [ip-int-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## nat-policy (*param-midstring* | *string*)

Synopsis BGP-VPN imported route and a NAT policy association

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [nat-policy](#) (*param-midstring* | *string*)

Tree [nat-policy](#)



Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type <b>accept</b> regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **next-hop** (*keyword | ipv4-address-no-zone | ipv6-address-no-zone | string*)

Synopsis	Next-hop IP address applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <b>next-hop</b> ( <i>keyword   ipv4-address-no-zone   ipv6-address-no-zone   string</i> )
Tree	<a href="#">next-hop</a>
String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

### **origin** (*keyword | string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <b>origin</b> ( <i>keyword   string</i> )
Tree	<a href="#">origin</a>
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

### **origin-validation-state** (*keyword | string*)

Synopsis	Origin validation state for routes
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">origin-validation-state</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">origin-validation-state</a>
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

### **preference** (*number* | *string*)

Synopsis	Route preference applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">preference</a>
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **resolve-static** *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">resolve-static</a> <i>boolean</i>
Tree	<a href="#">resolve-static</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **route-table-install** *boolean*

Synopsis	Allow BGP route installation in the route table
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">route-table-install</a> <i>boolean</i>
Tree	<a href="#">route-table-install</a>
Default	true
Introduced	19.10.R1

Platforms All

### **source-class** *number*

Synopsis Default source class for the policy statement

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [source-class](#) *number*

Tree [source-class](#)

Description This command specifies the policy accounting source class index to associate with matched routes.

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **sr-label-index**

Synopsis Enter the **sr-label-index** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [sr-label-index](#)

Tree [sr-label-index](#)

Description Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.

The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.

This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.

When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.

Introduced 19.10.R1

Platforms All

### **prefer-igp** *boolean*

Synopsis Use the SR label index from the IGP route when present

Context **configure** [policy-options](#) [policy-statement](#) *string* [default-action](#) [sr-label-index](#) [prefer-igp](#) *boolean*

Tree [prefer-igp](#)

Description	<p>When configured to <b>true</b>, BGP obtains the SID index from the IGP route (if a SID index is present) and the <b>configure router bgp segment-routing prefix-sid-range global</b> command is set to <b>true</b>.</p> <p>This command applies only to route table import policies.</p> <p>When configured to <b>false</b>, or the SID index is not present in the IGP route, or the <b>configure router bgp segment-routing prefix-sid-range global</b> command is not set to <b>true</b>, BGP obtains the label index value from the <b>value</b> command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **value** (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">sr-label-index</a> <i>value</i> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

### **sr-maintenance-policy** (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">sr-maintenance-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">sr-maintenance-policy</a>
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32

Introduced	20.10.R1
Platforms	All

### **sr-return-path-bfd-label** (*policy-var-name* | *number*)

Synopsis	S-BFD return path label
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <b>sr-return-path-bfd-label</b> ( <i>policy-var-name</i>   <i>number</i> )
Tree	<a href="#">sr-return-path-bfd-label</a>
Description	<p>This command configures an additional MPLS label to add to the bottom of the label stack for the S-BFD packet and sets the S-BFD session to echo mode.</p> <p>This command applies to the initiator of the S-BFD sessions. The label value can either be a binding SID for an SR policy or another MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through the MPLS return path. This value takes precedence over the return path label value in a maintenance policy (configured using the <b>configure router segment-routing maintenance-policy return-path-label</b> command) that is also applied as the policy-statement action. This command can only be configured if the <b>sr-maintenance-policy</b> is also configured.</p> <p>If this command is unconfigured, and there is no <b>return-path-label</b> command configuration in the maintenance policy that is also applied as an action, and the policy statement is reevaluated, S-BFD returns to asynchronous mode and no return path label is pushed by the initiator node. S-BFD packets for this LSP or path received by the reflector are routed through the IGP path.</p>
String Length	1 to 32
Range	32 to 1048512
Introduced	23.10.R1
Platforms	All

### **srv6-locator** (*param-midstring-64* | *string*)

Synopsis	Locator for SRv6 TLV to use
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <b>srv6-locator</b> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">srv6-locator</a>
Description	<p>This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named locator for the SRv6 TLV to use.</p> <p>For a VRF export policy, the referenced locator must already be configured using the commands in the <b>configure service vprn segment-routing-v6 locator</b> context.</p>

For a BGP export policy, the referenced locator must already be configured using the commands in the **configure router segment-routing segment-routing-v6 base-routing-instance locator** context.

String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srv6-micro-segment-locator** (*param-midstring-64* | *string*)

Synopsis	Micro-segment locator for SRv6 TLV to use
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">srv6-micro-segment-locator</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">srv6-micro-segment-locator</a>
Description	<p>This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named micro-segment locator for the SRv6 TLV to use.</p> <p>For a VRF export policy, the referenced micro-segment locator must already be configured using the commands in the <b>configure service vprn segment-routing-v6 micro-segment-locator</b> context.</p> <p>For a BGP export policy, the referenced micro-SID locator must already be configured using the commands in the <b>configure router segment-routing segment-routing-v6 base-routing-instance micro-segment-locator</b> context.</p>
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srv6-return-path-bfd-sid** (*policy-var-name* | *ipv6-address*)

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">srv6-return-path-bfd-sid</a> ( <i>policy-var-name</i>   <i>ipv6-address</i> )
Tree	<a href="#">srv6-return-path-bfd-sid</a>
Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

**sticky-ecmp** *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">sticky-ecmp</a> <i>boolean</i>
Tree	<a href="#">sticky-ecmp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tag** (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">tag</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">tag</a>
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**type** (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">default-action</a> <a href="#">type</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">type</a>
String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **entry** [entry-id] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[entry-id]** *number*

Synopsis Entry ID for a route policy entry  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number*  
 Tree [entry](#)  
 Range 1 to 4294967295  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **action**

Synopsis Enable the **action** context  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#)  
 Tree [action](#)  
 Introduced 16.0.R1  
 Platforms All

### **action-type** *keyword*

Synopsis Action type for routes matching the route policy entry  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [action-type](#) *keyword*  
 Tree [action-type](#)  
 Options accept, reject, next-entry, next-policy



Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **add-paths-send-limit** (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">add-paths-send-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">add-paths-send-limit</a>
Range	1 to 16
Options	multipaths
Introduced	16.0.R1
Platforms	All

### **admin-tag-policy** (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">admin-tag-policy</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">admin-tag-policy</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **advertise-label** *keyword*

Synopsis	Label allocation for matched BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">advertise-label</a> <i>keyword</i>
Tree	<a href="#">advertise-label</a>
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward
Introduced	16.0.R1
Platforms	All

## **aigp-metric**

Synopsis	Enter the <b>aigp-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">aigp-metric</a>
Tree	<a href="#">aigp-metric</a>
Introduced	16.0.R1
Platforms	All

## **add** (*number* | *string*)

Synopsis	AIGP metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">aigp-metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	16.0.R1
Platforms	All

## **set** (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">aigp-metric</a> <a href="#">set</a> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	16.0.R1
Platforms	All

## as-path

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path</a>
Tree	<a href="#">as-path</a>
Introduced	16.0.R1
Platforms	All

## add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path</a> <a href="#">add</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>add</b> or <b>replace</b> .
Introduced	16.0.R1
Platforms	All

## replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path</a> <a href="#">replace</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">replace</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>add</b> or <b>replace</b> .
Introduced	16.0.R1
Platforms	All

## as-path-prepend

Synopsis	Enter the <b>as-path-prepend</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">as-path-prepend</a>
Tree	<a href="#">as-path-prepend</a>
Introduced	16.0.R1

Platforms All

### **as-path** (*number* | *string* | *keyword*)

Synopsis AS number to prepend to the AS path attribute

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [as-path-prepend](#) [as-path](#) (*number* | *string* | *keyword*)

Tree [as-path](#)

String Length 1 to 32

Range 1 to 4294967295

Options most-recent

Introduced 16.0.R1

Platforms All

### **repeat** (*number* | *string*)

Synopsis Number of times to prepend the specified AS number

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [as-path-prepend](#) [repeat](#) (*number* | *string*)

Tree [repeat](#)

String Length 1 to 32

Range 1 to 50

Default 1

Introduced 16.0.R1

Platforms All

### **bgp-high-priority** *boolean*

Synopsis Tag routes as high priority for fast table updates

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-high-priority](#) *boolean*

Tree [bgp-high-priority](#)

Description When configured to **true**, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.

This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:

- IPv4

- label-IPv4
- IPv6
- label-IPv6

This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.

When configured to **false**, no routes are tagged for faster route table updates.

Default	false
Introduced	20.5.R1
Platforms	All

### **bgp-leak** *boolean*

Synopsis	Allow leaking for BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-leak</a> <i>boolean</i>
Tree	<a href="#">bgp-leak</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **bgp-med**

Synopsis	Enter the <b>bgp-med</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-med</a>
Tree	<a href="#">bgp-med</a>
Introduced	19.7.R1
Platforms	All

### **adjust** *string*

Synopsis	BGP-MED adjustment
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-med</a> <a href="#">adjust</a> <i>string</i>
Tree	<a href="#">adjust</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .

Introduced 19.7.R1  
 Platforms All

### **set** (*keyword* | *number* | *string*)

Synopsis BGP-MED assignment  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-med](#) [set](#) (*keyword* | *number* | *string*)  
 Tree [set](#)  
 String Length 1 to 32  
 Range 0 to 4294967295  
 Options igp, min-igp  
 Notes The following elements are part of a choice: **adjust** or **set**.  
 Introduced 19.7.R1  
 Platforms All

### **bgp-tunnel-metric**

Synopsis Enter the **bgp-tunnel-metric** context  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-tunnel-metric](#)  
 Tree [bgp-tunnel-metric](#)  
 Description Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.  
 Introduced 20.5.R1  
 Platforms All

### **prefer-aigp** *boolean*

Synopsis Use AIGP attribute as tunnel metric when present  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [bgp-tunnel-metric](#) [prefer-aigp](#) *boolean*  
 Tree [prefer-aigp](#)  
 Description When configured to **true**, and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.

When configured to **false**, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.

Default	false
Introduced	20.5.R1
Platforms	All

### **prefer-med** *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a> <a href="#">prefer-med</a> <i>boolean</i>
Tree	<a href="#">prefer-med</a>
Description	When configured to <b>true</b> , if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.  When configured to <b>false</b> , the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.
Default	false
Introduced	23.3.R1
Platforms	All

### **value** (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a> <a href="#">value</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	This command configures a BGP tunnel metric is assigned to routes that do not match any entry.  If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either: <ul style="list-style-type: none"> <li>the <code>prefer-aigp</code> option is set to false</li> <li>the <code>prefer-aigp</code> option is set to true but the BGP-LU route does not have an AIGP attribute</li> </ul>
String Length	1 to 32
Range	0 to 4294967295

Introduced	20.5.R1
Platforms	All

## community

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">community</a>
Tree	<a href="#">community</a>
Introduced	16.0.R1
Platforms	All

## add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">community</a> <a href="#">add</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">community</a> <a href="#">remove</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">remove</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.



Introduced	16.0.R1
Platforms	All

### **replace** (*param-midstring-64* | *string*)

Synopsis	List of community names to replace
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">community</a> <a href="#">replace</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">replace</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **create-mpls-tunnel** *boolean*

Synopsis	Create an MPLS tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">create-mpls-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-mpls-tunnel</a>
Description	When configured to <b>true</b> , the router creates an MPLS tunnel. This command is supported for only the following address families: <ul style="list-style-type: none"> <li>• evpn</li> <li>• ipv4</li> <li>• ipv6</li> <li>• label-ipv4</li> <li>• label-ipv6</li> <li>• vpn-ipv4</li> <li>• vpn-ipv6</li> </ul>
Default	false
Introduced	21.10.R1
Platforms	All

**create-udp-tunnel** *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">create-udp-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-udp-tunnel</a>
Default	false
Introduced	16.0.R1
Platforms	All

**damping** (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">damping</a> ( <i>keyword</i>   <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">damping</a>
String Length	1 to 32
Options	none
Introduced	16.0.R1
Platforms	All

**dest-class** *number*

Synopsis	Default destination class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">dest-class</a> <i>number</i>
Tree	<a href="#">dest-class</a>
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**egress-statistics** *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">egress-statistics</a> <i>boolean</i>
Tree	<a href="#">egress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

### **flex-algo** (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">flex-algo</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">flex-algo</a>
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry. Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU. This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

### **forwarding-class**

Synopsis	Enter the <b>forwarding-class</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forwarding-class</a>
Tree	<a href="#">forwarding-class</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc keyword**

Synopsis	Forwarding class associated with the route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forwarding-class</a> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority keyword**

Synopsis	Route priority
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forwarding-class</a> <a href="#">priority</a> <i>keyword</i>
Tree	<a href="#">priority</a>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ingress-statistics boolean**

Synopsis	Enable ingress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">ingress-statistics</a> <i>boolean</i>
Tree	<a href="#">ingress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

**install-backup-path boolean**

Synopsis	Install a preprogrammed backup path for the prefix
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">install-backup-path</a> <i>boolean</i>
Tree	<a href="#">install-backup-path</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **local-preference** (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">local-preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">local-preference</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **metric**

Synopsis	Enter the <b>metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">metric</a>
Tree	<a href="#">metric</a>
Introduced	16.0.R1
Platforms	All

### **add** (*number* | *string*)

Synopsis	Metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	16.0.R1

Platforms All

### **set** (*number* | *string*)

Synopsis Metric to assign

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [metric](#) **set** (*number* | *string*)

Tree [set](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 16.0.R1

Platforms All

### **subtract** (*number* | *string*)

Synopsis Metric to subtract

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [metric](#) **subtract** (*number* | *string*)

Tree [subtract](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 16.0.R1

Platforms All

### **multicast-redirect**

Synopsis Enter the **multicast-redirect** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [action](#) [multicast-redirect](#)

Tree [multicast-redirect](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**fwd-service *string***

Synopsis	Service ID for multicast redirection
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">multicast-redirection</a> <a href="#">fwd-service</a> <i>string</i>
Tree	<a href="#">fwd-service</a>
Default	Base
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-int-name *string***

Synopsis	Alternate interface where IGMP messages are redirected
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">multicast-redirection</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nat-policy (*param-midstring* | *string*)**

Synopsis	BGP-VPN imported route and a NAT policy association
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">nat-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">nat-policy</a>
Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type <b>accept</b> regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**next-hop** (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis	Next-hop IP address applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">next-hop</a> ( <i>keyword</i>   <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>string</i> )
Tree	<a href="#">next-hop</a>
String Length	1 to 32
Options	peer-address, self
Introduced	16.0.R1
Platforms	All

**origin** (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">origin</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">origin</a>
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	16.0.R1
Platforms	All

**origin-validation-state** (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">origin-validation-state</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">origin-validation-state</a>
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

**preference** (*number* | *string*)

Synopsis	Route preference applied to routes
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">preference</a>
String Length	1 to 32
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **resolve-static** *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">resolve-static</a> <i>boolean</i>
Tree	<a href="#">resolve-static</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **route-table-install** *boolean*

Synopsis	Allow BGP route installation in the route table
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">route-table-install</a> <i>boolean</i>
Tree	<a href="#">route-table-install</a>
Default	true
Introduced	19.10.R1
Platforms	All

### **source-class** *number*

Synopsis	Default source class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">source-class</a> <i>number</i>
Tree	<a href="#">source-class</a>
Description	This command specifies the policy accounting source class index to associate with matched routes.

Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## sr-label-index

Synopsis	Enter the <b>sr-label-index</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <b>sr-label-index</b>
Tree	<a href="#">sr-label-index</a>
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	19.10.R1
Platforms	All

## prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <b>sr-label-index</b> <a href="#">prefer-igp</a> <i>boolean</i>
Tree	<a href="#">prefer-igp</a>
Description	<p>When configured to <b>true</b>, BGP obtains the SID index from the IGP route (if a SID index is present) and the <b>configure router bgp segment-routing prefix-sid-range global</b> command is set to <b>true</b>.</p> <p>This command applies only to route table import policies.</p> <p>When configured to <b>false</b>, or the SID index is not present in the IGP route, or the <b>configure router bgp segment-routing prefix-sid-range global</b> command is not set to <b>true</b>, BGP obtains the label index value from the <b>value</b> command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

**value** (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sr-label-index</a> <a href="#">value</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

**sr-maintenance-policy** (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sr-maintenance-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">sr-maintenance-policy</a>
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

**sr-return-path-bfd-label** (*policy-var-name* | *number*)

Synopsis	S-BFD return path label
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sr-return-path-bfd-label</a> ( <i>policy-var-name</i>   <i>number</i> )
Tree	<a href="#">sr-return-path-bfd-label</a>

Description	<p>This command configures an additional MPLS label to add to the bottom of the label stack for the S-BFD packet and sets the S-BFD session to echo mode.</p> <p>This command applies to the initiator of the S-BFD sessions. The label value can either be a binding SID for an SR policy or another MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through the MPLS return path. This value takes precedence over the return path label value in a maintenance policy (configured using the <b>configure router segment-routing maintenance-policy return-path-label</b> command) that is also applied as the policy-statement action. This command can only be configured if the <b>sr-maintenance-policy</b> is also configured.</p> <p>If this command is unconfigured, and there is no <b>return-path-label</b> command configuration in the maintenance policy that is also applied as an action, and the policy statement is reevaluated, S-BFD returns to asynchronous mode and no return path label is pushed by the initiator node. S-BFD packets for this LSP or path received by the reflector are routed through the IGP path.</p>
String Length	1 to 32
Range	32 to 1048512
Introduced	23.10.R1
Platforms	All

### **srv6-locator** (*param-midstring-64* | *string*)

Synopsis	Locator for SRv6 TLV to use
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <b>srv6-locator</b> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">srv6-locator</a>
Description	<p>This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named locator for the SRv6 TLV to use.</p> <p>For a VRF export policy, the referenced locator must already be configured using the commands in the <b>configure service vprn segment-routing-v6 locator</b> context.</p> <p>For a BGP export policy, the referenced locator must already be configured using the commands in the <b>configure router segment-routing segment-routing-v6 base-routing-instance locator</b> context.</p>
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srv6-micro-segment-locator** (*param-midstring-64* | *string*)

Synopsis	Micro-segment locator for SRv6 TLV to use
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">srv6-micro-segment-locator</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">srv6-micro-segment-locator</a>
Description	This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named micro-segment locator for the SRv6 TLV to use. For a VRF export policy, the referenced micro-segment locator must already be configured using the commands in the <b>configure service vprn segment-routing-v6 micro-segment-locator</b> context. For a BGP export policy, the referenced micro-SID locator must already be configured using the commands in the <b>configure router segment-routing segment-routing-v6 base-routing-instance micro-segment-locator</b> context.
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srv6-return-path-bfd-sid** (*policy-var-name* | *ipv6-address*)

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">srv6-return-path-bfd-sid</a> ( <i>policy-var-name</i>   <i>ipv6-address</i> )
Tree	<a href="#">srv6-return-path-bfd-sid</a>
Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

### **sticky-ecmp** *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">sticky-ecmp</a> <i>boolean</i>
Tree	<a href="#">sticky-ecmp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tag** (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">tag</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">tag</a>
String Length	1 to 32
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**type** (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">type</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">type</a>
String Length	1 to 32
Range	1 to 2
Introduced	16.0.R1
Platforms	All

**conditional-expression**

Synopsis	Enable the <b>conditional-expression</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">conditional-expression</a>
Tree	<a href="#">conditional-expression</a>
Introduced	16.0.R1
Platforms	All

**route-exists** *string*

Synopsis	Conditional expression to test route existence
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">conditional-expression</a> <a href="#">route-exists</a> <i>string</i>
Tree	<a href="#">route-exists</a>
String Length	1 to 255

Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **from**

Synopsis	Enable the <b>from</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a>
Tree	<a href="#">from</a>
Description	Commands in this context configure policy match criteria based on the route's source or the protocol from which it is received. If conditions are not specified, all route sources are considered to match.
Introduced	16.0.R1
Platforms	All

### **aggregate-contributor** *boolean*

Synopsis	Enable aggregate route match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">aggregate-contributor</a> <i>boolean</i>
Tree	<a href="#">aggregate-contributor</a>
Description	<p>When configured to <b>true</b>, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, <b>vrf-export</b> policy or <b>vrf-import</b> policy, no routes are matched by that entry.</p>

When configured to **false**, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.

Default	false
Introduced	20.10.R1
Platforms	All

### **area string**

Synopsis	OSPF area as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">area</a> <i>string</i>
Tree	<a href="#">area</a>
Introduced	16.0.R1
Platforms	All

### **as-path**

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">as-path</a>
Tree	<a href="#">as-path</a>
Introduced	16.0.R1
Platforms	All

### **group (param-midstring | string)**

Synopsis	AS path group as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">as-path</a> <a href="#">group</a> ( <a href="#">param-midstring</a>   <a href="#">string</a> )
Tree	<a href="#">group</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>group</b> or <b>name</b> .
Introduced	16.0.R1
Platforms	All

### **length**

Synopsis	Enter the <b>length</b> context
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <a href="#">length</a>
Tree	<a href="#">length</a>
Introduced	16.0.R1
Platforms	All

### **qualifier** *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <a href="#">length</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	16.0.R1
Platforms	All

### **unique** *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <a href="#">length</a> <a href="#">unique</a> <i>boolean</i>
Tree	<a href="#">unique</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **value** (*number* | *string*)

Synopsis	AS numbers in the AS path that match on the BGP route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <a href="#">length</a> <a href="#">value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 255
Introduced	16.0.R1
Platforms	All

**name** (*param-midstring* | *string*)

Synopsis	AS path name to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from as-path</a> <i>name</i> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">name</a>
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	The following elements are part of a choice: <b>group</b> or <b>name</b> .
Introduced	16.0.R1
Platforms	All

**cluster-id**

Synopsis	Enter the <b>cluster-id</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from cluster-id</a>
Tree	<a href="#">cluster-id</a>
Introduced	16.0.R1
Platforms	All

**ip-address** *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from cluster-id</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Max. Instances	5
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>none-cluster-list</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**none-cluster-list** *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">cluster-id</a> <b>none-cluster-list</b> <i>boolean</i>
Tree	<a href="#">none-cluster-list</a>
Default	false
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>none-cluster-list</b> .
Introduced	16.0.R1
Platforms	All

**color** *number*

Synopsis	Color ID as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">color</a> <i>number</i>
Tree	<a href="#">color</a>
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

**community**

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">community</a>
Tree	<a href="#">community</a>
Introduced	16.0.R1
Platforms	All

**count**

Synopsis	Enter the <b>count</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">community</a> <b>count</b>
Tree	<a href="#">count</a>
Introduced	16.0.R1

Platforms All

### **qualifier** *keyword*

Synopsis Higher or lower values to be accepted as match criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **qualifier** *keyword*

Tree [qualifier](#)

Options equal, or-higher, or-lower

Default equal

Introduced 16.0.R1

Platforms All

### **type** *keyword*

Synopsis Community count to match the community count criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **type** *keyword*

Tree [type](#)

Options standard, extended, large

Introduced 16.0.R1

Platforms All

### **value** (*number* | *string*)

Synopsis Number of BGP communities to match the BGP route

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [community](#) [count](#) **value** (*number* | *string*)

Tree [value](#)

String Length 1 to 32

Range 0 to 1024

Introduced 16.0.R1

Platforms All

**expression string**

Synopsis	Community expression statement as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">community</a> <a href="#">expression</a> <i>string</i>
Tree	<a href="#">expression</a>
Description	<p>This command configures a community expression statement as a match criterion for the policy statement. This statement is a logical expression string composed of logical operators (keywords AND, OR, NOT), community names delimited by square brackets [], and parentheses ( ) to group subexpressions. If the expression contains special characters (for example, #, \$, spaces), the entire string must be enclosed in double quotes.</p> <p>The expression specified must already be defined using the <b>configure policy-options community expression expr</b> command.</p> <p>The following are examples of valid logical expressions:</p> <pre>"[community_list_A] OR ([community_list_B] AND [community_list_C])" "NOT [community_list_A]" "[community_list_A] AND [community_list_B] OR [community_list_C]" "NOT ([community_list_A] OR [community_list_B] OR [community_list_C])"</pre>
String Length	1 to 900
Notes	The following elements are part of a choice: <b>expression</b> or <b>name</b> .
Introduced	16.0.R1
Platforms	All

**name** (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">community</a> <a href="#">name</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">name</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>expression</b> or <b>name</b> .
Introduced	16.0.R1
Platforms	All

**distinguisher number**

Synopsis	SR policy distinguisher as a match criterion
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">distinguisher</a> <i>number</i>
Tree	<a href="#">distinguisher</a>
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

### **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	SR policy endpoint address as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">endpoint</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">endpoint</a>
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

### **evpn-type** *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">evpn-type</a> <i>keyword</i>
Tree	<a href="#">evpn-type</a>
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync, selective-pmsi-auto-discovery
Introduced	16.0.R4
Platforms	All

### **external** *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">external</a> <i>boolean</i>
Tree	<a href="#">external</a>
Default	false

Introduced	16.0.R1
Platforms	All

### **family** *keyword*

Synopsis	Address family as the match condition
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Max. Instances	20
Introduced	16.0.R1
Platforms	All

### **flowspec**

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">flowspec</a>
Tree	<a href="#">flowspec</a>
Introduced	16.0.R4
Platforms	All

### **dest** (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per destination IP prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">flowspec</a> <a href="#">dest</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">dest</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

**source** (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">flowspec</a> <a href="#">source</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">source</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

**group-address** (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">group-address</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">group-address</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**host-ip** (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">host-ip</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">host-ip</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**interface** (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis	Interface name as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">interface</a> ( <i>named-item</i>   <i>interface-name</i>   <i>interface-name</i>   <i>interface-name</i> )
Tree	<a href="#">interface</a>
String Length	1 to 32



Max. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## interface-subnets

Synopsis	Enter the <b>interface-subnets</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from interface-subnets</a>
Tree	<a href="#">interface-subnets</a>
Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> <li>• <b>export</b>, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP</li> <li>• <b>route-table-import</b>, when used with BGP</li> <li>• <b>vrf-export</b>, when used with MP-BGP</li> </ul>
Introduced	21.2.R1
Platforms	All

## ip-int-name *string*

Synopsis	Interface name as the match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from interface-subnets</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

### **service string**

Synopsis	Service ID of the interface subnets
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">interface-subnets</a> <a href="#">service</a> <i>string</i>
Tree	<a href="#">service</a>
Default	Base
Introduced	21.2.R1
Platforms	All

### **level number**

Synopsis	IS-IS route level as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 2
Introduced	16.0.R1
Platforms	All

### **local-preference**

Synopsis	Enter the <b>local-preference</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">local-preference</a>
Tree	<a href="#">local-preference</a>
Introduced	16.0.R1
Platforms	All

### **qualifier keyword**

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">local-preference</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	16.0.R1

Platforms All

### **value** (*number* | *string*)

Synopsis BGP routes per local preference value or variable name

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [local-preference](#) [value](#) (*number* | *string*)

Tree [value](#)

String Length 1 to 32

Range 0 to 4294967295

Introduced 16.0.R1

Platforms All

### **metric**

Synopsis Enter the **metric** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [metric](#)

Tree [metric](#)

Introduced 16.0.R1

Platforms All

### **qualifier** *keyword*

Synopsis Higher or lower values to be accepted as match criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [metric](#) [qualifier](#) *keyword*

Tree [qualifier](#)

Options equal, or-higher, or-lower

Default equal

Introduced 16.0.R1

Platforms All

### **value** (*number* | *string*)

Synopsis Local preference value or variable name

Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">metric</a> <a href="#">value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **mvpn-type** *keyword*

Synopsis	MVPN type as a match criterion for the entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">mvpn-type</a> <i>keyword</i>
Tree	<a href="#">mvpn-type</a>
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	16.0.R1
Platforms	All

### **neighbor**

Synopsis	Enter the <b>neighbor</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">neighbor</a>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">neighbor</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1

Platforms All

### **prefix-list** (*param-midstring* | *string*)

Synopsis Name to match the neighbor prefix list

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [neighbor](#) [prefix-list](#) (*param-midstring* | *string*)

Tree [prefix-list](#)

String Length 1 to 32

Notes The following elements are part of a choice: **ip-address** or **prefix-list**.

Introduced 16.0.R1

Platforms All

### **next-hop**

Synopsis Enter the **next-hop** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [next-hop](#)

Tree [next-hop](#)

Introduced 16.0.R1

Platforms All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the next hop to match

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [next-hop](#) [ip-address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [ip-address](#)

Notes The following elements are part of a choice: **ip-address** or **prefix-list**.

Introduced 16.0.R1

Platforms All

### **prefix-list** (*param-midstring* | *string*)

Synopsis Name of a next hop prefix list to match

Context **configure** [policy-options](#) [policy-statement](#) *string* [entry](#) *number* [from](#) [next-hop](#) [prefix-list](#) (*param-midstring* | *string*)

Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **origin keyword**

Synopsis	Route origin match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">origin</a> <i>keyword</i>
Tree	<a href="#">origin</a>
Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the <b>sub-mgmt</b> option for the <b>protocol</b> command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the <b>direct</b> option for the <b>protocol</b> command.</p> <p>Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the <b>direct</b> option for the <b>protocol</b> command.</p> <p>Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the <b>managed</b> option for the <b>protocol</b> command.</p> <p>The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.</p>
Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp
Introduced	16.0.R1
Platforms	All

### **origin-validation-state keyword**

Synopsis	Origin validation state used for match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">origin-validation-state</a> <i>keyword</i>
Tree	<a href="#">origin-validation-state</a>

Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	16.0.R1
Platforms	All

### **ospf-type** *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">ospf-type</a> <i>number</i>
Tree	<a href="#">ospf-type</a>
Range	1 to 2
Introduced	16.0.R1
Platforms	All

### **path-type** *keyword*

Synopsis	Path type as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">path-type</a> <i>keyword</i>
Tree	<a href="#">path-type</a>
Options	ibgp, ebgp
Introduced	16.0.R1
Platforms	All

### **policy** (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy</a> ( <i>string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

## policy-variables

Synopsis	Enter the <b>policy-variables</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a>
Tree	<a href="#">policy-variables</a>
Introduced	16.0.R1
Platforms	All

### name [[variable-name](#)] *string*

Synopsis	Enter the <b>name</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	All

### [[variable-name](#)] *string*

Synopsis	Global variable name used to reference policy functions
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### address ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	IP address of the policy variable
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i> <a href="#">address</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Tree	<a href="#">address</a>



Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	16.0.R1
Platforms	All

### **decimal** *decimal-number*

Synopsis	Attribute decimal to which variable name is resolved
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from policy-variables</a> <i>name</i> <i>string</i> <b>decimal</b> <i>decimal-number</i>
Tree	<a href="#">decimal</a>
Range	0.000 to 4294967295.000
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	19.7.R1
Platforms	All

### **number** *number*

Synopsis	Numerical value of the policy variable
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from policy-variables</a> <i>name</i> <i>string</i> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	0 to 4294967295
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	16.0.R1
Platforms	All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix value associated with the variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from policy-variables</a> <i>name</i> <i>string</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .

Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value string**

Synopsis	Policy variable value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i> <a href="#">value</a> <i>string</i>
Tree	<a href="#">value</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	16.0.R1
Platforms	All

**prefix-list** (*param-midstring-64* | *string*)

Synopsis	Prefix list as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">prefix-list</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**prefix-list-override** [[prefix-list](#)] *string*

Synopsis	Enter the <b>prefix-list-override</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">prefix-list-override</a> <i>string</i>
Tree	<a href="#">prefix-list-override</a>
Description	Commands in this context convert a prefix list to a specific match type. The routing policy uses the converted list as a match condition.

The prefix list to be converted can be specified by its name, as an expression containing the name of a global variable that holds the name of the prefix list, or as an expression containing the name of a subroutine variable that holds the name of the prefix list.

Max. Instances	1
Introduced	23.10.R1
Platforms	All

### **[prefix-list]** *string*

Synopsis	Prefix list to be converted
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">prefix-list-override</a> <i>string</i>
Tree	<a href="#">prefix-list-override</a>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

### **end-length** *number*

Synopsis	Prefix range end length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">prefix-list-override</a> <i>string</i> <b>end-length</b> <i>number</i>
Tree	<a href="#">end-length</a>
Range	0 to 128
Notes	The following elements are part of a choice: ( <b>end-length</b> and <b>start-length</b> ) or <b>through-length</b> .
Introduced	23.10.R1
Platforms	All

### **start-length** *number*

Synopsis	Prefix range start length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">prefix-list-override</a> <i>string</i> <b>start-length</b> <i>number</i>
Tree	<a href="#">start-length</a>
Range	0 to 128

Notes	The following elements are part of a choice: ( <b>end-length</b> and <b>start-length</b> ) or <b>through-length</b> .
Introduced	23.10.R1
Platforms	All

### **through-length** *number*

Synopsis	Prefix through length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">prefix-list-override</a> <i>string</i> <b>through-length</b> <i>number</i>
Tree	<a href="#">through-length</a>
Range	0 to 128
Notes	The following elements are part of a choice: ( <b>end-length</b> and <b>start-length</b> ) or <b>through-length</b> .
Introduced	23.10.R1
Platforms	All

### **type** *keyword*

Synopsis	New match type for entries in referenced prefix list
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">prefix-list-override</a> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	exact, longer, through, range
Default	exact
Introduced	23.10.R1
Platforms	All

### **protocol**

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">protocol</a>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	16.0.R1

Platforms All

### **instance** (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from protocol</a> <a href="#">instance</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">instance</a>
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion.  When this command is explicitly configured, the <b>name</b> command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Options	all
Default	0
Introduced	16.0.R1
Platforms	All

### **name** *keyword*

Synopsis	List of protocol names as the match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from protocol</a> <a href="#">name</a> <i>keyword</i>
Tree	<a href="#">name</a>
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: <ul style="list-style-type: none"> <li>• direct</li> <li>• static</li> <li>• isis</li> <li>• aggregate</li> <li>• bgp</li> <li>• bgp-label</li> <li>• direct-interface</li> </ul> <p>If multiple protocols are specified, the <b>instance</b> command cannot be explicitly configured.</p> <p>The protocol <b>direct-interface</b> route type matches the specific direct interface host IPv4 / 32 and IPv6 /128 routes.</p>

Options	direct, static, bgp, isis, ospf, rip, aggregate, bgp-vpn, igmp, pim, ospf3, ldp, sub-mgmt, mld, managed, vpn-leak, nat, periodic, ipsec, dhcpv6-pd, dhcpv6-na, dhcpv6-ta, dhcpv6-pd-excl, ripng, bgp-label, direct-interface, arp-nd, rib-api, dhcp-client, evpn-ift, srv6, video
Max. Instances	5
Introduced	16.0.R1
Platforms	All

### **route-distinguisher-list** (*param-midstring-64* | *string*)

Synopsis	Route distinguisher list as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">route-distinguisher-list</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">route-distinguisher-list</a>
Description	This command specifies the (possibly parameterized) name of a route distinguisher (RD) list.  This match condition is supported by policies applied as VRF-import or BGP peer import policies. A BGP route can match a policy entry with this match criterion if the NLRI field contains an RD that is matched by at least one of the entries in the RD list.  BGP routes belonging to address families other than VPN-IPv4, VPN-IPv6, MCAST-VPN-IPv4, MCAST-VPN-IPv6, EVPN, FlowSpec-VPN IPv4, FlowSpec-VPN IPv6, MVPN-IPv4, or MVPN-IPv6 route do not match policy entries with this match criterion.
String Length	1 to 64
Introduced	23.3.R1
Platforms	All

### **source-address**

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">source-address</a>
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address to match
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">source-address</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **prefix-list** (*param-midstring* | *string*)

Synopsis	Name of a source address prefix list to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">source-address</a> <a href="#">prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **srv6-sid-prefix** (*policy-var-name* | *ipv6-unicast-prefix*)

Synopsis	SRv6 SID or uSID as match criterion for the BGP route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">srv6-sid-prefix</a> ( <i>policy-var-name</i>   <i>ipv6-unicast-prefix</i> )
Tree	<a href="#">srv6-sid-prefix</a>
Description	<p>This command configures either the name of a prefix policy variable or an IPv6 prefix and prefix length, as a match criterion for a BGP route.</p> <p><b>Note:</b> If the name of a prefix policy variable is the match criterion, the name must start and end with an at sign (@).</p> <p>A BGP route matches this condition if it has an SRv6 TLV, and the SID or micro-segment (uSID) value in that TLV is matched by the bits of the IPv6 prefix (up to the specified prefix length).</p> <p>This match condition is supported in BGP import policies, BGP export policies, and VRF or VSI import policies.</p>
String Length	1 to 32
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**srv6-tlv keyword**

Synopsis	SRv6 TLV presence as match criterion for BGP route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">srv6-tlv</a> <i>keyword</i>
Tree	<a href="#">srv6-tlv</a>
Description	<p>This command configures whether the entry matches a BGP route with a prefix SID attribute containing an SRv6 TLV.</p> <p>If this command is not configured, a BGP route can match the entry, regardless of whether it has a prefix SID attribute or whether that prefix SID attribute has SRv6 TLVs.</p> <p>This match condition is supported in BGP import policies, BGP export policies, and VRF or VSI import policies.</p> <p>If the <b>present</b> option is configured, a BGP route only matches this entry if it has a prefix SID attribute containing an SRv6 TLV.</p> <p>If the <b>not-present</b> option is configured, a BGP route only matches this entry if it does not have a prefix SID attribute containing an SRv6 TLV.</p>
Options	present, not-present
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**state keyword**

Synopsis	State used as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">state</a> <i>keyword</i>
Tree	<a href="#">state</a>
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby, fsg-active-path-restoration
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tag (number | keyword)**

Synopsis	Route tag used as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">from</a> <a href="#">tag</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">tag</a>



Range	1 to 4294967295
Options	no-tag
Introduced	16.0.R1
Platforms	All

**to**

Synopsis	Enable the <b>to</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>to</b>
Tree	<a href="#">to</a>
Introduced	16.0.R1
Platforms	All

**level number**

Synopsis	IS-IS route level as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>to</b> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 2
Introduced	16.0.R1
Platforms	All

**neighbor**

Synopsis	Enter the <b>neighbor</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>to</b> <a href="#">neighbor</a>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to neighbor</a> <a href="#">ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **prefix-list** (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to neighbor</a> <a href="#">prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **prefix-list** (*param-midstring-64* | *string*)

Synopsis	Prefix list as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to prefix-list</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **protocol**

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to protocol</a>

Tree	<a href="#">protocol</a>
Introduced	16.0.R1
Platforms	All

### **instance** (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to protocol</a> <a href="#">instance</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">instance</a>
Range	0 to 127
Options	all
Default	0
Introduced	16.0.R1
Platforms	All

### **name** *keyword*

Synopsis	Protocol name to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">to protocol</a> <a href="#">name</a> <i>keyword</i>
Tree	<a href="#">name</a>
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ift
Max. Instances	2
Introduced	16.0.R1
Platforms	All

### **entry-type** *keyword*

Synopsis	The entry type for a route policy entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">entry-type</a> <i>keyword</i>
Tree	<a href="#">entry-type</a>
Options	numbered, named
Default	numbered
Introduced	19.10.R1

Platforms All

### **named-entry** [[entry-name](#)] *string*

Synopsis Enter the **named-entry** list instance

Context **configure** [policy-options](#) [policy-statement](#) *string* **named-entry** *string*

Tree [named-entry](#)

Max. Instances 16384

Notes This element is ordered by the user.

Introduced 19.10.R1

Platforms All

### **[entry-name]** *string*

Synopsis Route policy entry name

Context **configure** [policy-options](#) [policy-statement](#) *string* **named-entry** *string*

Tree [named-entry](#)

String Length 1 to 255

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms All

### **action**

Synopsis Enable the **action** context

Context **configure** [policy-options](#) [policy-statement](#) *string* **named-entry** *string* **action**

Tree [action](#)

Introduced 19.10.R1

Platforms All

### **action-type** *keyword*

Synopsis Action type for routes matching the route policy entry

Context **configure** [policy-options](#) [policy-statement](#) *string* **named-entry** *string* **action** **action-type** *keyword*

Tree	<a href="#">action-type</a>
Options	accept, reject, next-entry, next-policy
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	All

### **add-paths-send-limit** (*number* | *keyword*)

Synopsis	BGP Add-Paths send limit applied for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">add-paths-send-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">add-paths-send-limit</a>
Range	1 to 16
Options	multipaths
Introduced	19.10.R1
Platforms	All

### **admin-tag-policy** (*param-midstring-64* | *string*)

Synopsis	Administrative tag policy name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">admin-tag-policy</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">admin-tag-policy</a>
String Length	1 to 64
Introduced	19.10.R1
Platforms	All

### **advertise-label** *keyword*

Synopsis	Label allocation for matched BGP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">advertise-label</a> <i>keyword</i>
Tree	<a href="#">advertise-label</a>
Description	This command configures the label allocation method for advertised routes. The effect of this command depends on the context where the associated policy is applied.
Options	per-prefix, pop, pop-and-forward

Introduced	19.10.R1
Platforms	All

## **aigp-metric**

Synopsis	Enter the <b>aigp-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">aigp-metric</a>
Tree	<a href="#">aigp-metric</a>
Introduced	19.10.R1
Platforms	All

## **add** (*number* | *string*)

Synopsis	AIGP metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">aigp-metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	19.10.R1
Platforms	All

## **set** (*keyword* | *number* | *string*)

Synopsis	AIGP metric
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">aigp-metric</a> <a href="#">set</a> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp
Notes	The following elements are part of a choice: <b>add</b> or <b>set</b> .
Introduced	19.10.R1
Platforms	All

## as-path

Synopsis	Enter the <b>as-path</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path</a>
Tree	<a href="#">as-path</a>
Introduced	19.10.R1
Platforms	All

## add (*param-midstring* | *string*)

Synopsis	AS path to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path</a> <a href="#">add</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>add</b> or <b>replace</b> .
Introduced	19.10.R1
Platforms	All

## replace (*param-midstring* | *string*)

Synopsis	AS path to replace
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path</a> <a href="#">replace</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">replace</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>add</b> or <b>replace</b> .
Introduced	19.10.R1
Platforms	All

## as-path-prepend

Synopsis	Enter the <b>as-path-prepend</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path-prepend</a>
Tree	<a href="#">as-path-prepend</a>

Introduced	19.10.R1
Platforms	All

### **as-path** (*number* | *string* | *keyword*)

Synopsis	AS number to prepend to the AS path attribute
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path-prepend</a> <a href="#">as-path</a> ( <i>number</i>   <i>string</i>   <i>keyword</i> )
Tree	<a href="#">as-path</a>
String Length	1 to 32
Range	1 to 4294967295
Options	most-recent
Introduced	19.10.R1
Platforms	All

### **repeat** (*number* | *string*)

Synopsis	Number of times to prepend the specified AS number
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">as-path-prepend</a> <a href="#">repeat</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">repeat</a>
String Length	1 to 32
Range	1 to 50
Default	1
Introduced	19.10.R1
Platforms	All

### **bgp-high-priority** *boolean*

Synopsis	Tag routes as high priority for fast table updates
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-high-priority</a> <i>boolean</i>
Tree	<a href="#">bgp-high-priority</a>
Description	<p>When configured to <b>true</b>, eligible BGP routes matched by the policy entry or policy default-action are tagged as needing faster route table updates.</p> <p>This action applies only when the policy is applied as a BGP import policy to a base router BGP peer or VPRN BGP peer and applies only to the following route types:</p>



- IPv4
- label-IPv4
- IPv6
- label-IPv6

This command is useful when the BGP RIB contains a large number of routes and quick routing table updates are needed for a small subset of these routes. The effectiveness of this command decreases as the subset becomes a larger proportion of the total RIB.

When configured to **false**, no routes are tagged for faster route table updates.

Default false

Introduced 20.5.R1

Platforms All

### **bgp-leak** *boolean*

Synopsis Allow leaking for BGP routes

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [bgp-leak](#) *boolean*

Tree [bgp-leak](#)

Default false

Introduced 19.10.R1

Platforms All

### **bgp-med**

Synopsis Enter the **bgp-med** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [bgp-med](#)

Tree [bgp-med](#)

Introduced 19.10.R1

Platforms All

### **adjust** *string*

Synopsis BGP-MED adjustment

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [bgp-med](#) [adjust](#) *string*

Tree [adjust](#)

String Length 1 to 64

Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .
Introduced	19.10.R1
Platforms	All

### **set** (*keyword* | *number* | *string*)

Synopsis	BGP-MED assignment
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-med</a> <b>set</b> ( <i>keyword</i>   <i>number</i>   <i>string</i> )
Tree	<a href="#">set</a>
String Length	1 to 32
Range	0 to 4294967295
Options	igp, min-igp
Notes	The following elements are part of a choice: <b>adjust</b> or <b>set</b> .
Introduced	19.10.R1
Platforms	All

### **bgp-tunnel-metric**

Synopsis	Enter the <b>bgp-tunnel-metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a>
Tree	<a href="#">bgp-tunnel-metric</a>
Description	Commands in this context configure the tunnel-table metrics associated with BGP label unicast routes that pass through to the default action of the policy.
Introduced	20.5.R1
Platforms	All

### **prefer-aigp** *boolean*

Synopsis	Use AIGP attribute as tunnel metric when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a> <b>prefer-aigp</b> <i>boolean</i>
Tree	<a href="#">prefer-aigp</a>
Description	When configured to <b>true</b> , and a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy. The TTM metric of the tunnel is set to the

AIGP metric value of the BGP-LU route plus the IGP cost to reach the BGP next-hop if it has the AIGP path attribute, otherwise it is set to the value implied by the value leaf.

When configured to **false**, the AIGP attribute is removed from the advertised routes and is ignored if present in the received routes.

Default	false
Introduced	20.5.R1
Platforms	All

### **prefer-med** *boolean*

Synopsis	Use MED attribute as tunnel metric when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a> <b>prefer-med</b> <i>boolean</i>
Tree	<a href="#">prefer-med</a>
Description	<p>When configured to <b>true</b>, if a BGP-LU route is selected for installation in the TTM and is matched by this action in a BGP import policy, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the IGP cost to reach the BGP next hop added to it.</p> <p>When configured to <b>false</b>, the BGP tunnel metric associated with the BGP-LU route accepted by this policy action is not determined using the MED attribute.</p>
Default	false
Introduced	23.3.R1
Platforms	All

### **value** (*string* | *number*)

Synopsis	BGP tunnel table metric value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">bgp-tunnel-metric</a> <b>value</b> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command configures a BGP tunnel metric is assigned to routes that do not match any entry.</p> <p>If a BGP-LU route is selected for installation in TTM and it is matched by this action in a BGP import policy, the TTM metric of the associated tunnel is set to this value (or the value associated with the parameter name) if either:</p> <ul style="list-style-type: none"> <li>the <code>prefer-aigp</code> option is set to false</li> <li>the <code>prefer-aigp</code> option is set to true but the BGP-LU route does not have an AIGP attribute</li> </ul>
String Length	1 to 32

Range	0 to 4294967295
Introduced	20.5.R1
Platforms	All

## community

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">community</a>
Tree	<a href="#">community</a>
Introduced	19.10.R1
Platforms	All

## add (*param-midstring-64* | *string*)

Synopsis	List of community names to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">community</a> <a href="#">add</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

## remove (*param-midstring-64* | *string*)

Synopsis	List of community names to remove
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">community</a> <a href="#">remove</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">remove</a>
String Length	1 to 64
Max. Instances	28
Notes	The following elements are part of a choice: ( <b>add</b> and <b>remove</b> ) or <b>replace</b> .

This element is ordered by the user.

Introduced 19.10.R1  
 Platforms All

### **replace** (*param-midstring-64* | *string*)

Synopsis List of community names to replace  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [community](#) [replace](#) (*param-midstring-64* | *string*)  
 Tree [replace](#)  
 String Length 1 to 64  
 Max. Instances 28  
 Notes The following elements are part of a choice: (**add** and **remove**) or **replace**.  
 This element is ordered by the user.  
 Introduced 19.10.R1  
 Platforms All

### **create-mpls-tunnel** *boolean*

Synopsis Create an MPLS tunnel  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [create-mpls-tunnel](#) *boolean*  
 Tree [create-mpls-tunnel](#)  
 Description When configured to **true**, the router creates an MPLS tunnel.  
 This command is supported for only the following address families:
 

- evpn
- ipv4
- ipv6
- label-ipv4
- label-ipv6
- vpn-ipv4
- vpn-ipv6

 Default false  
 Introduced 21.10.R1  
 Platforms All

**create-udp-tunnel** *boolean*

Synopsis	Create an MPLS-over-UDP tunnel
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">create-udp-tunnel</a> <i>boolean</i>
Tree	<a href="#">create-udp-tunnel</a>
Default	false
Introduced	19.10.R1
Platforms	All

**damping** (*keyword* | *param-midstring* | *string*)

Synopsis	Damping profile used for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">damping</a> ( <i>keyword</i>   <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">damping</a>
String Length	1 to 32
Options	none
Introduced	19.10.R1
Platforms	All

**dest-class** *number*

Synopsis	Default destination class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">dest-class</a> <i>number</i>
Tree	<a href="#">dest-class</a>
Description	This command specifies the policy accounting destination class index to associate with matched routes.
Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**egress-statistics** *boolean*

Synopsis	Enable egress statistics for BGP-LU routes
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">egress-statistics</a> <i>boolean</i>
Tree	<a href="#">egress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on egress data paths. When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

### **flex-algo** (*string* | *number*)

Synopsis	Flexible algorithm for BGP next-hop autobind operation
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">flex-algo</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">flex-algo</a>
Description	This command configures the Flex-Algorithm for use in the BGP next-hop automatic bind operation in a BGP import policy. A Flex-Algorithm aware autobind of the BGP next-hop is enabled when the route is matched by the policy statement entry. Flex-Algorithm aware next-hop lookup is supported for unicast BGP, VPRN, and BGP-LU. This command is not supported for multicast address families.
String Length	1 to 32
Range	128 to 255
Introduced	20.10.R1
Platforms	All

### **forwarding-class**

Synopsis	Enter the <b>forwarding-class</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">forwarding-class</a>
Tree	<a href="#">forwarding-class</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc keyword**

Synopsis	Forwarding class associated with the route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">forwarding-class</a> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority keyword**

Synopsis	Route priority
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">forwarding-class</a> <a href="#">priority</a> <i>keyword</i>
Tree	<a href="#">priority</a>
Options	low, high
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ingress-statistics boolean**

Synopsis	Enable ingress statistics for BGP-LU routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">ingress-statistics</a> <i>boolean</i>
Tree	<a href="#">ingress-statistics</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistical indexes to BGP labeled unicast route entries that are programmed on ingress data paths. For effective operation, a prefix must be advertised with a label per prefix for ILM statistics.  When configured to <b>false</b> , this command disables the allocation of statistical indexes to BGP-LU route entries.
Default	false
Introduced	20.10.R1
Platforms	All

**install-backup-path boolean**

Synopsis	Install a preprogrammed backup path for the prefix
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">install-backup-path</a> <i>boolean</i>
Tree	<a href="#">install-backup-path</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **local-preference** (*number* | *string*)

Synopsis	BGP local preference for routes not matching any entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">local-preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">local-preference</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

### **metric**

Synopsis	Enter the <b>metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">metric</a>
Tree	<a href="#">metric</a>
Introduced	19.10.R1
Platforms	All

### **add** (*number* | *string*)

Synopsis	Metric to add
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">metric</a> <a href="#">add</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">add</a>
String Length	1 to 32
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>add</b> , <b>set</b> , or <b>subtract</b> .
Introduced	19.10.R1

Platforms All

### **set** (*number* | *string*)

Synopsis Metric to assign

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [metric](#) [set](#) (*number* | *string*)

Tree [set](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 19.10.R1

Platforms All

### **subtract** (*number* | *string*)

Synopsis Metric to subtract

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [metric](#) [subtract](#) (*number* | *string*)

Tree [subtract](#)

String Length 1 to 32

Range 0 to 4294967295

Notes The following elements are part of a choice: **add**, **set**, or **subtract**.

Introduced 19.10.R1

Platforms All

### **multicast-redirect**

Synopsis Enter the **multicast-redirect** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [action](#) [multicast-redirect](#)

Tree [multicast-redirect](#)

Introduced 19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**fwd-service *string***

Synopsis	Service ID for multicast redirection
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">multicast-redirection</a> <a href="#">fwd-service</a> <i>string</i>
Tree	<a href="#">fwd-service</a>
Default	Base
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-int-name *string***

Synopsis	Alternate interface where IGMP messages are redirected
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">multicast-redirection</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nat-policy (*param-midstring* | *string*)**

Synopsis	BGP-VPN imported route and a NAT policy association
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">nat-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">nat-policy</a>
Description	<p>This command assigns a NAT policy to the matched routes that do not have a more specific NAT policy configured under action.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route must be associated with a NAT policy that maps traffic into a NAT pool and outside routing context. If the NAT policy is not specified within the route policy entry, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into the NAT inside routing context must have action-type <b>accept</b> regardless of whether the NAT policy is configured in the action.</p>
String Length	1 to 32
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**next-hop** (*keyword* | *ipv4-address-no-zone* | *ipv6-address-no-zone* | *string*)

Synopsis	Next-hop IP address applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">next-hop</a> ( <i>keyword</i>   <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>string</i> )
Tree	<a href="#">next-hop</a>
String Length	1 to 32
Options	peer-address, self
Introduced	19.10.R1
Platforms	All

**origin** (*keyword* | *string*)

Synopsis	BGP origin for routes that are exported into BGP
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">origin</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">origin</a>
String Length	1 to 32
Options	igp, egp, incomplete
Introduced	19.10.R1
Platforms	All

**origin-validation-state** (*keyword* | *string*)

Synopsis	Origin validation state for routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">origin-validation-state</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">origin-validation-state</a>
String Length	1 to 32
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

**preference** (*number* | *string*)

Synopsis	Route preference applied to routes
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">preference</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">preference</a>
String Length	1 to 32
Range	1 to 255
Introduced	19.10.R1
Platforms	All

**resolve-static** *boolean*

Synopsis	Resolve next hop of a static route for the BGP next hop
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">resolve-static</a> <i>boolean</i>
Tree	<a href="#">resolve-static</a>
Default	false
Introduced	19.10.R1
Platforms	All

**route-table-install** *boolean*

Synopsis	Allow BGP route installation in the route table
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">route-table-install</a> <i>boolean</i>
Tree	<a href="#">route-table-install</a>
Default	true
Introduced	19.10.R1
Platforms	All

**source-class** *number*

Synopsis	Default source class for the policy statement
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">source-class</a> <i>number</i>
Tree	<a href="#">source-class</a>
Description	This command specifies the policy accounting source class index to associate with matched routes.

Range	1 to 255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## sr-label-index

Synopsis	Enter the <b>sr-label-index</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-label-index</a>
Tree	<a href="#">sr-label-index</a>
Description	<p>Commands in this context configure the policy action to associate a BGP segment-routing label index value with all /32 BGP labeled IPv4 routes.</p> <p>The use of this action in a policy entry that matches more than one /32 labeled IPv4 route may create SID conflicts.</p> <p>This action only takes effect in BGP peer import policies (and only on received /32 labeled IPv4 routes) and in route table import policies associated with the labeled IPv4 RIB.</p> <p>When this action occurs in a policy applied as a peer import policy, a prefix SID attribute can be added to a received /32 labeled IPv4 route that was not sent with this attribute, or the received prefix SID attribute can be replaced with a new one.</p>
Introduced	19.10.R1
Platforms	All

## prefer-igp *boolean*

Synopsis	Use the SR label index from the IGP route when present
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-label-index</a> <a href="#">prefer-igp</a> <i>boolean</i>
Tree	<a href="#">prefer-igp</a>
Description	<p>When configured to <b>true</b>, BGP obtains the SID index from the IGP route (if a SID index is present) and the <b>configure router bgp segment-routing prefix-sid-range global</b> command is set to <b>true</b>.</p> <p>This command applies only to route table import policies.</p> <p>When configured to <b>false</b>, or the SID index is not present in the IGP route, or the <b>configure router bgp segment-routing prefix-sid-range global</b> command is not set to <b>true</b>, BGP obtains the label index value from the <b>value</b> command.</p>
Default	false
Introduced	19.10.R1
Platforms	All

**value** (*string* | *number*)

Synopsis	BGP SR label index associated with routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-label-index</a> <a href="#">value</a> ( <i>string</i>   <i>number</i> )
Tree	<a href="#">value</a>
Description	<p>This command specifies the BGP SR label index value to be associated with a route or routes.</p> <p>If this command specifies an index value that causes a SID conflict with another BGP route, all conflicting BGP routes are re-advertised with label values based on dynamic allocation rather than SID-based allocation.</p> <p>If this command specifies an index value that causes a SID conflict with an IGP route, the BGP route is re-advertised with a label value based on dynamic allocation rather than SID-based allocation.</p>
String Length	1 to 32
Range	0 to 524287
Introduced	19.10.R1
Platforms	All

**sr-maintenance-policy** (*param-midstring* | *string*)

Synopsis	SR maintenance policy as an action
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-maintenance-policy</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">sr-maintenance-policy</a>
Description	This command applies a named segment routing maintenance policy as an action for route policies. It is only used for SR policy routes.
String Length	1 to 32
Introduced	20.10.R1
Platforms	All

**sr-return-path-bfd-label** (*policy-var-name* | *number*)

Synopsis	S-BFD return path label
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sr-return-path-bfd-label</a> ( <i>policy-var-name</i>   <i>number</i> )
Tree	<a href="#">sr-return-path-bfd-label</a>

Description	<p>This command configures an additional MPLS label to add to the bottom of the label stack for the S-BFD packet and sets the S-BFD session to echo mode.</p> <p>This command applies to the initiator of the S-BFD sessions. The label value can either be a binding SID for an SR policy or another MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through the MPLS return path. This value takes precedence over the return path label value in a maintenance policy (configured using the <b>configure router segment-routing maintenance-policy return-path-label</b> command) that is also applied as the policy-statement action. This command can only be configured if the <b>sr-maintenance-policy</b> is also configured.</p> <p>If this command is unconfigured, and there is no <b>return-path-label</b> command configuration in the maintenance policy that is also applied as an action, and the policy statement is reevaluated, S-BFD returns to asynchronous mode and no return path label is pushed by the initiator node. S-BFD packets for this LSP or path received by the reflector are routed through the IGP path.</p>
String Length	1 to 32
Range	32 to 1048512
Introduced	23.10.R1
Platforms	All

### **srv6-locator** (*param-midstring-64* | *string*)

Synopsis	Locator for SRv6 TLV to use
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">srv6-locator</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">srv6-locator</a>
Description	<p>This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named locator for the SRv6 TLV to use.</p> <p>For a VRF export policy, the referenced locator must already be configured using the commands in the <b>configure service vprn segment-routing-v6 locator</b> context.</p> <p>For a BGP export policy, the referenced locator must already be configured using the commands in the <b>configure router segment-routing segment-routing-v6 base-routing-instance locator</b> context.</p>
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srv6-micro-segment-locator** (*param-midstring-64* | *string*)

Synopsis	Micro-segment locator for SRv6 TLV to use
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">srv6-micro-segment-locator</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">srv6-micro-segment-locator</a>
Description	This command configures either a string encoding a midstring parameter delimited by at signs (@), or a reference to a named micro-segment locator for the SRv6 TLV to use. For a VRF export policy, the referenced micro-segment locator must already be configured using the commands in the <b>configure service vprn segment-routing-v6 micro-segment-locator</b> context. For a BGP export policy, the referenced micro-SID locator must already be configured using the commands in the <b>configure router segment-routing segment-routing-v6 base-routing-instance micro-segment-locator</b> context.
String Length	1 to 64
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srv6-return-path-bfd-sid** (*policy-var-name* | *ipv6-address*)

Synopsis	SRv6 return path BFD SID applied to SRv6 policy routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">srv6-return-path-bfd-sid</a> ( <i>policy-var-name</i>   <i>ipv6-address</i> )
Tree	<a href="#">srv6-return-path-bfd-sid</a>
Description	This command configures the S-BFD session to echo mode and pushes an additional SRv6 SID in the SRH only for S-BFD packets sent on the imported SRv6 policy.
String Length	1 to 32
Introduced	23.3.R1
Platforms	All

### **sticky-ecmp** *boolean*

Synopsis	Specify the sticky ECMP flag for BGP ECMP routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">sticky-ecmp</a> <i>boolean</i>
Tree	<a href="#">sticky-ecmp</a>
Default	false
Introduced	19.10.R1
Platforms	All

**tag** (*number* | *string*)

Synopsis	OSPF RIP or IS-IS tag applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">tag</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">tag</a>
String Length	1 to 32
Range	1 to 4294967295
Introduced	19.10.R1
Platforms	All

**type** (*number* | *string*)

Synopsis	OSPF metric type applied to routes
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <a href="#">type</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">type</a>
String Length	1 to 32
Range	1 to 2
Introduced	19.10.R1
Platforms	All

**conditional-expression**

Synopsis	Enable the <b>conditional-expression</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">conditional-expression</a>
Tree	<a href="#">conditional-expression</a>
Introduced	19.10.R1
Platforms	All

**route-exists** *string*

Synopsis	Conditional expression to test route existence
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">conditional-expression</a> <a href="#">route-exists</a> <i>string</i>
Tree	<a href="#">route-exists</a>

String Length	1 to 255
Introduced	19.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.10.R1
Platforms	All

### **from**

Synopsis	Enable the <b>from</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <b>from</b>
Tree	<a href="#">from</a>
Introduced	19.10.R1
Platforms	All

### **aggregate-contributor** *boolean*

Synopsis	Enable aggregate route match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">aggregate-contributor</a> <i>boolean</i>
Tree	<a href="#">aggregate-contributor</a>
Description	<p>When configured to <b>true</b>, matches all routes (BGP and non-BGP) that have contributed to an active aggregate route. If the prefix tree above a particular route includes no active aggregate routes or the most specific active aggregate route in the prefix tree above this route has a policy that rejects the route, then it is not considered as an aggregate-contributor.</p> <p>This match condition is only supported when used in a BGP export policy. If it is used in an entry of a BGP import policy, <b>vrf-export</b> policy or <b>vrf-import</b> policy, no routes are matched by that entry.</p> <p>When configured to <b>false</b>, no routes (BGP and non-BGP) that have contributed to an active aggregate route are matched.</p>
Default	false

Introduced 20.10.R1  
 Platforms All

### **area string**

Synopsis OSPF area as a match criterion  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from area](#) *string*  
 Tree [area](#)  
 Introduced 19.10.R1  
 Platforms All

### **as-path**

Synopsis Enter the **as-path** context  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#)  
 Tree [as-path](#)  
 Introduced 19.10.R1  
 Platforms All

### **group** (*param-midstring* | *string*)

Synopsis AS path group as a match criterion  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#) [group](#) (*param-midstring* | *string*)  
 Tree [group](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **group** or **name**.  
 Introduced 19.10.R1  
 Platforms All

### **length**

Synopsis Enter the **length** context  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from as-path](#) [length](#)  
 Tree [length](#)

Introduced	19.10.R1
Platforms	All

### **qualifier** *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from as-path</a> <a href="#">length</a> <b>qualifier</b> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

### **unique** *boolean*

Synopsis	Use unique AS numbers as matching criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from as-path</a> <a href="#">length</a> <b>unique</b> <i>boolean</i>
Tree	<a href="#">unique</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **value** (*number* | *string*)

Synopsis	AS numbers in the AS path that match on the BGP route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from as-path</a> <a href="#">length</a> <b>value</b> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 255
Introduced	19.10.R1
Platforms	All

**name** (*param-midstring* | *string*)

Synopsis	AS path name to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from as-path</a> <a href="#">name</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">name</a>
Description	This command specifies an AS path regular expression name for the route policy entry. Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 32
Notes	The following elements are part of a choice: <b>group</b> or <b>name</b> .
Introduced	19.10.R1
Platforms	All

**cluster-id**

Synopsis	Enter the <b>cluster-id</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from cluster-id</a>
Tree	<a href="#">cluster-id</a>
Introduced	19.10.R1
Platforms	All

**ip-address** *string*

Synopsis	Cluster list attribute IP addresses for route matching
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from cluster-id</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Max. Instances	5
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>none-cluster-list</b> . This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**none-cluster-list** *boolean*

Synopsis	Specify matching BGP routes without a cluster ID
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from cluster-id</a> <a href="#">none-cluster-list</a> <i>boolean</i>
Tree	<a href="#">none-cluster-list</a>
Default	false
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>none-cluster-list</b> .
Introduced	19.10.R1
Platforms	All

**color** *number*

Synopsis	Color ID as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from color</a> <i>number</i>
Tree	<a href="#">color</a>
Description	This command configures an SR Policy color ID as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

**community**

Synopsis	Enter the <b>community</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community</a>
Tree	<a href="#">community</a>
Introduced	19.10.R1
Platforms	All

**count**

Synopsis	Enter the <b>count</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community</a> <a href="#">count</a>
Tree	<a href="#">count</a>
Introduced	19.10.R1

Platforms All

### **qualifier** *keyword*

Synopsis Higher or lower values to be accepted as match criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from](#) [community](#) [count](#) **qualifier** *keyword*

Tree [qualifier](#)

Options equal, or-higher, or-lower

Default equal

Introduced 19.10.R1

Platforms All

### **type** *keyword*

Synopsis Community count to match the community count criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from](#) [community](#) [count](#) **type** *keyword*

Tree [type](#)

Options standard, extended, large

Introduced 19.10.R1

Platforms All

### **value** (*number* | *string*)

Synopsis Number of BGP communities to match the BGP route

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from](#) [community](#) [count](#) **value** (*number* | *string*)

Tree [value](#)

String Length 1 to 32

Range 0 to 1024

Introduced 19.10.R1

Platforms All



**expression string**

Synopsis	Community expression statement as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community</a> <a href="#">expression</a> <i>string</i>
Tree	<a href="#">expression</a>
Description	<p>This command configures a community expression statement as a match criterion for the policy statement. This statement is a logical expression string composed of logical operators (keywords AND, OR, NOT), community names delimited by square brackets [], and parentheses ( ) to group subexpressions. If the expression contains special characters (for example, #, \$, spaces), the entire string must be enclosed in double quotes.</p> <p>The expression specified must already be defined using the <b>configure policy-options community expression expr</b> command.</p> <p>The following are examples of valid logical expressions:</p> <pre>"[community_list_A] OR ([community_list_B] AND [community_list_C])" "NOT [community_list_A]" "[community_list_A] AND [community_list_B] OR [community_list_C]" "NOT ([community_list_A] OR [community_list_B] OR [community_list_C])"</pre>
String Length	1 to 900
Notes	The following elements are part of a choice: <b>expression</b> or <b>name</b> .
Introduced	19.10.R1
Platforms	All

**name** (*param-midstring-64* | *string*)

Synopsis	Community list name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from community</a> <a href="#">name</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">name</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>expression</b> or <b>name</b> .
Introduced	19.10.R1
Platforms	All

**distinguisher number**

Synopsis	SR policy distinguisher as a match criterion
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Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">distinguisher</a> <i>number</i>
Tree	<a href="#">distinguisher</a>
Description	This command configures an SR Policy distinguisher as a route policy match criterion. This match criterion is only used in import policies.
Range	0 to 4294967295
Introduced	20.10.R1
Platforms	All

### **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	SR policy endpoint address as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">endpoint</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">endpoint</a>
Description	This command configures an SR Policy endpoint address as a route policy match criterion. This match criterion is only used in import policies.
Introduced	20.10.R1
Platforms	All

### **evpn-type** *keyword*

Synopsis	EVPN type as a match criterion for the entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">evpn-type</a> <i>keyword</i>
Tree	<a href="#">evpn-type</a>
Options	ethernet-auto-discovery, mac-ip-advertisement, inclusive-multicast, ethernet-segment, ip-prefix, selective-multicast, multicast-join-sync, multicast-leave-sync, selective-pmsi-auto-discovery
Introduced	19.10.R1
Platforms	All

### **external** *boolean*

Synopsis	Specify the external IS-IS route as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">external</a> <i>boolean</i>

Tree	<a href="#">external</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **family** *keyword*

Synopsis	Address family as the match condition
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Max. Instances	20
Introduced	19.10.R1
Platforms	All

### **flowspec**

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">flowspec</a>
Tree	<a href="#">flowspec</a>
Introduced	19.10.R1
Platforms	All

### **dest** (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per destination IP prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">flowspec</a> <a href="#">dest</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">dest</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

**source** (*param-midstring* | *string*)

Synopsis	BGP FlowSpec route matches per the source IP prefix
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">flowspec</a> <a href="#">source</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">source</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

**group-address** (*param-midstring* | *string*)

Synopsis	Prefix list of multicast group addresses for mathcing
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">group-address</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">group-address</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

**host-ip** (*param-midstring* | *string*)

Synopsis	Prefix list of IGMP host IP addresses for matching
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">host-ip</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">host-ip</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	All

**interface** (*named-item* | *interface-name* | *interface-name* | *interface-name*)

Synopsis	Interface name as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from</a> <a href="#">interface</a> ( <i>named-item</i>   <i>interface-name</i>   <i>interface-name</i>   <i>interface-name</i> )
Tree	<a href="#">interface</a>

String Length	1 to 32
Max. Instances	1
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

## interface-subnets

Synopsis	Enter the <b>interface-subnets</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from interface-subnets</a>
Tree	<a href="#">interface-subnets</a>
Description	<p>Commands in this context configure the applied router instance and interfaces that are used as the matching condition within each policy statement entry when exporting the IP address of the associated interface to a routing protocol.</p> <p>The interface subnet policy statement match criterion is applied to the following unicast use case contexts:</p> <ul style="list-style-type: none"> <li>• <b>export</b>, when used with OSPFv2, OSPFv3, IS-IS, RIP, RIPng, and BGP</li> <li>• <b>route-table-import</b>, when used with BGP</li> <li>• <b>vrf-export</b>, when used with MP-BGP</li> </ul>
Introduced	21.2.R1
Platforms	All

## ip-int-name *string*

Synopsis	Interface name as the match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from interface-subnets</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
Description	This command specifies the interface name to match when exporting the IP address of the associated interface to a routing protocol.
String Length	1 to 32
Max. Instances	10
Notes	This element is ordered by the user.
Introduced	21.2.R1

Platforms All

### **service** *string*

Synopsis Service ID of the interface subnets

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from interface-subnets](#) [service](#) *string*

Tree [service](#)

Default Base

Introduced 21.2.R1

Platforms All

### **level** *number*

Synopsis IS-IS route level as a match criterion

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from level](#) *number*

Tree [level](#)

Range 1 to 2

Introduced 19.10.R1

Platforms All

### **local-preference**

Synopsis Enter the **local-preference** context

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from local-preference](#)

Tree [local-preference](#)

Introduced 19.10.R1

Platforms All

### **qualifier** *keyword*

Synopsis Higher or lower values to be accepted as match criteria

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from local-preference](#) [qualifier](#) *keyword*

Tree [qualifier](#)

Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

### **value** (*number* | *string*)

Synopsis	BGP routes per local preference value or variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from local-preference value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

### **metric**

Synopsis	Enter the <b>metric</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from metric</a>
Tree	<a href="#">metric</a>
Introduced	19.10.R1
Platforms	All

### **qualifier** *keyword*

Synopsis	Higher or lower values to be accepted as match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from metric</a> <a href="#">qualifier</a> <i>keyword</i>
Tree	<a href="#">qualifier</a>
Options	equal, or-higher, or-lower
Default	equal
Introduced	19.10.R1
Platforms	All

**value** (*number* | *string*)

Synopsis	Local preference value or variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from metric value</a> ( <i>number</i>   <i>string</i> )
Tree	<a href="#">value</a>
String Length	1 to 32
Range	0 to 4294967295
Introduced	19.10.R1
Platforms	All

**mvpn-type** *keyword*

Synopsis	MVPN type as a match criterion for the entry
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from mvpn-type keyword</a>
Tree	<a href="#">mvpn-type</a>
Options	intra-as-ipmsi-auto-discovery, inter-as-ipmsi-auto-discovery, s-pmsi-auto-discovery, intra-as-segment-leaf-auto-discovery, source-active-auto-discovery, shared-tree-join, source-tree-join
Introduced	19.10.R1
Platforms	All

**neighbor**

Synopsis	Enter the <b>neighbor</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from neighbor</a>
Tree	<a href="#">neighbor</a>
Introduced	19.10.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address to match the neighbor
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from neighbor ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )



Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

### **prefix-list** (*param-midstring* | *string*)

Synopsis	Name to match the neighbor prefix list
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">neighbor prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

### **next-hop**

Synopsis	Enter the <b>next-hop</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">next-hop</a>
Tree	<a href="#">next-hop</a>
Introduced	19.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the next hop to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">next-hop ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

**prefix-list** (*param-midstring* | *string*)

Synopsis	Name of a next hop prefix list to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from next-hop prefix-list</a> ( <i>param-midstring</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

**origin** *keyword*

Synopsis	Route origin match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from origin</a> <i>keyword</i>
Tree	<a href="#">origin</a>
Description	<p>This command configures a match criteria for the origin attribute of the route. The origin attribute is applicable to BGP routes and to the following subscriber-management routes:</p> <p>Host routes (for example, IPv4 /32 address, or IPv6 SLAAC prefix) carry the origin attribute with AAA, dynamic, or static values, depending on the address assignment method. For CUPS hosts, the origin attribute is always PFCP. Host routes can also be distinguished using the <b>sub-mgmt</b> option for the <b>protocol</b> command.</p> <p>Dynamically provisioned prefixes or loopback addresses use AAA or PFCP origin values, depending on the protocol that provides the prefix and address. Dynamic routes can also be distinguished using the <b>direct</b> option for the <b>protocol</b> command.</p> <p>Statically configured prefixes under the subscriber interface do not have an origin attribute. These routes can be distinguished using the <b>direct</b> option for the <b>protocol</b> command.</p> <p>Framed routes for non-CUPS hosts do not have an origin attribute. Framed routes for CUPS hosts use PFCP for the origin attribute. Alternatively, framed routes can be distinguished using the <b>managed</b> option for the <b>protocol</b> command.</p> <p>The values that are specific to subscriber-management routes are never carried in BGP updates as part of the BGP origin attribute and are not visible within the BGP process.</p>
Options	igp, egp, incomplete, any, aaa, dynamic, static, bonding, pfcp
Introduced	19.10.R1
Platforms	All

**origin-validation-state** *keyword*

Synopsis	Origin validation state used for match criteria
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">origin-validation-state</a> <i>keyword</i>
Tree	<a href="#">origin-validation-state</a>
Description	This command specifies a validation state that is used to match BGP routes based on their origin validation state.
Options	valid, not-found, invalid
Introduced	19.10.R1
Platforms	All

**ospf-type** *number*

Synopsis	OSPF type metric applied to unmatching route entries
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">ospf-type</a> <i>number</i>
Tree	<a href="#">ospf-type</a>
Range	1 to 2
Introduced	19.10.R1
Platforms	All

**path-type** *keyword*

Synopsis	Path type as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">path-type</a> <i>keyword</i>
Tree	<a href="#">path-type</a>
Options	ibgp, ebgp
Introduced	19.10.R1
Platforms	All

**policy** (*string* | *string*)

Synopsis	Policy statement as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">policy</a> ( <i>string</i>   <i>string</i> )

Tree	<a href="#">policy</a>
String Length	1 to 255
Introduced	19.10.R1
Platforms	All

## policy-variables

Synopsis	Enter the <b>policy-variables</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">policy-variables</a>
Tree	<a href="#">policy-variables</a>
Introduced	19.10.R1
Platforms	All

## name [[variable-name](#)] *string*

Synopsis	Enter the <b>name</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
Description	Commands in this context configure global variables for use across BGP peers of a common type (transit, peer, customer, and so on).
Max. Instances	10
Introduced	19.10.R1
Platforms	All

## [[variable-name](#)] *string*

Synopsis	Global variable name used to reference policy functions
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">policy-variables</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1

Platforms All

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the policy variable

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.

Introduced 19.10.R1

Platforms All

### **decimal** *decimal-number*

Synopsis Attribute decimal to which variable name is resolved

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* **decimal** *decimal-number*

Tree [decimal](#)

Range 0.000 to 4294967295.000

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.

Introduced 19.10.R1

Platforms All

### **number** *number*

Synopsis Numerical value of the policy variable

Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [from policy-variables](#) [name](#) *string* **number** *number*

Tree [number](#)

Range 0 to 4294967295

Notes The following elements are part of a mandatory choice: **address**, **decimal**, **number**, **prefix**, or **value**.

Introduced 19.10.R1

Platforms All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix value associated with the variable name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from policy-variables</a> <i>name string prefix (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">prefix</a>
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value** *string*

Synopsis	Policy variable value
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from policy-variables</a> <i>name string value string</i>
Tree	<a href="#">value</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>decimal</b> , <b>number</b> , <b>prefix</b> , or <b>value</b> .
Introduced	19.10.R1
Platforms	All

**prefix-list** (*param-midstring-64* | *string*)

Synopsis	Prefix list as match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from prefix-list</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 64
Max. Instances	28
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**prefix-list-override** [[prefix-list](#)] *string*

Synopsis	Enter the <b>prefix-list-override</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from prefix-list-override</a> <i>string</i>
Tree	<a href="#">prefix-list-override</a>
Description	<p>Commands in this context convert a prefix list to a specific match type. The routing policy uses the converted list as a match condition.</p> <p>The prefix list to be converted can be specified by its name, as an expression containing the name of a global variable that holds the name of the prefix list, or as an expression containing the name of a subroutine variable that holds the name of the prefix list.</p>
Max. Instances	1
Introduced	23.10.R1
Platforms	All

**[prefix-list]** *string*

Synopsis	Prefix list to be converted
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from prefix-list-override</a> <i>string</i>
Tree	<a href="#">prefix-list-override</a>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	All

**end-length** *number*

Synopsis	Prefix range end length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from prefix-list-override</a> <i>string</i> <a href="#">end-length</a> <i>number</i>
Tree	<a href="#">end-length</a>
Range	0 to 128
Notes	The following elements are part of a choice: ( <b>end-length</b> and <b>start-length</b> ) or <b>through-length</b> .
Introduced	23.10.R1
Platforms	All

**start-length** *number*

Synopsis	Prefix range start length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from prefix-list-override</a> <i>string</i> <b>start-length</b> <i>number</i>
Tree	<a href="#">start-length</a>
Range	0 to 128
Notes	The following elements are part of a choice: ( <b>end-length</b> and <b>start-length</b> ) or <b>through-length</b> .
Introduced	23.10.R1
Platforms	All

**through-length** *number*

Synopsis	Prefix through length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from prefix-list-override</a> <i>string</i> <b>through-length</b> <i>number</i>
Tree	<a href="#">through-length</a>
Range	0 to 128
Notes	The following elements are part of a choice: ( <b>end-length</b> and <b>start-length</b> ) or <b>through-length</b> .
Introduced	23.10.R1
Platforms	All

**type** *keyword*

Synopsis	New match type for entries in referenced prefix list
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from prefix-list-override</a> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	exact, longer, through, range
Default	exact
Introduced	23.10.R1
Platforms	All



**protocol**

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from protocol</a>
Tree	<a href="#">protocol</a>
Description	Commands in this context configure the match criterion based on protocols for a route policy statement entry and may be used for both import and export policies.
Introduced	19.10.R1
Platforms	All

**instance** (*keyword* | *number*)

Synopsis	Instance for protocol IS-IS, OSPF, or OSPFv3 to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from protocol</a> <a href="#">instance</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">instance</a>
Description	This command specifies the OSPF, OSPFv3, or IS-IS instance to be used as the match criterion.  When this command is explicitly configured, the <b>name</b> command must be configured to identify the protocol (OSPF, OSPFv3, or IS-IS).
Range	0 to 127
Options	all
Default	0
Introduced	19.10.R1
Platforms	All

**name** *keyword*

Synopsis	List of protocol names as the match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from protocol</a> <a href="#">name</a> <i>keyword</i>
Tree	<a href="#">name</a>
Description	This command specifies a protocol list for the match criterion. If multiple protocols are specified, the protocol names must belong to the following protocol set: <ul style="list-style-type: none"> <li>• direct</li> <li>• static</li> <li>• isis</li> <li>• aggregate</li> </ul>

- `bgp`
- `bgp-label`
- `direct-interface`

If multiple protocols are specified, the **instance** command cannot be explicitly configured.

The protocol **direct-interface** route type matches the specific direct interface host IPv4 / 32 and IPv6 /128 routes.

Options	<code>direct</code> , <code>static</code> , <code>bgp</code> , <code>isis</code> , <code>ospf</code> , <code>rip</code> , <code>aggregate</code> , <code>bgp-vpn</code> , <code>igmp</code> , <code>pim</code> , <code>ospf3</code> , <code>ldp</code> , <code>sub-mgmt</code> , <code>mld</code> , <code>managed</code> , <code>vpn-leak</code> , <code>nat</code> , <code>periodic</code> , <code>ipsec</code> , <code>dhcpv6-pd</code> , <code>dhcpv6-na</code> , <code>dhcpv6-ta</code> , <code>dhcpv6-pd-excl</code> , <code>ripng</code> , <code>bgp-label</code> , <code>direct-interface</code> , <code>arp-nd</code> , <code>rib-api</code> , <code>dhcp-client</code> , <code>evpn-iftl</code> , <code>srv6</code> , <code>video</code>
Max. Instances	5
Introduced	19.10.R1
Platforms	All

### **route-distinguisher-list** (*param-midstring-64* | *string*)

Synopsis	Route distinguisher list as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from route-distinguisher-list</a> ( <i>param-midstring-64</i>   <i>string</i> )
Tree	<a href="#">route-distinguisher-list</a>
Description	This command specifies the (possibly parameterized) name of a route distinguisher (RD) list.  This match condition is supported by policies applied as VRF-import or BGP peer import policies. A BGP route can match a policy entry with this match criterion if the NLRI field contains an RD that is matched by at least one of the entries in the RD list.  BGP routes belonging to address families other than VPN-IPv4, VPN-IPv6, MCAST-VPN-IPv4, MCAST-VPN-IPv6, EVPN, FlowSpec-VPN IPv4, FlowSpec-VPN IPv6, MVPN-IPv4, or MVPN-IPv6 route do not match policy entries with this match criterion.
String Length	1 to 64
Introduced	23.3.R1
Platforms	All

### **source-address**

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from source-address</a>

Tree	<a href="#">source-address</a>
Introduced	19.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Source IP address to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">source-address</a> <b>ip-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

### **prefix-list** (*param-midstring | string*)

Synopsis	Name of a source address prefix list to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">source-address</a> <b>prefix-list</b> ( <i>param-midstring   string</i> )
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>prefix-list</b> .
Introduced	19.10.R1
Platforms	All

### **srv6-sid-prefix** (*policy-var-name | ipv6-unicast-prefix*)

Synopsis	SRv6 SID or uSID as match criterion for the BGP route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">srv6-sid-prefix</a> ( <i>policy-var-name   ipv6-unicast-prefix</i> )
Tree	<a href="#">srv6-sid-prefix</a>
Description	This command configures either the name of a prefix policy variable or an IPv6 prefix and prefix length, as a match criterion for a BGP route.  <b>Note:</b> If the name of a prefix policy variable is the match criterion, the name must start and end with an at sign (@).

A BGP route matches this condition if it has an SRv6 TLV, and the SID or micro-segment (uSID) value in that TLV is matched by the bits of the IPv6 prefix (up to the specified prefix length).

This match condition is supported in BGP import policies, BGP export policies, and VRF or VSI import policies.

String Length	1 to 32
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srv6-tlv** keyword

Synopsis	SRv6 TLV presence as match criterion for BGP route
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">srv6-tlv</a> keyword
Tree	<a href="#">srv6-tlv</a>
Description	<p>This command configures whether the entry matches a BGP route with a prefix SID attribute containing an SRv6 TLV.</p> <p>If this command is not configured, a BGP route can match the entry, regardless of whether it has a prefix SID attribute or whether that prefix SID attribute has SRv6 TLVs.</p> <p>This match condition is supported in BGP import policies, BGP export policies, and VRF or VSI import policies.</p> <p>If the <b>present</b> option is configured, a BGP route only matches this entry if it has a prefix SID attribute containing an SRv6 TLV.</p> <p>If the <b>not-present</b> option is configured, a BGP route only matches this entry if it does not have a prefix SID attribute containing an SRv6 TLV.</p>
Options	present, not-present
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **state** keyword

Synopsis	State used as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> from <a href="#">state</a> keyword
Tree	<a href="#">state</a>
Description	This command configures a criterion that identifies in resilient gateways which routes are associated with an active context and which routes are associated with a standby context.
Options	srrp-master, srrp-non-master, ipsec-master-with-peer, ipsec-master-without-peer, ipsec-non-master, fsg-active, fsg-standby, fsg-active-path-restoration

Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tag** (*number* | *keyword*)

Synopsis	Route tag used as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">from tag</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Options	no-tag
Introduced	19.10.R1
Platforms	All

**to**

Synopsis	Enable the <b>to</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to</a>
Tree	<a href="#">to</a>
Introduced	19.10.R1
Platforms	All

**level** *number*

Synopsis	IS-IS route level as a match criterion
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 2
Introduced	19.10.R1
Platforms	All

**neighbor**

Synopsis	Enter the <b>neighbor</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to neighbor</a>
Tree	<a href="#">neighbor</a>

Introduced 19.10.R1  
 Platforms All

### **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone*)

Synopsis IP address to match the neighbor  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to neighbor](#) [ip-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone | ipv4-address-with-zone | ipv6-address-with-zone*)  
 Tree [ip-address](#)  
 Notes The following elements are part of a choice: **ip-address** or **prefix-list**.  
 Introduced 19.10.R1  
 Platforms All

### **prefix-list** (*param-midstring | string*)

Synopsis Name to match the neighbor prefix list  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to neighbor](#) [prefix-list](#) (*param-midstring | string*)  
 Tree [prefix-list](#)  
 String Length 1 to 32  
 Notes The following elements are part of a choice: **ip-address** or **prefix-list**.  
 Introduced 19.10.R1  
 Platforms All

### **prefix-list** (*param-midstring-64 | string*)

Synopsis Prefix list as match criterion  
 Context **configure** [policy-options](#) [policy-statement](#) *string* [named-entry](#) *string* [to prefix-list](#) (*param-midstring-64 | string*)  
 Tree [prefix-list](#)  
 String Length 1 to 64  
 Max. Instances 28  
 Notes This element is ordered by the user.

Introduced	19.10.R1
Platforms	All

## protocol

Synopsis	Enter the <b>protocol</b> context
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to protocol</a>
Tree	<a href="#">protocol</a>
Introduced	19.10.R1
Platforms	All

## instance (*keyword* | *number*)

Synopsis	Instance for the IS-IS, OSPF, or OSPF3 protocol
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to protocol</a> <a href="#">instance</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">instance</a>
Range	0 to 127
Options	all
Default	0
Introduced	19.10.R1
Platforms	All

## name *keyword*

Synopsis	Protocol name to match
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">to protocol</a> <a href="#">name</a> <i>keyword</i>
Tree	<a href="#">name</a>
Options	bgp, isis, ospf, rip, bgp-vpn, ospf3, ldp, vpn-leak, ripng, bgp-label, evpn-ift
Max. Instances	2
Introduced	19.10.R1
Platforms	All

**prefix-list** [*name*] *string*

Synopsis	Enter the <b>prefix-list</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Tree	<a href="#">prefix-list</a>
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Prefix list name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Tree	<a href="#">prefix-list</a>
Description	This command specifies the name for a prefix list.  Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**prefix** [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*) [type](#) *keyword*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix associated with the prefix length
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms All

### **type** *keyword*

Synopsis Prefix list match type

Context **configure** [policy-options](#) [prefix-list](#) *string* [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [type](#) *keyword*

Tree [prefix](#)

Options exact, longer, through, range, to, address-mask

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **end-length** *number*

Synopsis Prefix range end length

Context **configure** [policy-options](#) [prefix-list](#) *string* [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [type](#) *keyword* [end-length](#) *number*

Tree [end-length](#)

Range 0 to 128

Notes The following elements are part of a choice: **mask-pattern**, (**end-length** and **start-length**), **through-length**, or **to-prefix**.

Introduced 16.0.R1

Platforms All

### **mask-pattern** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Add a list entry for **mask-pattern**

Context **configure** [policy-options](#) [prefix-list](#) *string* [prefix](#) (*ipv4-prefix* | *ipv6-prefix*) [type](#) *keyword* [mask-pattern](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [mask-pattern](#)

Notes The following elements are part of a choice: **mask-pattern**, (**end-length** and **start-length**), **through-length**, or **to-prefix**.

Introduced 20.7.R1

Platforms All

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Address mask for matching routes to the prefix entry
Context	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>type</b> <b>keyword</b> <b>mask-pattern</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>mask-pattern</b>
Description	<p>This command specifies the address mask to compare against the prefix entry to determine whether the route is considered a match.</p> <p>A route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"> <li>• The bitwise logical AND of the prefix address and its mask matches the bitwise logical AND of the route address and its mask.</li> <li>• The prefix length of the prefix entry matches the prefix length of the route.</li> </ul> <p>For example, for a prefix entry of 17.1.0.0/32, routes with an address 17.1.x.0 (where x can be 0 through 255) and a prefix length of 32 match the entry.</p>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

**start-length** *number*

Synopsis	Start in the prefix range length
Context	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>type</b> <b>keyword</b> <b>start-length</b> <i>number</i>
Tree	<b>start-length</b>
Range	0 to 128
Notes	The following elements are part of a choice: <b>mask-pattern</b> , ( <b>end-length</b> and <b>start-length</b> ), <b>through-length</b> , or <b>to-prefix</b> .
Introduced	16.0.R1
Platforms	All

**through-length** *number*

Synopsis	Prefix through length
Context	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>type</b> <b>keyword</b> <b>through-length</b> <i>number</i>
Tree	<b>through-length</b>
Range	0 to 128

Notes	The following elements are part of a choice: <b>mask-pattern</b> , ( <b>end-length</b> and <b>start-length</b> ), <b>through-length</b> , or <b>to-prefix</b> .
Introduced	16.0.R1
Platforms	All

### **to-prefix** [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for <b>to-prefix</b>
Context	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>type</b> <i>keyword</i> <b>to-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>to-prefix</b>
Notes	The following elements are part of a choice: <b>mask-pattern</b> , ( <b>end-length</b> and <b>start-length</b> ), <b>through-length</b> , or <b>to-prefix</b> .
Introduced	20.7.R1
Platforms	All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for "to" match type
Context	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>type</b> <i>keyword</i> <b>to-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>to-prefix</b>
Description	<p>This command configures an IP prefix to use in a route policy prefix list for the to match type. If the prefix entry is in the format <i>prefix1/length1</i>, and this command is configured in the format <i>prefix2/length2</i>, a route matches the prefix entry if the following conditions are met.</p> <ul style="list-style-type: none"> <li>• The route shares the same most-significant bits (specified by <i>length1</i>) with the prefix entry</li> <li>• The route shares the same most-significant bits (specified by <i>length2</i>) with this IP prefix value</li> <li>• The prefix length of the route is in the range of <i>length1</i> to <i>length2</i> (inclusive)</li> </ul> <p>For example, for a prefix entry of 10.0.0.8 with a to IP prefix value of 10.0.0.0/32, routes 10.0.0.0/8, 10.0.0.0/9, 10.0.0.0/10, and so on, to 10.0.0.0/32 are considered matches for the prefix entry.</p>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

**route-distinguisher-list** [*name*] *string*

Synopsis	Enter the <b>route-distinguisher-list</b> list instance
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">route-distinguisher-list</a> <i>string</i>
Tree	<a href="#">route-distinguisher-list</a>
Introduced	23.3.R1
Platforms	All

**[name]** *string*

Synopsis	Route distinguisher list name
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">route-distinguisher-list</a> <i>string</i>
Tree	<a href="#">route-distinguisher-list</a>
Description	This command creates a list of entries used to match the RD in BGP routes of specific address families.
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

**rd-entry** [*rd*] *string*

Synopsis	Add a list entry for <b>rd-entry</b>
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">route-distinguisher-list</a> <i>string</i> <a href="#">rd-entry</a> <i>string</i>
Tree	<a href="#">rd-entry</a>
Max. Instances	128
Introduced	23.3.R1
Platforms	All

**[rd]** *string*

Synopsis	Route distinguisher
Context	<b>configure</b> <a href="#">policy-options</a> <a href="#">route-distinguisher-list</a> <i>string</i> <a href="#">rd-entry</a> <i>string</i>
Tree	<a href="#">rd-entry</a>

---

Description	<p>This command creates an RD matching entry containing an IPv4 address or ASN and the assigned number. The following formats are supported:</p> <ul style="list-style-type: none"><li>• <i>a.b.c.d/m:*</i> – RD in IPv4 format with a wildcard character (such as 10.0.0.0/16:*)</li><li>• <i>a.b.c.d/m:n</i> – RD in IPv4 format with a specific number (such as 10.0.0.2/32:535)</li><li>• <i>asn:*</i> – RD in ASN format with a wildcard character (such as 65000:*)</li><li>• <i>asn:n</i> – RD in ASN format with a specific number (such as 65000:535)</li></ul> <p>See the "Route distinguishers" section of the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Layer 3 Services Guide: IES and VPRN</i> for information about Type values.</p>
String Length	3 to 28
Notes	This element is part of a list key.
Introduced	23.3.R1
Platforms	All

## 3.32 port commands

```

configure
- port string
- access
- apply-groups reference
- apply-groups-exclude reference
- egress
- pool string
- amber-alarm-threshold number
- apply-groups reference
- apply-groups-exclude reference
- red-alarm-threshold number
- resv-cbs
- amber-alarm-action
- max number
- step number
- cbs (number | keyword)
- slope-policy reference
- ingress
- pool string
- amber-alarm-threshold number
- apply-groups reference
- apply-groups-exclude reference
- red-alarm-threshold number
- resv-cbs
- amber-alarm-action
- max number
- step number
- cbs (number | keyword)
- slope-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- connector
- apply-groups reference
- apply-groups-exclude reference
- breakout keyword
- rs-fec-mode keyword
- ddm-events boolean
- description string
- dist-cpu-protection
- policy reference
- dwdm
- apply-groups reference
- apply-groups-exclude reference
- coherent
- apply-groups reference
- apply-groups-exclude reference
- compatibility keyword
- cpr-window-size number
- dispersion number
- mode keyword
- report-alarm
- hosttx boolean
- mod boolean
- modflt boolean
- netrx boolean
- nettx boolean
- rx-los-reaction keyword
- rx-los-thresh decimal-number

```

## configure port dwdm coherent sweep

```

- sweep
  - end number
  - start number
  - target-power decimal-number
- frequency number
- ethernet
- access
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number
  - booking-factor number
  - egress
    - queue-group reference instance-id number
      - accounting-policy reference
      - aggregate-rate
        - limit-unused-bandwidth boolean
        - queue-frame-based-accounting boolean
        - rate (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - collect-stats boolean
      - description string
      - host-match
        - int-dest-id string
      - hs-turbo boolean
      - queue-overrides
        - queue reference
          - adaptation-rule
            - cir keyword
            - pir keyword
          - apply-groups reference
          - apply-groups-exclude reference
          - burst-limit (number | keyword)
          - cbs (number | keyword)
          - drop-tail
            - low
              - percent-reduction-from-mbs (number | keyword)
          - mbs (number | keyword)
          - monitor-queue-depth
            - fast-polling boolean
            - violation-threshold decimal-number
        - parent
          - cir-weight number
          - weight number
        - percent-rate
          - cir decimal-number
          - pir decimal-number
        - rate
          - cir (number | keyword)
          - pir (number | keyword)
      - scheduler-policy
        - overrides
          - scheduler string
          - apply-groups reference
          - apply-groups-exclude reference
          - parent
            - cir-weight number
            - weight number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
          - policy-name reference
        - virtual-port string
      - aggregate-rate

```

configure port ethernet access egress virtual-port aggregate-rate limit-unused-bandwidth

```

    - limit-unused-bandwidth boolean
    - rate (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - host-match
    - int-dest-id string
    - hw-agg-shaper-scheduler-policy reference
    - lag-per-link-hash
    - class number
    - weight number
    - monitor-hw-agg-shaper-scheduler boolean
    - monitor-port-scheduler boolean
    - multicast-hqos-adjustment boolean
    - port-scheduler-policy reference
    - scheduler-policy
    - policy-name reference
- ingress
- queue-group reference
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- description string
- queue-overrides
- queue reference
- adaptation-rule
- cir keyword
- pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- drop-tail
- low
- percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- monitor-queue-depth
- fast-polling boolean
- rate
- cir (number | keyword)
- pir (number | keyword)
- scheduler-policy
- overrides
- scheduler string
- apply-groups reference
- apply-groups-exclude reference
- parent
- cir-weight number
- weight number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- autonegotiate keyword
- collect-stats boolean
- crc-monitor
- signal-degrade
- multiplier number
- threshold number
- signal-failure
- multiplier number

```



configure port ethernet crc-monitor signal-failure threshold

```

    - threshold number
    - window-size number
  - dampening
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - half-life number
    - max-suppress-time number
    - reuse-threshold number
    - suppress-threshold number
  - discard-rx-pause-frames boolean
  - dot1q-etype string
  - dot1x
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - macsec
    - apply-groups reference
    - apply-groups-exclude reference
    - exclude-mac-policy reference
    - exclude-protocol
      - cdp boolean
      - eapol-start boolean
      - efm-oam boolean
      - eth-cfm boolean
      - lacp boolean
      - lldp boolean
      - ptp boolean
      - ubfd boolean
    - rx-must-be-encrypted boolean
  - sub-port number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ca-name reference
    - eapol-destination-address string
    - encap-match
      - all-match boolean
      - double-tag string
      - single-tag string
      - untagged boolean
    - max-peers number
  - max-authentication-requests number
  - per-host-authentication
    - admin-state keyword
    - allowed-source-macs
      - mac-address string
    - authenticator-init boolean
  - port-control keyword
  - quiet-period number
  - radius-policy reference
  - radius-server-policy reference
  - radius-server-policy-acct reference
  - radius-server-policy-auth reference
  - re-authentication
    - period number
  - server-timeout number
  - supplicant-timeout number
  - transmit-period number
  - tunnel-dot1q boolean
  - tunnel-qinq boolean
  - tunneling boolean
  - down-on-internal-error
    - tx-laser keyword

```

## configure port ethernet down-when-looped

- **down-when-looped**
  - **admin-state** *keyword*
  - **keep-alive** *number*
  - **retry-timeout** *number*
  - **use-broadcast-address** *boolean*
- **duplex** *keyword*
- **efm-oam**
  - **accept-remote-loopback** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **discovery**
    - **advertise-capabilities**
      - **link-monitoring** *boolean*
  - **dying-gasp-tx-on-reset** *boolean*
  - **grace-tx** *boolean*
  - **grace-vendor-oui** *string*
  - **hold-time** *number*
  - **ignore-efm-state** *boolean*
- **link-monitoring**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **errored-frame**
    - **admin-state** *keyword*
    - **event-notification** *boolean*
    - **sd-threshold** *number*
    - **sf-threshold** *number*
    - **window** *number*
  - **errored-frame-period**
    - **admin-state** *keyword*
    - **event-notification** *boolean*
    - **sd-threshold** *number*
    - **sf-threshold** *number*
    - **window** *number*
  - **errored-frame-seconds**
    - **admin-state** *keyword*
    - **event-notification** *boolean*
    - **sd-threshold** *number*
    - **sf-threshold** *number*
    - **window** *number*
  - **errored-symbols**
    - **admin-state** *keyword*
    - **event-notification** *boolean*
    - **sd-threshold** *number*
    - **sf-threshold** *number*
    - **window** *number*
  - **local-sf-action**
    - **event-notification-burst** *number*
    - **info-notification**
      - **critical-event** *boolean*
      - **dying-gasp** *boolean*
      - **local-port-action** *keyword*
- **mode** *keyword*
- **multiplier** *number*
- **peer-rdi-rx**
  - **critical-event** *keyword*
  - **dying-gasp** *keyword*
  - **event-notification** *keyword*
  - **link-fault** *keyword*
- **transmit-interval** *number*
- **trigger-fault** *keyword*
- **tunneling** *boolean*
- **egress**

## configure port ethernet egress apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **eth-bn-rate-changes** *boolean*
- **hs-port-pool-policy** *reference*
- **hs-scheduler-policy**
  - **overrides**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **group** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rate** (*number* | *keyword*)
    - **max-rate** (*number* | *keyword*)
    - **scheduling-class** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rate** (*number* | *keyword*)
      - **weight** *number*
  - **policy-name** *reference*
- **hs-secondary-shaper** *string*
  - **aggregate**
    - **low-burst-max-class** *number*
    - **rate** (*number* | *keyword*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **class** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **rate** (*number* | *keyword*)
  - **description** *string*
- **hw-agg-shaper-scheduler**
  - **monitor** *boolean*
  - **policy-name** *reference*
- **monitor-port-scheduler** *boolean*
- **port-scheduler-policy**
  - **overrides**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **level** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **percent-rate**
      - **cir** *decimal-number*
      - **pir** *decimal-number*
    - **rate**
      - **cir** (*number* | *keyword*)
      - **pir** (*number* | *keyword*)
    - **max-rate**
      - **percent-rate** *decimal-number*
      - **rate** (*number* | *keyword*)
  - **policy-name** *reference*
  - **rate** *number*
- **elmi**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mode** *keyword*
  - **n393** *number*
  - **t391** *number*
  - **t392** *number*
- **encap-type** *keyword*
- **eth-cfm**
  - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
    - **admin-state** *keyword*
    - **ais**

configure port ethernet eth-cfm mep ais client-meg-level

```

- client-meg-level number
- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- ccm-tlv-ignore keyword
- collect-lmm-stats boolean
- csf
- multiplier decimal-number
- description string
- eth-bn
- receive boolean
- rx-update-pacing number
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- facility-fault boolean
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- vlan (number | keyword)
- hold-time
- down number
- units keyword
- up number
- ingress
- rate number
- lacp-tunnel boolean
- lldp
- apply-groups reference
- apply-groups-exclude reference
- dest-mac keyword
- apply-groups reference
- apply-groups-exclude reference
- notification boolean
- port-id-subtype keyword
- receive boolean
- transmit boolean
- tunnel-nearest-bridge boolean
- tx-mgmt-address keyword
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- tx-tlvs
- port-desc boolean

```

configure port ethernet lldp dest-mac tx-tlvs sys-cap

```

    - sys-cap boolean
    - sys-desc boolean
    - sys-name boolean
- load-balancing-algorithm keyword
- mac-address string
- min-frame-length number
- mode keyword
- mtu number
- network
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - egress
    - port-queues
      - overrides
        - queue number
          - apply-groups reference
          - apply-groups-exclude reference
          - monitor-queue-depth
            - fast-polling boolean
            - violation-threshold decimal-number
        - queue-group reference instance-id number
          - accounting-policy reference
          - aggregate-rate
            - limit-unused-bandwidth boolean
            - queue-frame-based-accounting boolean
            - rate (number | keyword)
          - apply-groups reference
          - apply-groups-exclude reference
          - collect-stats boolean
          - description string
          - hs-turbo boolean
          - policer-control-policy reference
          - queue-overrides
            - queue reference
              - adaptation-rule
                - cir keyword
                - pir keyword
              - apply-groups reference
              - apply-groups-exclude reference
              - cbs (number | keyword)
              - drop-tail
                - low
                  - percent-reduction-from-mbs (number | keyword)
              - mbs (number | keyword)
              - monitor-queue-depth
                - fast-polling boolean
                - violation-threshold decimal-number
              - percent-rate
                - cir decimal-number
                - pir decimal-number
              - rate
                - cir (number | keyword)
                - pir (number | keyword)
            - scheduler-policy
              - policy-name reference
          - queue-policy reference
      - pbbs-etype string
      - ptp-asymmetry number
      - qinq-etype string
      - report-alarm
        - alignment-marker-not-locked boolean
        - block-not-locked boolean

```

configure port ethernet report-alarm duplicate-lane

- **duplicate-lane** *boolean*
- **frame-not-locked** *boolean*
- **high-ber** *boolean*
- **local** *boolean*
- **remote** *boolean*
- **signal-fail** *boolean*
- **rs-fec-mode** *keyword*
- **single-fiber** *boolean*
- **speed** *number*
- **ssm**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **code-type** *keyword*
  - **esmc-tunnel** *boolean*
  - **tx-dus** *boolean*
- **symbol-monitor**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **signal-degrade**
    - **multiplier** *number*
    - **threshold** *number*
  - **signal-failure**
    - **multiplier** *number*
    - **threshold** *number*
  - **window-size** *number*
- **util-stats-interval** *number*
- **xgig** *keyword*
- **gnss**
  - **antenna-cable-delay** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **constellation**
    - **galileo** *boolean*
    - **glonass** *boolean*
    - **gps** *boolean*
  - **elevation-mask-angle** *number*
- **hybrid-buffer-allocation**
  - **egress-weight**
    - **access** *number*
    - **network** *number*
  - **ingress-weight**
    - **access** *number*
    - **network** *number*
- **modify-buffer-allocation**
  - **percentage-of-rate**
    - **egress** *number*
    - **ingress** *number*
- **monitor-agg-egress-queue-stats** *boolean*
- **monitor-oper-group** *reference*
- **network**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress**
    - **pool** *string*
      - **amber-alarm-threshold** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **red-alarm-threshold** *number*
      - **resv-cbs**
        - **amber-alarm-action**
          - **max** *number*
          - **step** *number*

configure port network egress pool resv-cbs cbs

```

    - cbs (number | keyword)
    - slope-policy reference
- oper-group reference
- otu
  - apply-groups reference
  - apply-groups-exclude reference
  - async-mapping boolean
  - fec keyword
  - fine-granularity-ber
    - signal-degrade
      - clear
        - multiplier number
        - threshold number
      - raise
        - multiplier number
        - threshold number
    - signal-failure
      - clear
        - multiplier number
        - threshold number
      - raise
        - multiplier number
        - threshold number
  - otu2-lan-data-rate keyword
  - path-monitoring
    - trail-trace-identifier
      - expected
        - auto-generated
        - bytes string
        - string string
      - mismatch-reaction keyword
      - transmit
        - auto-generated
        - bytes string
        - string string
    - payload-structure-identifier
      - payload
        - expected keyword
        - mismatch-reaction keyword
        - transmit keyword
  - report-alarm
    - fec-fail boolean
    - fec-sd boolean
    - fec-sf boolean
    - fec-uncorr boolean
    - loc boolean
    - lof boolean
    - lom boolean
    - los boolean
    - odu-ais boolean
    - odu-bdi boolean
    - odu-lck boolean
    - odu-oci boolean
    - odu-tim boolean
    - opu-plm boolean
    - otu-ais boolean
    - otu-bdi boolean
    - otu-ber-sd boolean
    - otu-ber-sf boolean
    - otu-biae boolean
    - otu-iae boolean
    - otu-tim boolean
  - sd-threshold number
  - section-monitoring

```

configure port otu section-monitoring trail-trace-identifier

- **trail-trace-identifier**
  - **expected**
    - **auto-generated**
    - **bytes** *string*
    - **string** *string*
  - **mismatch-reaction** *keyword*
  - **transmit**
    - **auto-generated**
    - **bytes** *string*
    - **string** *string*
- **sf-sd-method** *keyword*
- **sf-threshold** *number*
- **sonet-sdh**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **clock-source** *keyword*
  - **framing** *keyword*
  - **group** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **payload** *keyword*
  - **hold-time**
    - **down** *number*
    - **up** *number*
  - **loopback** *keyword*
  - **path** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **crc** *number*
    - **description** *string*
    - **egress**
      - **port-scheduler-policy**
        - **overrides**
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **level** *number*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
          - **percent-rate**
            - **cir** *decimal-number*
            - **pir** *decimal-number*
          - **rate**
            - **cir** (*number* | *keyword*)
            - **pir** (*number* | *keyword*)
        - **max-rate**
          - **percent-rate** *decimal-number*
          - **rate** (*number* | *keyword*)
      - **policy-name** *reference*
    - **load-balancing-algorithm** *keyword*
    - **mac-address** *string*
    - **mode** *keyword*
    - **mtu** *number*
    - **network**
      - **accounting-policy** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **collect-stats** *boolean*
      - **queue-policy** *reference*
    - **payload** *keyword*
    - **report-alarm**
      - **pais** *boolean*
      - **plcd** *boolean*
      - **plop** *boolean*



configure port sonet-sdh path report-alarm pplm

```

    - pplm boolean
    - prdi boolean
    - prei boolean
    - puneq boolean
  - scramble boolean
  - signal-label string
  - trace-string (keyword | string)
- report-alarm
  - lais boolean
  - lb2er-sd boolean
  - lb2er-sf boolean
  - loc boolean
  - lrdi boolean
  - lrei boolean
  - slof boolean
  - slos boolean
  - ss1f boolean
- sd-threshold number
- section-trace
  - byte string
  - increment-z0
  - string string
- sf-threshold number
- single-fiber boolean
- speed keyword
- suppress-low-order-alarms boolean
- tx-dus boolean
- tdm
  - apply-groups reference
  - apply-groups-exclude reference
  - buildout keyword
  - dsl string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ber-threshold
      - signal-degrade number
      - signal-failure number
  - channel-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress
      - port-scheduler-policy
        - overrides
          - apply-groups reference
          - apply-groups-exclude reference
          - level number
            - apply-groups reference
            - apply-groups-exclude reference
          - percent-rate
            - cir decimal-number
            - pir decimal-number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
          - max-rate
            - percent-rate decimal-number
            - rate (number | keyword)
        - policy-name reference
      - encap-type keyword
      - idle-payload-fill
        - all-ones

```

configure port tdm ds1 channel-group idle-payload-fill pattern

```

- pattern number
- idle-signal-fill
- all-ones
- pattern number
- load-balancing-algorithm keyword
- mac-address string
- mode keyword
- mtu number
- network
- accounting-policy reference
- apply-groups reference
- apply-groups-exclude reference
- collect-stats boolean
- queue-policy reference
- speed number
- timeslot number
- clock-source keyword
- framing keyword
- loopback keyword
- remote-loop-respond boolean
- report-alarm
- ais boolean
- ber-sd boolean
- ber-sf boolean
- looped boolean
- los boolean
- oof boolean
- rai boolean
- signal-mode keyword
- ds3 string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- channelized keyword
- clock-source keyword
- crc number
- description string
- egress
- port-scheduler-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- level number
- apply-groups reference
- apply-groups-exclude reference
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- max-rate
- percent-rate decimal-number
- rate (number | keyword)
- policy-name reference
- encap-type keyword
- feac-loop-respond boolean
- framing keyword
- idle-cycle-flag keyword
- load-balancing-algorithm keyword
- loopback keyword
- mac-address string
- maintenance-data-link
- equipment-id-code string

```

## configure port tdm ds3 maintenance-data-link facility-id-code

```

- facility-id-code string
- frame-id-code string
- generator-string string
- location-id-code string
- port-string string
- transmit-message-type
  - idle-signal boolean
  - path boolean
  - test-signal boolean
- unit-id-code string
- mode keyword
- mtu number
- network
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - queue-policy reference
- report-alarm
  - ais boolean
  - looped boolean
  - los boolean
  - oof boolean
  - rai boolean
- scramble boolean
- subrate
  - csu-mode keyword
  - rate-step number
- e1 string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ber-threshold
    - signal-degrade number
    - signal-failure number
  - channel-group number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress
      - port-scheduler-policy
        - overrides
          - apply-groups reference
          - apply-groups-exclude reference
          - level number
            - apply-groups reference
            - apply-groups-exclude reference
          - percent-rate
            - cir decimal-number
            - pir decimal-number
          - rate
            - cir (number | keyword)
            - pir (number | keyword)
          - max-rate
            - percent-rate decimal-number
            - rate (number | keyword)
        - policy-name reference
      - encap-type keyword
    - idle-payload-fill
      - all-ones
      - pattern number
    - idle-signal-fill
      - all-ones

```

configure port tdm e1 channel-group idle-signal-fill pattern

```

- pattern number
- load-balancing-algorithm keyword
- mac-address string
- mode keyword
- mtu number
- network
  - accounting-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - queue-policy reference
- speed number
- timeslot number
- clock-source keyword
- framing keyword
- loopback keyword
- national-bits
  - sa4 boolean
  - sa5 boolean
  - sa6 boolean
  - sa7 boolean
  - sa8 boolean
- report-alarm
  - ais boolean
  - ber-sd boolean
  - ber-sf boolean
  - looped boolean
  - los boolean
  - oof boolean
  - rai boolean
- signal-mode keyword
- e3 string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- clock-source keyword
- crc number
- description string
- egress
  - port-scheduler-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - max-rate
      - percent-rate decimal-number
      - rate (number | keyword)
    - policy-name reference
- encap-type keyword
- framing keyword
- idle-cycle-flag keyword
- load-balancing-algorithm keyword
- loopback keyword
- mac-address string
- mode keyword
- mtu number

```

---

configure port tdm e3 network

- **network**
  - **accounting-policy** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
  - **queue-policy** *reference*
- **report-alarm**
  - **ais** *boolean*
  - **looped** *boolean*
  - **los** *boolean*
  - **oof** *boolean*
  - **rai** *boolean*
  - **scramble** *boolean*
- **hold-time**
  - **down** *number*
  - **up** *number*
- **transceiver**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **digital-coherent-optics** *boolean*
  - **optical-line-system**
    - **egress-amplifier-gain** *decimal-number*

### 3.32.1 port command descriptions

#### **port** [[port-id](#)] *string*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure port</b> <i>string</i>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

#### **[port-id]** *string*

Synopsis	Port ID
Context	<b>configure port</b> <i>string</i>
Tree	<a href="#">port</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure port</b> <i>string</i> <a href="#">access</a>
Tree	<a href="#">access</a>
Description	Commands in this context configure egress and ingress pool policy commands.
Introduced	16.0.R1
Platforms	All

#### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure port</b> <i>string</i> <a href="#">access</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>

Description	Commands in this context specify the configuration of access egress buffer pools to determine how a CBS-reserved space is handled and the strategy for utilizing the shared buffer space.
Introduced	16.0.R1
Platforms	All

### **pool** [*name*] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <i>port string access egress pool string</i>
Tree	<i>pool</i>
Description	Commands in this context configure pool policies for the pool instance.
Introduced	16.0.R1
Platforms	All

### **[name]** *string*

Synopsis	Pool name for the access port
Context	<b>configure</b> <i>port string access egress pool string</i>
Tree	<i>pool</i>
String Length	1 to 32
MD-CLI Default	default
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **amber-alarm-threshold** *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	<b>configure</b> <i>port string access egress pool string amber-alarm-threshold number</i>
Tree	<i>amber-alarm-threshold</i>
Range	1 to 1000
Units	percent
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **red-alarm-threshold** *number*

Synopsis Threshold for the red alarm on oversubscription

Context **configure** *port string access egress pool string red-alarm-threshold number*

Tree [red-alarm-threshold](#)

Range 1 to 1000

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **resv-cbs**

Synopsis Enter the **resv-cbs** context

Context **configure** *port string access egress pool string resv-cbs*

Tree [resv-cbs](#)

Introduced 16.0.R1

Platforms All

### **amber-alarm-action**

Synopsis Enter the **amber-alarm-action** context

Context **configure** *port string access egress pool string resv-cbs amber-alarm-action*

Tree [amber-alarm-action](#)

Introduced 16.0.R1

Platforms All

### **max** *number*

Synopsis Maximum percentage for reserved CBS of the pool

Context **configure** *port string access egress pool string resv-cbs amber-alarm-action max number*

Tree [max](#)

Description This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.



To enable adaptive CBS sizing the **max**, **step**, and **cbs** commands must be configured. The **cbs** command must also be configured to a percentage other than the default value.

When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **step** *number*

Synopsis	Step-size percentage for reserved CBS of the pool
Context	<b>configure</b> <i>port string access egress pool string resv-cbs amber-alarm-action step number</i>
Tree	<i>step</i>
Description	This command specifies the step-size percentage for the reserved CBS of the pool. To enable adaptive CBS sizing the <b>max</b> , <b>step</b> , and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value. When unconfigured, CBS adaptive sizing is not enabled.

Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	<b>configure</b> <i>port string access egress pool string resv-cbs cbs (number   keyword)</i>
Tree	<i>cbs</i>
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**slope-policy** *reference*

Synopsis	Policy for the RED slope and TAF values
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">egress</a> <a href="#">pool</a> <i>string</i> <b>slope-policy</b> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <b>ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

**pool** [[name](#)] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Pool name for the access port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
MD-CLI Default	default
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **amber-alarm-threshold** *number*

Synopsis Threshold for the amber alarm on oversubscription

Context **configure** *port string access ingress pool string amber-alarm-threshold number*

Tree [amber-alarm-threshold](#)

Range 1 to 1000

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **red-alarm-threshold** *number*

Synopsis Threshold for the red alarm on oversubscription

Context **configure** *port string access ingress pool string red-alarm-threshold number*

Tree [red-alarm-threshold](#)

Range 1 to 1000

Units percent

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **resv-cbs**

Synopsis Enter the **resv-cbs** context

Context **configure** *port string access ingress pool string resv-cbs*

Tree [resv-cbs](#)

Introduced 16.0.R1

Platforms All

### **amber-alarm-action**

Synopsis Enter the **amber-alarm-action** context

Context **configure** *port string access ingress pool string resv-cbs amber-alarm-action*

Tree [amber-alarm-action](#)

Introduced	16.0.R1
Platforms	All

**max number**

Synopsis	Maximum percentage for reserved CBS of the pool
Context	<b>configure</b> port string access ingress pool string resv-cbs amber-alarm-action max number
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the <b>max</b>, <b>step</b>, and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**step number**

Synopsis	Step-size percentage for reserved CBS of the pool
Context	<b>configure</b> port string access ingress pool string resv-cbs amber-alarm-action step number
Tree	step
Description	<p>This command specifies the step-size percentage for the reserved CBS of the pool.</p> <p>To enable adaptive CBS sizing the <b>max</b>, <b>step</b>, and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**cbs** (*number* | *keyword*)

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i> <a href="#">resv-cbs</a> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**slope-policy** *reference*

Synopsis	Policy for the RED slope and TAF values
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">access</a> <a href="#">ingress</a> <a href="#">pool</a> <i>string</i> <a href="#">slope-policy</a> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**connector**

Synopsis	Enter the <b>connector</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">connector</a>
Tree	<a href="#">connector</a>
Description	Commands in this context configure connector ports and modes.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **breakout** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port breakout of the transceiver used in the connector
Context	<b>configure</b> <b>port</b> <i>string</i> <b>connector</b> <b>breakout</b> <i>keyword</i>
Tree	<b>breakout</b>
Description	<p>This command defines the port breakout of the transceiver used in the connector. Specifying the type triggers the creation of the ports that will be accessible under the connector.</p> <p>When a QSFP28 connector uses an SFP+ optical module with the QSFP28-to-SFP+/SFP28 adapter, set this command to c1-10g. This value indicates the presence of the adapter.</p> <p>For some connectors (for example, QSFPDD), there can be overlap in the breakout for different host interfaces. The same port breakout can be supported on an optical modules that uses a host interface of CAUI-4 as another optical module that uses 100GAUI-2. To distinguish from the CAUI-4 host interface, the '-aui2' suffix is used on some breakout options. This is only necessary where there is overlap. In other situations, the SR OS will set the host interface correctly without requiring the distinction in the breakout option.</p>
Options	c1-40g, c4-10g, c1-100g, c4-25g, c10-10g, c1-400g, c2-100g, c4-100g, c1-10g, c1-25g, c1-50g, c8-50g, c1-800g, c3-100g, c8-100g, c2-400g, c1-1g, c2-1g, c1-100g-aui2, c2-100g-aui2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rs-fec-mode** *keyword*

Synopsis	RS-FEC mode for the Ethernet connector
Context	<b>configure</b> <b>port</b> <i>string</i> <b>connector</b> <b>rs-fec-mode</b> <i>keyword</i>
Tree	<b>rs-fec-mode</b>
Description	<p>This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet connector.</p> <p>See "Forward Error Correction" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide</i> for more information about FEC settings.</p>

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Options	cl91-514-528, cl91-514-544
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ddm-events** *boolean*

Synopsis	Enable Digital Diagnostic Monitoring (DDM) events
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <b>ddm-events</b> <i>boolean</i>
Tree	<a href="#">ddm-events</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

### **dist-cpu-protection**

Synopsis	Enter the <b>dist-cpu-protection</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <b>dist-cpu-protection</b>
Tree	<a href="#">dist-cpu-protection</a>
Introduced	21.5.R1
Platforms	All

### **policy** *reference*

Synopsis	Distributed CPU protection policy name
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <b>dist-cpu-protection</b> <i>policy reference</i>
Tree	<a href="#">policy</a>

Reference	<b>configure system security dist-cpu-protection policy</b> <i>string</i>
Introduced	21.5.R1
Platforms	All

## dwdm

Synopsis	Enter the <b>dwdm</b> context
Context	<b>configure port</b> <i>string dwdm</i>
Tree	<a href="#">dwdm</a>
Description	Commands in this context configure the Dense Wavelength Division Multiplexing (DWDM) parameters for the port.
Introduced	16.0.R1
Platforms	All

## coherent

Synopsis	Enter the <b>coherent</b> context
Context	<b>configure port</b> <i>string dwdm coherent</i>
Tree	<a href="#">coherent</a>
Description	Commands in this context configure the coherent optical module.
Introduced	16.0.R1
Platforms	All

## compatibility *keyword*

Synopsis	Optical mode and rate of operation
Context	<b>configure port</b> <i>string dwdm coherent compatibility keyword</i>
Tree	<a href="#">compatibility</a>
Options	long-haul, metro, access, interop, interop2, interop3, long-haul-non-differential, oif-400g-zr, open-zrp-ofec1, open-zrp-ofec2
Default	long-haul
Introduced	16.0.R1
Platforms	All



**cpr-window-size** *number*

Synopsis	Window size for the carrier phase recovery
Context	<b>configure</b> port <i>string</i> <i>dwdm coherent cpr-window-size number</i>
Tree	<a href="#">cpr-window-size</a>
Description	This command configures the window size for the carrier phase recovery. When this command is changed, the link bounces because the receiver needs to be reconfigured.
Range	2   4   8   16   32   64
Units	symbols
Default	32
Introduced	16.0.R1
Platforms	All

**dispersion** *number*

Synopsis	Residual chromatic dispersion compensation
Context	<b>configure</b> port <i>string</i> <i>dwdm coherent dispersion number</i>
Tree	<a href="#">dispersion</a>
Description	This command specifies the residual chromatic dispersion compensation when the coherent receiver is operating in manual dispersion control mode.
Range	-50000 to 50000
Units	picoseconds per nanometer
Introduced	16.0.R1
Platforms	All

**mode** *keyword*

Synopsis	Mode used to compensate for chromatic dispersion
Context	<b>configure</b> port <i>string</i> <i>dwdm coherent mode keyword</i>
Tree	<a href="#">mode</a>
Options	automatic, manual
Default	automatic
Introduced	16.0.R1
Platforms	All

## report-alarm

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dwdm coherent</a> <b>report-alarm</b>
Tree	<a href="#">report-alarm</a>
Description	Commands in this context configure the alarms reported for the coherent module.
Introduced	16.0.R1
Platforms	All

## hosttx *boolean*

Synopsis	Report the host (electrical side) transmit alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dwdm coherent</a> <b>report-alarm</b> <b>hosttx</b> <i>boolean</i>
Tree	<a href="#">hosttx</a>
Default	true
Introduced	16.0.R1
Platforms	All

## mod *boolean*

Synopsis	Report the module alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dwdm coherent</a> <b>report-alarm</b> <b>mod</b> <i>boolean</i>
Tree	<a href="#">mod</a>
Default	true
Introduced	16.0.R1
Platforms	All

## modflt *boolean*

Synopsis	Report the module fault alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dwdm coherent</a> <b>report-alarm</b> <b>modflt</b> <i>boolean</i>
Tree	<a href="#">modflt</a>
Default	true
Introduced	16.0.R1
Platforms	All

**netrx boolean**

Synopsis	Report the network (optical side) receive alarm
Context	<b>configure</b> port string <i>dwdm coherent report-alarm netrx boolean</i>
Tree	<a href="#">netrx</a>
Default	true
Introduced	16.0.R1
Platforms	All

**nettx boolean**

Synopsis	Report the network (optical side) transmit alarm
Context	<b>configure</b> port string <i>dwdm coherent report-alarm nettx boolean</i>
Tree	<a href="#">nettx</a>
Default	true
Introduced	16.0.R1
Platforms	All

**rx-los-reaction keyword**

Synopsis	Reaction to an RX LOS
Context	<b>configure</b> port string <i>dwdm coherent rx-los-reaction keyword</i>
Tree	<a href="#">rx-los-reaction</a>
Description	This command configures the reaction to an RX LOS.  <b>Note:</b> If this command is disabled for some coherent DWDM transceivers, the transceiver only reports local fault alarms when an RX LOS condition occurs; however, the port returns to service faster after the LOS condition is cleared. For these transceivers, if this command is enabled, there is better visibility of individual alarms (for example, signal-fail, local fault, no-am-lock), but the port takes longer to service after the LOS condition is cleared.
Options	none, squelch
Default	squelch
Introduced	16.0.R1
Platforms	All

**rx-los-thresh** *decimal-number*

Synopsis	Average input power LOS threshold
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dwdm coherent</a> <b>rx-los-thresh</b> <i>decimal-number</i>
Tree	<a href="#">rx-los-thresh</a>
Range	-30 to -13
Units	decibel-milliwatts
Default	-23
Introduced	16.0.R1
Platforms	All

**sweep**

Synopsis	Enter the <b>sweep</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dwdm coherent</a> <b>sweep</b>
Tree	<a href="#">sweep</a>
Description	Commands in this context allow users to configure the dispersion sweep <b>start</b> and <b>end</b> values for the automatic mode of coherent control. If the user knows the approximate or theoretical residual dispersion of the link, these commands can be used to limit the range of sweeping for the automatic control mode and therefore achieve a faster link up.
Introduced	16.0.R1
Platforms	All

**end** *number*

Synopsis	Upper bound of the dispersion compensation range
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">dwdm coherent sweep</a> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	-50000 to 50000
Units	picoseconds per nanometer
Default	2000
Introduced	16.0.R1
Platforms	All

**start** *number*

Synopsis	Lower bound of the dispersion compensation range
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Context	<b>configure</b> <i>port string</i> <b>dwdm coherent sweep start</b> <i>number</i>
Tree	<b>start</b>
Range	-50000 to 50000
Units	picoseconds per nanometer
Default	-25500
Introduced	16.0.R1
Platforms	All

### **target-power** *decimal-number*

Synopsis	Average output power target for the port
Context	<b>configure</b> <i>port string</i> <b>dwdm coherent target-power</b> <i>decimal-number</i>
Tree	<b>target-power</b>
Range	-20 to 3
Units	decibel-milliwatts
Default	1
Introduced	16.0.R1
Platforms	All

### **frequency** *number*

Synopsis	Center frequency for tunable DWDM optical interface
Context	<b>configure</b> <i>port string</i> <b>dwdm frequency</b> <i>number</i>
Tree	<b>frequency</b>
Description	<p>This command configures the center frequency to use for a tunable DWDM optical interface. This command can be used to specify any frequency in the C band.</p> <p>To set the DWDM frequency, the port must be a physical port and the provisioned MDA type must have DWDM tunable optics (for example, p1-100g-tun-b), or the MDA must support the option of tunable DWDM optic modules.</p> <p>This command replaces the <b>configure port dwdm channel</b> command.</p>
Range	191100000 to 196150000
Units	megahertz
Introduced	21.10.R3
Platforms	All

**ethernet**

Synopsis	Enter the <b>ethernet</b> context
Context	<b>configure port string ethernet</b>
Tree	<a href="#">ethernet</a>
Description	Commands in this context configure Ethernet port attributes. This context can only be used when configuring Fast Ethernet, Gigabit, or 10-Gb Ethernet LAN ports on an appropriate MDA.
Introduced	16.0.R1
Platforms	All

**access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure port string ethernet access</b>
Tree	<a href="#">access</a>
Description	Commands in this context configure Ethernet access port commands.
Introduced	16.0.R1
Platforms	All

**bandwidth *number***

Synopsis	Administrative bandwidth assigned to Ethernet ports
Context	<b>configure port string ethernet access bandwidth <i>number</i></b>
Tree	<a href="#">bandwidth</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

**booking-factor *number***

Synopsis	Booking factor applied to the Ethernet port
Context	<b>configure port string ethernet access booking-factor <i>number</i></b>
Tree	<a href="#">booking-factor</a>
Range	1 to 1000

Default	100
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port string ethernet access egress</a>
Tree	<a href="#">egress</a>
Description	Commands in this context configure Ethernet access egress port commands.
Introduced	16.0.R1
Platforms	All

## queue-group [[queue-group-name](#)] *reference instance-id number*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure</b> <a href="#">port string ethernet access egress queue-group reference instance-id number</a>
Tree	<a href="#">queue-group</a>
Introduced	16.0.R1
Platforms	All

## [\[queue-group-name\]](#) *reference*

Synopsis	Queue group name
Context	<b>configure</b> <a href="#">port string ethernet access egress queue-group reference instance-id number</a>
Tree	<a href="#">queue-group</a>
Reference	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## instance-id *number*

Synopsis	Instance ID for the egress queue group
Context	<b>configure</b> <a href="#">port string ethernet access egress queue-group reference instance-id number</a>

Tree	<a href="#">queue-group</a>
Range	1 to 65535
MD-CLI	1
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **accounting-policy** *reference*

Synopsis	Accounting policy for the Ethernet port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

### **aggregate-rate**

Synopsis	Enter the <b>aggregate-rate</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">aggregate-rate</a>
Tree	<a href="#">aggregate-rate</a>
Introduced	16.0.R1
Platforms	All

### **limit-unused-bandwidth** *boolean*

Synopsis	Control unused bandwidth
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">aggregate-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	All



**queue-frame-based-accounting** *boolean*

Synopsis	Enable frame-based accounting on policers and queues
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">aggregate-rate</a> <a href="#">queue-frame-based-accounting</a> <i>boolean</i>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

**rate** (*number* | *keyword*)

Synopsis	Aggregate rate for all queues
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">aggregate-rate</a> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
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Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## host-match

Synopsis	Enter the <b>host-match</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> host-match
Tree	host-match
Introduced	16.0.R1
Platforms	All

## int-dest-id [*destination-string*] *string*

Synopsis	Add a list entry for <b>int-dest-id</b>
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> host-match int-dest-id <i>string</i>
Tree	int-dest-id
Introduced	16.0.R1
Platforms	All

## [*destination-string*] *string*

Synopsis	Host match destination ID
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> host-match int-dest-id <i>string</i>
Tree	int-dest-id
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**hs-turbo** *boolean*

Synopsis	Enable HS turbo queues for higher throughput
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> hs-turbo <i>boolean</i>
Tree	hs-turbo
Description	When configured to <b>true</b> , this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput.  This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port.  When configured to <b>false</b> , HS turbo queues are disabled.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**queue-overrides**

Synopsis	Enter the <b>queue-overrides</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides
Tree	queue-overrides
Introduced	16.0.R1
Platforms	All

**queue** [*queue-id*] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Introduced	16.0.R1
Platforms	All

**[queue-id]** *reference*

Synopsis	Queue ID
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>

Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

## cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

## pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**burst-limit** (*number* | *keyword*)

Synopsis	Override for the shaping burst size for the queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> burst-limit ( <i>number</i>   <i>keyword</i> )
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

**cbs** (*number* | *keyword*)

Synopsis	CBS for the template queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> cbs ( <i>number</i>   <i>keyword</i> )
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail
Tree	drop-tail
Description	Commands in this context configure queue drop tail commands.
Introduced	16.0.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
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Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail low
Tree	low
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

### percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> drop-tail low percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

### mbs (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> mbs ( <i>number</i>   <i>keyword</i> )
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

## monitor-queue-depth

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth
Tree	monitor-queue-depth
Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	All

## fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth fast-polling <i>boolean</i>
Tree	fast-polling
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to <b>false</b> , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

## violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> monitor-queue-depth violation-threshold <i>decimal-number</i>
Tree	violation-threshold
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> parent
Tree	parent
Description	<p>Commands in this context define the weight of the queue treatment by the parent scheduler that further governs the available bandwidth given to the queue, aside from the queue PIR setting.</p> <p>When multiple schedulers or queues share a child status with the parent scheduler, the weight or level commands define how the queue contends with the other children for the parent bandwidth.</p>
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	CIR that overrides the parent for the queue group
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## weight *number*

Synopsis	PIR that overrides the parent for the queue group
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> parent weight <i>number</i>
Tree	weight
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
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Context	<b>configure</b> <i>port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference percent-rate</i>
Tree	<a href="#">percent-rate</a>
Description	Commands in this context specify percent rates.  These commands are ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the <b>hs-wrr-group</b> command within the egress queue group template.
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	CIR for the queue
Context	<b>configure</b> <i>port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference percent-rate cir decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	PIR for the queue
Context	<b>configure</b> <i>port string ethernet access egress queue-group reference instance-id number queue-overrides queue reference percent-rate pir decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
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Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** (*number* | *keyword*)

Synopsis	CIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Description	<p>This command specifies the administrative CIR used by the queue. When the <b>rate</b> command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent <b>cir-level</b> and <b>cir-weight</b> commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	PIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is</p>

dependent on the queue's **adaptation-rule** commands and the actual hardware where the queue is provisioned.

The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

## scheduler-policy

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy
Tree	scheduler-policy
Description	Commands in this context configure a scheduler policy for the egress queue group.
Introduced	16.0.R1
Platforms	All

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides
Tree	overrides
Introduced	16.0.R1
Platforms	All

## scheduler [*scheduler-name*] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy overrides scheduler <i>string</i>
Tree	scheduler

**Description** Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.

A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.

**Introduced** 16.0.R1

**Platforms** All

### [scheduler-name] *string*

**Synopsis** Scheduler name

**Context** **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string*

**Tree** scheduler

**Description** This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.

**String Length** 1 to 32

**Notes** This element is part of a list key.

**Introduced** 16.0.R1

**Platforms** All

### parent

**Synopsis** Enter the **parent** context

**Context** **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* parent

**Tree** parent

**Description** Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.

The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.

Introduced 16.0.R1  
 Platforms All

### **cir-weight** *number*

Synopsis CIR that overrides the parent  
 Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* parent cir-weight *number*  
 Tree [cir-weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

### **weight** *number*

Synopsis PIR that overrides the parent  
 Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* parent weight *number*  
 Tree [weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

### **rate**

Synopsis Enter the **rate** context  
 Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* rate  
 Tree [rate](#)  
 Description Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.  
 Introduced 16.0.R1

Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR for the scheduler

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* rate cir (*number* | *keyword*)

Tree [cir](#)

Description This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the **rate** command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to **max**, the CIR rate is set to infinity.

The **sum** keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.

Range 0 to 6400000000

Units kilobps

Options sum, max

Introduced 16.0.R1

Platforms All

### **pir** (*number* | *keyword*)

Synopsis PIR for the scheduler

Context **configure** port *string* ethernet access egress queue-group *reference* instance-id *number* scheduler-policy overrides scheduler *string* rate pir (*number* | *keyword*)

Tree [pir](#)

Description This command specifies the PIR. When the **rate** command is executed, a valid PIR setting must be explicitly defined. Any other value results in an error without modifying the current PIR rate.

Range 1 to 6400000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> port <i>string</i> ethernet access egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

**virtual-port** [*vport-name*] *string*

Synopsis	Enter the <b>virtual-port</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i>
Tree	virtual-port
Introduced	16.0.R4
Platforms	All

**[vport-name]** *string*

Synopsis	Vport scheduling node name
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i>
Tree	virtual-port
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**aggregate-rate**

Synopsis	Enter the <b>aggregate-rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> aggregate-rate
Tree	aggregate-rate
Introduced	16.0.R4
Platforms	All

**limit-unused-bandwidth** *boolean*

Synopsis	Control unused bandwidth
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">string</a> <a href="#">aggregate-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R4
Platforms	All

**rate** (*number* | *keyword*)

Synopsis	Enforced aggregate rate for the queue
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">string</a> <a href="#">aggregate-rate</a> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">string</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

**host-match**

Synopsis	Enter the <b>host-match</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">string</a> <a href="#">host-match</a>



Tree	<a href="#">host-match</a>
Introduced	16.0.R4
Platforms	All

### **int-dest-id** [[destination-string](#)] *string*

Synopsis	Add a list entry for <b>int-dest-id</b>
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i> <a href="#">host-match</a> <b>int-dest-id</b> <i>string</i>
Tree	<a href="#">int-dest-id</a>
Introduced	16.0.R4
Platforms	All

### **[destination-string]** *string*

Synopsis	Host match destination ID
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i> <a href="#">host-match</a> <b>int-dest-id</b> <i>string</i>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **hw-agg-shaper-scheduler-policy** *reference*

Synopsis	Hardware aggregate shaper scheduler policy to apply
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i> <b>hw-agg-shaper-scheduler-policy</b> <i>reference</i>
Tree	<a href="#">hw-agg-shaper-scheduler-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <b>hw-agg-shaper-scheduler-policy</b> <i>string</i>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## lag-per-link-hash

Synopsis	Enter the <b>lag-per-link-hash</b> context
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> lag-per-link-hash
Tree	lag-per-link-hash
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## class number

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> lag-per-link-hash class <i>number</i>
Tree	class
Range	1 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## weight number

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> lag-per-link-hash weight <i>number</i>
Tree	weight
Range	1 to 1024
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## monitor-hw-agg-shaper-scheduler *boolean*

Synopsis	Enable monitoring hardware aggregate shaper scheduler
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> monitor-hw-agg-shaper-scheduler <i>boolean</i>
Tree	monitor-hw-agg-shaper-scheduler

Description	When configured to <b>true</b> , enables congestion monitoring of the hardware aggregate shaper scheduler on the specified vport.
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **monitor-port-scheduler** *boolean*

Synopsis	Enable congestion monitoring on egress port scheduler
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> monitor-port-scheduler <i>boolean</i>
Tree	<a href="#">monitor-port-scheduler</a>
Description	The command enables congestion monitoring on an EPS that is applied to a Vport. Congestion monitoring must be further configured under the port-scheduler CLI hierarchy. Once the congestion monitoring is in effect, the offered rate (incoming traffic) is compared to the configured port-scheduler congestion threshold. The results of these measurements are stored as the number of samples representing the number of times the offered rates exceeded the configured congestion threshold since the last clearing of the stats. Therefore, the results represent the number of times that the port-scheduler that is applied to a Vport was congested since the last reset of the stats using a <b>clear</b> command.
Default	false
Introduced	16.0.R4
Platforms	All

### **multicast-hqos-adjustment** *boolean*

Synopsis	Apply HQoS Adjustment (egress rate modification)
Context	<b>configure</b> port <i>string</i> ethernet access egress virtual-port <i>string</i> multicast-hqos-adjustment <i>boolean</i>
Tree	<a href="#">multicast-hqos-adjustment</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **port-scheduler-policy** *reference*

Synopsis	Port scheduler policy name
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Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i> <a href="#">port-scheduler-policy</a> <i>reference</i>
Tree	<a href="#">port-scheduler-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">port-scheduler-policy</a> <i>string</i>
Introduced	16.0.R4
Platforms	All

## scheduler-policy

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i> <a href="#">scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Description	This command specifies a scheduler policy to associate with the Vport.  The <b>aggregate-rate</b> , <b>port-scheduler-policy</b> and <b>scheduler-policy</b> commands are mutually exclusive. Changing between the use of a scheduler policy and the use of an aggregate rate or port scheduler policy involves removing the existing command and applying the new command.
Introduced	16.0.R4
Platforms	All

## policy-name *reference*

Synopsis	Egress scheduler policy
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	22.2.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Description	Commands in this context configure Ethernet access ingress port commands.

Introduced	16.0.R1
Platforms	All

### **queue-group** [[queue-group-name](#)] *reference*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>reference</i>
Tree	<a href="#">queue-group</a>
Description	<p>Commands in this context create an ingress queue group on the Ethernet port. Queue groups created on access ports are used as an alternative queue destination for SAPs.</p> <p>Queue groups can be created on both access and network oriented ports. When the port is in access mode, the queue groups must be created within the port access node. Access ingress queue groups can only be used by ingress SAP forwarding classes and only a single ingress queue group per port is supported. When the queue group is created in an ingress port context, the queue group name must be an existing ingress queue group template. Two ingress queue groups with the same name cannot be created on the same port.</p> <p>When creating a queue group, the system will attempt to allocate queue resources based on the queues defined in the queue group template. If the appropriate queue resources do not currently exist, the queue group will not be created. Ingress port queue groups do not support shared-queuing or multipoint shared queuing behavior.</p> <p>A port queue group cannot be removed from the port when a forwarding class is currently redirected to the group. All forwarding class redirections must first be removed prior to removing the queue group.</p>
Introduced	16.0.R1
Platforms	All

### **[queue-group-name]** *reference*

Synopsis	Queue group name
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>reference</i>
Tree	<a href="#">queue-group</a>
Description	This command specifies the queue group name. The specified queue group name must exist as an ingress or egress queue group template depending on the ingress or egress context of the port queue group. Only a single queue group may be created on an ingress port.
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **accounting-policy** *reference*

Synopsis Accounting policy for the Ethernet port

Context **configure** port *string* ethernet access ingress queue-group *reference* accounting-policy *reference*

Tree [accounting-policy](#)

Reference **configure** log accounting-policy *number*

Introduced 16.0.R1

Platforms All

### **collect-stats** *boolean*

Synopsis Collect accounting and statistical data

Context **configure** port *string* ethernet access ingress queue-group *reference* collect-stats *boolean*

Tree [collect-stats](#)

Default false

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** port *string* ethernet access ingress queue-group *reference* description *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **queue-overrides**

Synopsis Enter the **queue-overrides** context

Context **configure** port *string* ethernet access ingress queue-group *reference* queue-overrides

Tree [queue-overrides](#)

Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

### **queue** [queue-id] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i>
Tree	queue
Description	Commands in this context associate a queue for use in a queue group template. The template queue is created on each queue group object that is created with the queue group template name. Each queue is identified within the template by a queue ID number. The template ensures that all queue groups created with the template's name have the same queue IDs, providing a uniform structure for the forwarding class redirection commands in the SAP egress QoS policies. The queue commands can be individually changed for each queue in each queue group using per queue overrides.
Introduced	16.0.R1
Platforms	All

### [queue-id] *reference*

Synopsis	Queue ID for the queue group template
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i>
Tree	queue
Reference	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule

Introduced 16.0.R1  
Platforms All

### **cir** keyword

Synopsis Constraint used when deriving the operational CIR value  
Context **configure** port string ethernet access ingress queue-group reference queue-overrides queue reference adaptation-rule cir keyword  
Tree cir  
Options max, min, closest  
Introduced 16.0.R1  
Platforms All

### **pir** keyword

Synopsis Constraint used when deriving the operational PIR value  
Context **configure** port string ethernet access ingress queue-group reference queue-overrides queue reference adaptation-rule pir keyword  
Tree pir  
Options max, min, closest  
Introduced 16.0.R1  
Platforms All

### **cbs** (number | keyword)

Synopsis CBS for the template queue  
Context **configure** port string ethernet access ingress queue-group reference queue-overrides queue reference cbs (number | keyword)  
Tree cbs  
Range 0 to 1048576  
Units kilobytes  
Options auto  
Introduced 16.0.R1  
Platforms All



## drop-tail

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b> <b>low</b>
Tree	<a href="#">low</a>
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which out-of-profile packets are accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b> <b>low</b> <b>percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

**mbs** (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

**monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b>
Tree	<a href="#">monitor-queue-depth</a>
Introduced	21.7.R1
Platforms	All

**fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Default	false
Introduced	21.7.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">ingress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>

Introduced	16.0.R1
Platforms	All

### **cir** (*number* | *keyword*)

Synopsis	CIR for the queue
Context	<b>configure</b> <a href="#">port string</a> <a href="#">ethernet access ingress queue-group</a> <a href="#">reference queue-overrides queue</a> <a href="#">reference rate cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Description	<p>This command specifies the administrative CIR used by the queue. When the <b>rate</b> command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent <b>cir-level</b> and <b>cir-weight</b> commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	PIR for the queue
Context	<b>configure</b> <a href="#">port string</a> <a href="#">ethernet access ingress queue-group</a> <a href="#">reference queue-overrides queue</a> <a href="#">reference rate pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Description	<p>This command specifies the administrative PIR used by the queue. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's <b>adaptation-rule</b> commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that</p>

the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.

Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

## **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy
Tree	<a href="#">scheduler-policy</a>
Description	Commands in this context configure a scheduler policy for the ingress queue group.
Introduced	16.0.R1
Platforms	All

## **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Description	Commands in this context specify the set of attributes specifying values specific to the given queue-group instance.
Introduced	16.0.R1
Platforms	All

## **scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy <a href="#">overrides</a> scheduler <i>string</i>
Tree	<a href="#">scheduler</a>
Description	Commands in this context are used to override specific attributes of the specified scheduler name. A scheduler defines bandwidth controls that limit each child (other schedulers and queues) associated with the scheduler. Scheduler objects are created

within the hierarchical tiers of the policy. It is assumed that each scheduler created has queues or other schedulers defined as child associations. The scheduler can be a child which takes bandwidth from a scheduler in a higher tier.

A total of 32 schedulers can be created within a single scheduler policy with no restriction on the distribution between the tiers. The scheduler name must exist in the applied scheduler policy.

Introduced	16.0.R1
Platforms	All

### [scheduler-name] *string*

Synopsis	Scheduler name
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i>
Tree	<a href="#">scheduler</a>
Description	This command specifies the scheduler name. Valid names consist of any string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent
Tree	<a href="#">parent</a>
Description	<p>Commands in this context are used to override the scheduler's parent weight and CIR weight. The weights apply to the associated level or CIR level configured in the applied scheduler policy.</p> <p>The override weights are ignored if the scheduler does not have a parent command configured in the scheduler policy. This allows the parent of the scheduler to be removed from the scheduler policy without having to remove all of the queue group overrides. If the parent scheduler does not exist, causing the configured scheduler to be fostered on an egress port scheduler, then the override weights are ignored.</p>
Introduced	16.0.R1
Platforms	All

**cir-weight** *number*

Synopsis	CIR that overrides the parent
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent cir-weight <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	PIR that overrides the parent
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> parent weight <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> rate
Tree	<a href="#">rate</a>
Description	Commands in this context override specific attributes of the specified scheduler rate. The actual operating rate of the scheduler is limited by bandwidth constraints other than its maximum rate. The scheduler's parent scheduler may not have the available bandwidth to meet the scheduler's needs. The bandwidth available to the parent scheduler could be allocated to other child schedulers or the child queues on the parent scheduler may be based on a higher priority. The children of the scheduler may not need the maximum rate available to the scheduler due to an insufficient offered load or limits to their own maximum rates.
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Description	<p>This command specifies the CIR. When a parent is associated with the scheduler, this command provides the amount of bandwidth to be considered during the parent scheduler's within-cir distribution phase. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined before specifying the CIR. If the CIR is set to <b>max</b>, the CIR rate is set to infinity.</p> <p>The <b>sum</b> keyword specifies that the CIR be used as the summed CIR values of the children schedulers, policers, or queues.</p>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy overrides scheduler <i>string</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Description	<p>This command specifies the PIR. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Any other value results in an error without modifying the current PIR rate.</p>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> port <i>string</i> ethernet access ingress queue-group <i>reference</i> scheduler-policy <i>policy-name</i> <i>reference</i>

Tree	<a href="#">policy-name</a>
Reference	<b>configure qos scheduler-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **accounting-policy** *reference*

Synopsis	Accounting policy for the Ethernet port
Context	<b>configure port</b> <i>string</i> <a href="#">ethernet accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure log accounting-policy</b> <i>number</i>
Introduced	16.0.R1
Platforms	All

### **autonegotiate** *keyword*

Synopsis	Speed and duplex autonegotiation on the Ethernet port
Context	<b>configure port</b> <i>string</i> <a href="#">ethernet autonegotiate</a> <i>keyword</i>
Tree	<a href="#">autonegotiate</a>
Description	<p>This command enables speed and duplex autonegotiation on Fast Ethernet ports and enables far-end fault indicator support on Gb ports. When autonegotiation is enabled on a port, the link attempts to automatically negotiate the link <b>speed</b> and <b>duplex</b> commands. If autonegotiation is enabled, the configured <b>duplex</b> and <b>speed</b> commands are ignored.</p> <p>When autonegotiation is disabled on a port, the port does not attempt to autonegotiate and will only operate at the <b>speed</b> and <b>duplex</b> command settings configured for the port. Note that disabling autonegotiation on Gb ports is not allowed as the IEEE 802.3 specification for Gb Ethernet requires autonegotiation be enabled for far end fault indication.</p> <p>It is required for autonegotiation to be limited for ports in a LAG to guarantee a specific port speed.</p>
Options	true, false, limited
Introduced	16.0.R1
Platforms	All

### **collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
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Context	<b>configure</b> port <i>string</i> ethernet collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

### crc-monitor

Synopsis	Enter the <b>crc-monitor</b> context
Context	<b>configure</b> port <i>string</i> ethernet crc-monitor
Tree	crc-monitor
Description	Commands in this context configure Ethernet Cyclic Redundancy Check (CRC) monitoring.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### signal-degrade

Synopsis	Enter the <b>signal-degrade</b> context
Context	<b>configure</b> port <i>string</i> ethernet crc-monitor signal-degrade
Tree	signal-degrade
Description	Commands in this context specify the error rate at which to declare the Signal Degrade (SD) condition on an Ethernet interface. The value represents $M \cdot 10E^{-N}$ , which is the ratio of errored frames over the total frames received over $W$ seconds of the sliding window. The CRC errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### multiplier *number*

Synopsis	SD multiplier
Context	<b>configure</b> port <i>string</i> ethernet crc-monitor signal-degrade multiplier <i>number</i>
Tree	multiplier
Range	1 to 9
Default	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **threshold** *number*

Synopsis SD threshold  
 Context **configure** [port](#) [string](#) [ethernet](#) [crc-monitor](#) [signal-degrade](#) [threshold](#) *number*  
 Tree [threshold](#)  
 Range 1 to 9  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **signal-failure**

Synopsis Enter the **signal-failure** context  
 Context **configure** [port](#) [string](#) [ethernet](#) [crc-monitor](#) [signal-failure](#)  
 Tree [signal-failure](#)  
 Description Commands in this context specify the error rate at which to declare the Signal Fail (SF) condition on an Ethernet interface. The value represents  $M \cdot 10^E - N$  errored frames over total frames received over  $W$  seconds of the sliding window. The CRC errors on the interface are sampled once per second.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *number*

Synopsis SF multiplier  
 Context **configure** [port](#) [string](#) [ethernet](#) [crc-monitor](#) [signal-failure](#) [multiplier](#) *number*  
 Tree [multiplier](#)  
 Range 1 to 9  
 Default 1  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **threshold** *number*

Synopsis SF threshold

Context	<b>configure port string ethernet crc-monitor signal-failure threshold number</b>
Tree	<b>threshold</b>
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **window-size** *number*

Synopsis	Sliding window size over which errors are measured
Context	<b>configure port string ethernet crc-monitor window-size number</b>
Tree	<b>window-size</b>
Description	This command specifies the sliding window size over which the Ethernet frames are sampled to detect SF or SD conditions. The command is used jointly with the <b>signal-failure</b> and the <b>signal-degrade</b> commands to configure the sliding window size.
Range	5 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dampening**

Synopsis	Enter the <b>dampening</b> context
Context	<b>configure port string ethernet dampening</b>
Tree	<b>dampening</b>
Description	Commands in this context configure Exponential Port Dampening (EPD) for the Ethernet port.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of exponential port dampening
Context	<b>configure port string ethernet dampening admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	All

### **half-life** *number*

Synopsis	Half-life decay time
Context	<b>configure</b> port <i>string</i> ethernet dampening half-life <i>number</i>
Tree	half-life
Description	This command specifies the time that must pass before penalties decay to one-half the initial amount. The half-life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half-life must be less than or equal to 49 and greater than or equal to one.
Range	1 to 2000
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

### **max-suppress-time** *number*

Synopsis	Maximum suppression time
Context	<b>configure</b> port <i>string</i> ethernet dampening max-suppress-time <i>number</i>
Tree	max-suppress-time
Description	This command specifies the maximum suppression time, which is the time it can take after the physical link comes up before the worst case accumulated penalties have decayed to the reuse threshold. The maximum penalty is derived from the maximum suppression time, half life, and reuse threshold, using the following equation:  $\text{maximum penalty} = (\text{reuse threshold})^2 \text{expo}:(\text{maximum suppression time}/\text{half life})$ <p>The half life and maximum suppression time values must be set at the same time and the ratio of the maximum suppression time and half life must be less than or equal to 49 and greater than or equal to one.</p>
Range	1 to 43200
Units	seconds
Default	20
Introduced	16.0.R1
Platforms	All

**reuse-threshold** *number*

Synopsis	Threshold which port-up state is no longer suppressed
Context	<b>configure</b> port <i>string</i> ethernet dampening reuse-threshold <i>number</i>
Tree	reuse-threshold
Description	This command specifies the threshold at which the port-up state is no longer suppressed, after the port has been in a suppressed state and the accumulated penalties decay drops below this threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Units	penalties
Default	1000
Introduced	16.0.R1
Platforms	All

**suppress-threshold** *number*

Synopsis	Threshold at which the port-up state is suppressed
Context	<b>configure</b> port <i>string</i> ethernet dampening suppress-threshold <i>number</i>
Tree	suppress-threshold
Description	This command specifies the threshold at which the port-up state is suppressed until the accumulated penalties drop below the reuse threshold. The reuse threshold value must be less than the suppress threshold value.
Range	1 to 20000
Units	penalties
Default	2000
Introduced	16.0.R1
Platforms	All

**discard-rx-pause-frames** *boolean*

Synopsis	Discard received pause frames
Context	<b>configure</b> port <i>string</i> ethernet discard-rx-pause-frames <i>boolean</i>
Tree	discard-rx-pause-frames
Description	When configured to <b>true</b> , the router discards received pause frames. Pause frames are used for local link flow control.

When configured to **false**, pause frames are processed upon reception and the transmit side of the receiving port pauses in its transmissions.

Default	false
Introduced	20.10.R1
Platforms	All

### **dot1q-etype** *string*

Synopsis	Ethertype expected if port encapsulation type is dot1q
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dot1q-etype</a> <i>string</i>
Tree	<a href="#">dot1q-etype</a>
Description	This command specifies the Ethertype expected when the port encapsulation type is dot1q. Dot1q encapsulation is supported only on Ethernet interfaces.
Default	33024
Introduced	16.0.R1
Platforms	All

### **dot1x**

Synopsis	Enter the <b>dot1x</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dot1x</a>
Tree	<a href="#">dot1x</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of dot1x packet extraction to CPM
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	All

**macsec**

Synopsis	Enter the <b>macsec</b> context
Context	<b>configure</b> port <i>string</i> ethernet dot1x macsec
Tree	macsec
Description	Commands in this context configure Media Access Control Security (MACsec) under the port.
Introduced	16.0.R1
Platforms	All

**exclude-mac-policy** *reference*

Synopsis	MAC policy excluded from MACsec encryption
Context	<b>configure</b> port <i>string</i> ethernet dot1x macsec exclude-mac-policy <i>reference</i>
Tree	exclude-mac-policy
Reference	<b>configure</b> macsec mac-policy <i>number</i>
Introduced	16.0.R5
Platforms	All

**exclude-protocol**

Synopsis	Enter the <b>exclude-protocol</b> context
Context	<b>configure</b> port <i>string</i> ethernet dot1x macsec exclude-protocol
Tree	exclude-protocol
Introduced	16.0.R1
Platforms	All

**cdp** *boolean*

Synopsis	Disable MACsec for all packets on the link for CDP
Context	<b>configure</b> port <i>string</i> ethernet dot1x macsec exclude-protocol cdp <i>boolean</i>
Tree	cdp
Default	false
Introduced	16.0.R1
Platforms	All

**eapol-start** *boolean*

Synopsis	Disable MACsec for all packets on the link for EAPOL
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">macsec</a> <a href="#">exclude-protocol</a> <b>eapol-start</b> <i>boolean</i>
Tree	<a href="#">eapol-start</a>
Default	false
Introduced	16.0.R1
Platforms	All

**efm-oam** *boolean*

Synopsis	Disable MACsec for all packets on the link for EFM-OAM
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">macsec</a> <a href="#">exclude-protocol</a> <b>efm-oam</b> <i>boolean</i>
Tree	<a href="#">efm-oam</a>
Default	false
Introduced	16.0.R1
Platforms	All

**eth-cfm** *boolean*

Synopsis	Disable MACsec for all packets on the link for ETH-CFM
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">macsec</a> <a href="#">exclude-protocol</a> <b>eth-cfm</b> <i>boolean</i>
Tree	<a href="#">eth-cfm</a>
Default	false
Introduced	16.0.R1
Platforms	All

**lACP** *boolean*

Synopsis	Disable MACsec for all packets on the link for LACP
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">dot1x</a> <a href="#">macsec</a> <a href="#">exclude-protocol</a> <b>lACP</b> <i>boolean</i>
Tree	<a href="#">lACP</a>
Default	false
Introduced	16.0.R1
Platforms	All



### **lldp** *boolean*

Synopsis	Disable MACsec for all packets on the link for LLDP
Context	<b>configure</b> <i>port string ethernet dot1x macsec exclude-protocol lldp boolean</i>
Tree	<a href="#">lldp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ptp** *boolean*

Synopsis	Disable MACsec for all packets on the link for PTP
Context	<b>configure</b> <i>port string ethernet dot1x macsec exclude-protocol ptp boolean</i>
Tree	<a href="#">ptp</a>
Default	false
Introduced	19.5.R1
Platforms	All

### **ubfd** *boolean*

Synopsis	Disable MACsec for all packets on the link for uBFD
Context	<b>configure</b> <i>port string ethernet dot1x macsec exclude-protocol ubfd boolean</i>
Tree	<a href="#">ubfd</a>
Default	false
Introduced	19.5.R1
Platforms	All

### **rx-must-be-encrypted** *boolean*

Synopsis	Drop all port traffic that is not MACsec-secured
Context	<b>configure</b> <i>port string ethernet dot1x macsec rx-must-be-encrypted boolean</i>
Tree	<a href="#">rx-must-be-encrypted</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sub-port** [[sub-port-id](#)] *number*

Synopsis	Enter the <b>sub-port</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port</a> <i>number</i>
Tree	<a href="#">sub-port</a>
Introduced	16.0.R1
Platforms	All

**[sub-port-id]** *number*

Synopsis	Sub-port ID
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port</a> <i>number</i>
Tree	<a href="#">sub-port</a>
Range	1 to 1023
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MACsec on the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**ca-name** *reference*

Synopsis	Connectivity association linked to the MACsec sub-port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port</a> <i>number</i> <a href="#">ca-name</a> <i>reference</i>
Tree	<a href="#">ca-name</a>
Reference	<b>configure</b> <a href="#">macsec connectivity-association</a> <i>string</i>
Introduced	16.0.R1

Platforms All

### **eapol-destination-address** *string*

Synopsis EAPOL destination MAC address

Context **configure** [port](#) [string](#) [ethernet dot1x macsec sub-port](#) [number](#) [eapol-destination-address](#) [string](#)

Tree [eapol-destination-address](#)

Introduced 16.0.R1

Platforms All

### **encap-match**

Synopsis Enter the **encap-match** context

Context **configure** [port](#) [string](#) [ethernet dot1x macsec sub-port](#) [number](#) [encap-match](#)

Tree [encap-match](#)

Introduced 19.5.R1

Platforms All

### **all-match** *boolean*

Synopsis Match and encrypt all traffic patterns

Context **configure** [port](#) [string](#) [ethernet dot1x macsec sub-port](#) [number](#) [encap-match](#) [all-match](#) [boolean](#)

Tree [all-match](#)

Default true

Notes The following elements are part of a choice: **all-match**, **double-tag**, **single-tag**, or **untagged**.

Introduced 19.5.R1

Platforms All

### **double-tag** *string*

Synopsis QinQ double tag traffic pattern to match

Context **configure** [port](#) [string](#) [ethernet dot1x macsec sub-port](#) [number](#) [encap-match](#) [double-tag](#) [string](#)

Tree	<a href="#">double-tag</a>
String Length	1 to 11
Notes	The following elements are part of a choice: <b>all-match</b> , <b>double-tag</b> , <b>single-tag</b> , or <b>untagged</b> .
Introduced	19.5.R1
Platforms	All

### **single-tag** *string*

Synopsis	Dot1q single tag traffic pattern to match
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port number</a> <a href="#">encap-match</a> <a href="#">single-tag</a> <i>string</i>
Tree	<a href="#">single-tag</a>
String Length	1 to 11
Notes	The following elements are part of a choice: <b>all-match</b> , <b>double-tag</b> , <b>single-tag</b> , or <b>untagged</b> .
Introduced	19.5.R1
Platforms	All

### **untagged** *boolean*

Synopsis	Match and encrypt untagged traffic only
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x macsec sub-port number</a> <a href="#">encap-match</a> <a href="#">untagged</a> <i>boolean</i>
Tree	<a href="#">untagged</a>
Notes	The following elements are part of a choice: <b>all-match</b> , <b>double-tag</b> , <b>single-tag</b> , or <b>untagged</b> .
Introduced	19.5.R1
Platforms	All

### **max-peers** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of peers supported on the port
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Context	<b>configure</b> <a href="#">port string ethernet dot1x macsec sub-port number max-peers number</a>
Tree	<a href="#">max-peers</a>
Range	1 to 32
Introduced	16.0.R1
Platforms	All

### **max-authentication-requests** *number*

Synopsis	Maximum number of RADIUS retries
Context	<b>configure</b> <a href="#">port string ethernet dot1x max-authentication-requests number</a>
Tree	<a href="#">max-authentication-requests</a>
Range	1 to 10
Default	2
Introduced	16.0.R1
Platforms	All

### **per-host-authentication**

Synopsis	Enter the <b>per-host-authentication</b> context
Context	<b>configure</b> <a href="#">port string ethernet dot1x per-host-authentication</a>
Tree	<a href="#">per-host-authentication</a>
Introduced	20.7.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of per-host authentication
Context	<b>configure</b> <a href="#">port string ethernet dot1x per-host-authentication admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	All

**allowed-source-macs**

Synopsis	Enter the <b>allowed-source-macs</b> context
Context	<b>configure</b> port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs
Tree	<a href="#">allowed-source-macs</a>
Introduced	20.7.R1
Platforms	All

**mac-address** [*mac*] *string*

Synopsis	Add a list entry for <b>mac-address</b>
Context	<b>configure</b> port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs mac-address <i>string</i>
Tree	<a href="#">mac-address</a>
Introduced	20.7.R1
Platforms	All

**[mac]** *string*

Synopsis	Source MAC address of a host selected for authentication
Context	<b>configure</b> port <i>string</i> ethernet dot1x per-host-authentication allowed-source-macs mac-address <i>string</i>
Tree	<a href="#">mac-address</a>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

**authenticator-init** *boolean*

Synopsis	Initiate per-host authentication
Context	<b>configure</b> port <i>string</i> ethernet dot1x per-host-authentication authenticator-init <i>boolean</i>
Tree	<a href="#">authenticator-init</a>
Default	true
Introduced	21.2.R1
Platforms	All

**port-control** *keyword*

Synopsis	802.1x authentication mode
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">port-control</a> <i>keyword</i>
Tree	<a href="#">port-control</a>
Options	force-unauthorized, auto, force-authorized
Default	force-authorized
Introduced	16.0.R1
Platforms	All

**quiet-period** *number*

Synopsis	Time between two sessions when no EAPOL frames are sent
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">quiet-period</a> <i>number</i>
Tree	<a href="#">quiet-period</a>
Range	1 to 3600
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	All

**radius-policy** *reference*

Synopsis	RADIUS policy used for 802.1x authentication
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">radius-policy</a> <i>reference</i>
Tree	<a href="#">radius-policy</a>
Reference	<b>configure</b> <a href="#">system security dot1x</a> <a href="#">radius-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**radius-server-policy** *reference*

Synopsis	RADIUS server policy name
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">radius-server-policy</a> <i>reference</i>
Tree	<a href="#">radius-server-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius</a> <a href="#">server-policy</a> <i>string</i>

Notes	The following elements are part of a choice: <b>radius-server-policy</b> or ( <b>radius-server-policy-acct</b> and <b>radius-server-policy-auth</b> ).
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy-acct** *reference*

Synopsis	RADIUS server policy name for accounting
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x</a> <a href="#">radius-server-policy-acct</a> <i>reference</i>
Tree	<a href="#">radius-server-policy-acct</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">server-policy</a> <i>string</i>
Notes	The following elements are part of a choice: <b>radius-server-policy</b> or ( <b>radius-server-policy-acct</b> and <b>radius-server-policy-auth</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy-auth** *reference*

Synopsis	RADIUS server policy name for authentication
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x</a> <a href="#">radius-server-policy-auth</a> <i>reference</i>
Tree	<a href="#">radius-server-policy-auth</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">server-policy</a> <i>string</i>
Notes	The following elements are part of a choice: <b>radius-server-policy</b> or ( <b>radius-server-policy-acct</b> and <b>radius-server-policy-auth</b> ).
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **re-authentication**

Synopsis	Enable the <b>re-authentication</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet dot1x</a> <a href="#">re-authentication</a>
Tree	<a href="#">re-authentication</a>
Introduced	16.0.R1
Platforms	All



**period** *number*

Synopsis	Delay before re-authentication is performed
Context	<b>configure</b> port <i>string</i> ethernet dot1x re-authentication period <i>number</i>
Tree	period
Range	1 to 9000
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	All

**server-timeout** *number*

Synopsis	Wait time for a response from the RADIUS server
Context	<b>configure</b> port <i>string</i> ethernet dot1x server-timeout <i>number</i>
Tree	server-timeout
Range	1 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**supplicant-timeout** *number*

Synopsis	Wait time for a response to EAPOL messages
Context	<b>configure</b> port <i>string</i> ethernet dot1x supplicant-timeout <i>number</i>
Tree	supplicant-timeout
Range	1 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**transmit-period** *number*

Synopsis	Time after which a new EAPOL request message is sent
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Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">transmit-period</a> <i>number</i>
Tree	<a href="#">transmit-period</a>
Range	1 to 3600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **tunnel-dot1q** *boolean*

Synopsis	Enable dot1x tunneling for 802.1q tagged packets
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">tunnel-dot1q</a> <i>boolean</i>
Tree	<a href="#">tunnel-dot1q</a>
Default	true
Introduced	21.2.R1
Platforms	All

### **tunnel-qinq** *boolean*

Synopsis	Enable dot1x tunneling for QinQ tagged packets
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">tunnel-qinq</a> <i>boolean</i>
Tree	<a href="#">tunnel-qinq</a>
Default	true
Introduced	21.2.R1
Platforms	All

### **tunneling** *boolean*

Synopsis	Allow tunneling of untagged 802.1x frames
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet dot1x</a> <a href="#">tunneling</a> <i>boolean</i>
Tree	<a href="#">tunneling</a>
Default	false
Introduced	16.0.R1
Platforms	All

## down-on-internal-error

Synopsis	Enable the <b>down-on-internal-error</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">down-on-internal-error</a>
Tree	<a href="#">down-on-internal-error</a>
Introduced	16.0.R1
Platforms	All

## tx-laser *keyword*

Synopsis	Remote laser state on internal MAC transmit error
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">down-on-internal-error</a> <a href="#">tx-laser</a> <i>keyword</i>
Tree	<a href="#">tx-laser</a>
Options	off, on
Default	on
Introduced	16.0.R1
Platforms	All

## down-when-looped

Synopsis	Enter the <b>down-when-looped</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">down-when-looped</a>
Tree	<a href="#">down-when-looped</a>
Description	Commands in this context configure Ethernet loop detection.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of Ethernet loop detection
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">down-when-looped</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

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Platforms All

### **keep-alive** *number*

Synopsis Time interval between keep-alive PDUs

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [keep-alive](#) *number*

Tree [keep-alive](#)

Range 1 to 120

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **retry-timeout** *number*

Synopsis Wait time before re-enabling port after loop detection

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [retry-timeout](#) *number*

Tree [retry-timeout](#)

Range 0 | 10 to 160

Units seconds

Default 120

Introduced 16.0.R1

Platforms All

### **use-broadcast-address** *boolean*

Synopsis Use broadcast MAC address for destination MAC address

Context **configure** [port](#) [string](#) [ethernet](#) [down-when-looped](#) [use-broadcast-address](#) *boolean*

Tree [use-broadcast-address](#)

Default false

Introduced 16.0.R1

Platforms All

**duplex** *keyword*

Synopsis	Duplex type for the fast Ethernet port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">duplex</a> <i>keyword</i>
Tree	<a href="#">duplex</a>
Description	This command configures the duplex of a Fast Ethernet port when autonegotiation is disabled. This command setting is ignored if autonegotiation is enabled for the port.
Options	full, half
Introduced	16.0.R1
Platforms	All

**efm-oam**

Synopsis	Enter the <b>efm-oam</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a>
Tree	<a href="#">efm-oam</a>
Introduced	16.0.R1
Platforms	All

**accept-remote-loopback** *boolean*

Synopsis	Enable reactions to loopback control OAMPDUs from peers
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">accept-remote-loopback</a> <i>boolean</i>
Tree	<a href="#">accept-remote-loopback</a>
Default	false
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the EFM OAM operation
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	16.0.R1
Platforms	All

## discovery

Synopsis	Enter the <b>discovery</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">discovery</a>
Tree	<a href="#">discovery</a>
Introduced	16.0.R1
Platforms	All

## advertise-capabilities

Synopsis	Enter the <b>advertise-capabilities</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">discovery</a> <a href="#">advertise-capabilities</a>
Tree	<a href="#">advertise-capabilities</a>
Description	Commands in this context specify settings that enable the advertisement of specific capabilities.
Introduced	16.0.R1
Platforms	All

## link-monitoring *boolean*

Synopsis	Advertise link monitoring capabilities to peer
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">discovery</a> <a href="#">advertise-capabilities</a> <a href="#">link-monitoring</a> <i>boolean</i>
Tree	<a href="#">link-monitoring</a>
Description	When configured to <b>true</b> , the link monitoring capability is advertised to the peer through the EFM-OAM protocol. When configured to <b>false</b> , the router suppresses the advertisement of capabilities to a remote peer.
Default	true
Introduced	16.0.R1
Platforms	All

**dying-gasp-tx-on-reset** *boolean*

Synopsis	Enable generation of the Information OAMPDU off-cycle
Context	<b>configure</b> port <i>string</i> ethernet efm-oam dying-gasp-tx-on-reset <i>boolean</i>
Tree	dying-gasp-tx-on-reset
Description	<p>When configured to <b>true</b>, this command enables the generation of the Information OAMPDU off-cycle when the soft reset notification is received by the EFM application.</p> <p>The local port state remains under the control of the soft reset application and does not change based on the EFM function. If the port is operationally up, then the local node will continue to consider the port as available for service data and forwarding. If the upstream node requires a notification to route around the local node undergoing the soft reset, then a notification must be sent to those nodes. This is a disruptive function.</p> <p>When both the <b>grace-tx</b> and <b>dying-gasp-tx-on-reset</b> commands are active on the same port, the <b>grace-tx</b> command takes precedence when a soft reset is invoked if the peer vendor OUI being received is 00:16:4D or the configured <b>grace-vendor-oui</b> value.</p> <p>When configured to <b>false</b>, the generation of the Information OAMPDU off-cycle is disabled.</p>
Default	true
Introduced	16.0.R1
Platforms	All

**grace-tx** *boolean*

Synopsis	Enable the sending of Grace TLV for EFM-OAM
Context	<b>configure</b> port <i>string</i> ethernet efm-oam grace-tx <i>boolean</i>
Tree	grace-tx
Description	<p>When configured to <b>true</b>, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval.</p> <p>By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to <b>true</b>, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period.</p> <p>The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer.</p> <p>When configured to <b>false</b>, the Nokia Vendor Specific Grace TLV is not sent.</p>
Introduced	16.0.R1
Platforms	All

**grace-vendor-oui** *string*

Synopsis	Peer vendor OUI to support grace function
Context	<b>configure</b> <i>port string</i> <i>ethernet efm-oam grace-vendor-oui string</i>
Tree	<i>grace-vendor-oui</i>
Default	00:16:4D
Introduced	16.0.R1
Platforms	All

**hold-time** *number*

Synopsis	Wait time before protocol returns to operational state
Context	<b>configure</b> <i>port string ethernet efm-oam hold-time number</i>
Tree	<i>hold-time</i>
Range	1 to 50
Units	seconds
Introduced	16.0.R1
Platforms	All

**ignore-efm-state** *boolean*

Synopsis	Suppress port state changes for EFM-OAM faults
Context	<b>configure</b> <i>port string ethernet efm-oam ignore-efm-state boolean</i>
Tree	<i>ignore-efm-state</i>
Description	When configured to <b>true</b> , the ETH-OAM protocol does not impact the state of the port when there is a failure in the protocol state machine (discovery, configuration, timeout, loops, and so on). There is only a protocol warning message on the port. When configured to <b>false</b> , the port state is affected by any existing EFM-OAM protocol fault condition.
Default	false
Introduced	16.0.R1
Platforms	All

**link-monitoring**

Synopsis	Enter the <b>link-monitoring</b> context
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Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring
Tree	<a href="#">link-monitoring</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring admin-state <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **errored-frame**

Synopsis	Enter the <b>errored-frame</b> context
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame
Tree	<a href="#">errored-frame</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame admin-state <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**event-notification** *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame event-notification <i>boolean</i>
Tree	<a href="#">event-notification</a>
Default	true
Introduced	16.0.R4
Platforms	All

**sd-threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame sd-threshold <i>number</i>
Tree	<a href="#">sd-threshold</a>
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

**sf-threshold** *number*

Synopsis	SF threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame sf-threshold <i>number</i>
Tree	<a href="#">sf-threshold</a>
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

**window** *number*

Synopsis	Window size
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame window <i>number</i>
Tree	<a href="#">window</a>
Range	10 to 600

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Units	deciseconds
Default	10
Introduced	16.0.R4
Platforms	All

### **errored-frame-period**

Synopsis	Enter the <b>errored-frame-period</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-period</a>
Tree	<a href="#">errored-frame-period</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-period</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **event-notification** *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-period</a> <a href="#">event-notification</a> <i>boolean</i>
Tree	<a href="#">event-notification</a>
Default	true
Introduced	16.0.R4
Platforms	All

**sd-threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period sd-threshold <i>number</i>
Tree	sd-threshold
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

**sf-threshold** *number*

Synopsis	SF threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

**window** *number*

Synopsis	Window size
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-period window <i>number</i>
Tree	window
Range	1 to 4294967295
Units	packets
Default	1488095
Introduced	16.0.R4
Platforms	All

**errored-frame-seconds**

Synopsis	Enter the <b>errored-frame-seconds</b> context
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-seconds

Tree	<a href="#">errored-frame-seconds</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> port <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-seconds</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**event-notification** *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	<b>configure</b> port <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-seconds</a> <a href="#">event-notification</a> <i>boolean</i>
Tree	<a href="#">event-notification</a>
Default	true
Introduced	16.0.R4
Platforms	All

**sd-threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> port <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">errored-frame-seconds</a> <a href="#">sd-threshold</a> <i>number</i>
Tree	<a href="#">sd-threshold</a>
Range	1 to 900
Introduced	16.0.R4
Platforms	All

**sf-threshold** *number*

Synopsis	SF threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-seconds sf-threshold <i>number</i>
Tree	sf-threshold
Range	1 to 900
Default	1
Introduced	16.0.R4
Platforms	All

**window** *number*

Synopsis	Window size
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-frame-seconds window <i>number</i>
Tree	window
Range	100 to 9000
Units	deciseconds
Default	600
Introduced	16.0.R4
Platforms	All

**errored-symbols**

Synopsis	Enter the <b>errored-symbols</b> context
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols
Tree	errored-symbols
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of link monitoring on the port
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols admin-state <i>keyword</i>
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **event-notification** *boolean*

Synopsis	Transmit Event Notification OAMPDU with link event TLV
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols event-notification <i>boolean</i>
Tree	<a href="#">event-notification</a>
Default	true
Introduced	16.0.R4
Platforms	All

### **sd-threshold** *number*

Synopsis	SD threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols sd-threshold <i>number</i>
Tree	<a href="#">sd-threshold</a>
Range	1 to 1000000
Introduced	16.0.R4
Platforms	All

### **sf-threshold** *number*

Synopsis	SF threshold
Context	<b>configure</b> port <i>string</i> ethernet efm-oam link-monitoring errored-symbols sf-threshold <i>number</i>
Tree	<a href="#">sf-threshold</a>
Range	1 to 1000000
Default	1
Introduced	16.0.R4
Platforms	All

**window number**

Synopsis	Window size
Context	<b>configure</b> port string ethernet efm-oam link-monitoring errored-symbols window number
Tree	window
Range	10 to 600
Units	deciseconds
Default	10
Introduced	16.0.R4
Platforms	All

**local-sf-action**

Synopsis	Enter the <b>local-sf-action</b> context
Context	<b>configure</b> port string ethernet efm-oam link-monitoring local-sf-action
Tree	local-sf-action
Introduced	16.0.R4
Platforms	All

**event-notification-burst number**

Synopsis	Number of OAMPDUs to send when SF threshold is reached
Context	<b>configure</b> port string ethernet efm-oam link-monitoring local-sf-action event-notification-burst number
Tree	event-notification-burst
Range	1 to 5
Units	packets
Default	1
Introduced	16.0.R4
Platforms	All

**info-notification**

Synopsis	Enter the <b>info-notification</b> context
Context	<b>configure</b> port string ethernet efm-oam link-monitoring local-sf-action info-notification



Tree	<a href="#">info-notification</a>
Introduced	16.0.R4
Platforms	All

**critical-event** *boolean*

Synopsis	Set critical event flag when SF threshold is reached
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a> <a href="#">info-notification</a> <a href="#">critical-event</a> <i>boolean</i>
Tree	<a href="#">critical-event</a>
Default	false
Introduced	16.0.R4
Platforms	All

**dying-gasp** *boolean*

Synopsis	Set dying gasp flag when SF threshold is reached
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a> <a href="#">info-notification</a> <a href="#">dying-gasp</a> <i>boolean</i>
Tree	<a href="#">dying-gasp</a>
Default	false
Introduced	16.0.R4
Platforms	All

**local-port-action** *keyword*

Synopsis	Local port action when SF threshold is reached
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">efm-oam</a> <a href="#">link-monitoring</a> <a href="#">local-sf-action</a> <a href="#">local-port-action</a> <i>keyword</i>
Tree	<a href="#">local-port-action</a>
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	16.0.R4
Platforms	All

**mode** *keyword*

Synopsis	Mode of OAM operation for the Ethernet port
Context	<b>configure</b> port <i>string</i> ethernet efm-oam mode <i>keyword</i>
Tree	mode
Options	passive, active
Default	active
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Multiplier for the transmit interval of OAMPDUs
Context	<b>configure</b> port <i>string</i> ethernet efm-oam multiplier <i>number</i>
Tree	multiplier
Range	2 to 5
Default	5
Introduced	16.0.R1
Platforms	All

**peer-rdi-rx**

Synopsis	Enter the <b>peer-rdi-rx</b> context
Context	<b>configure</b> port <i>string</i> ethernet efm-oam peer-rdi-rx
Tree	peer-rdi-rx
Introduced	16.0.R1
Platforms	All

**critical-event** *keyword*

Synopsis	Action taken upon receipt of critical event flag
Context	<b>configure</b> port <i>string</i> ethernet efm-oam peer-rdi-rx critical-event <i>keyword</i>
Tree	critical-event
Options	log-only, port-out-of-service
Default	port-out-of-service
Introduced	16.0.R1

Platforms All

### **dying-gasp** *keyword*

Synopsis Action taken upon receipt of dying gasp flag

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **dying-gasp** *keyword*

Tree [dying-gasp](#)

Options log-only, port-out-of-service

Default port-out-of-service

Introduced 16.0.R1

Platforms All

### **event-notification** *keyword*

Synopsis Action taken upon receipt of event TLVs

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **event-notification** *keyword*

Tree [event-notification](#)

Options log-only, port-out-of-service

Default log-only

Introduced 16.0.R1

Platforms All

### **link-fault** *keyword*

Synopsis Action taken upon receipt of link fault flag

Context **configure** [port](#) [string](#) [ethernet](#) [efm-oam](#) [peer-rdi-rx](#) **link-fault** *keyword*

Tree [link-fault](#)

Options log-only, port-out-of-service

Default port-out-of-service

Introduced 16.0.R1

Platforms All

### **transmit-interval** *number*

Synopsis Transmit interval of OAMPDUs

Context	<b>configure</b> port <i>string</i> ethernet efm-oam transmit-interval <i>number</i>
Tree	transmit-interval
Range	1 to 600
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### **trigger-fault** *keyword*

Synopsis	Flag setting in the information OAMPDU
Context	<b>configure</b> port <i>string</i> ethernet efm-oam trigger-fault <i>keyword</i>
Tree	trigger-fault
Options	dying-gasp, critical-event
Introduced	16.0.R1
Platforms	All

### **tunneling** *boolean*

Synopsis	Enable EFM-OAM PDU tunneling
Context	<b>configure</b> port <i>string</i> ethernet efm-oam tunneling <i>boolean</i>
Tree	tunneling
Default	false
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress
Tree	egress
Introduced	16.0.R1
Platforms	All

**eth-bn-rate-changes** *boolean*

Synopsis	Allow rate changes in ETH-BN messages on port-based MEP
Context	<b>configure</b> port <i>string</i> ethernet egress eth-bn-rate-changes <i>boolean</i>
Tree	<a href="#">eth-bn-rate-changes</a>
Description	When configured to <b>true</b> , this command allows rate changes received in ETH-BN messages on a port-based MEP to update the egress rate used on the port. This command is not supported for all MDA types. When configured to <b>false</b> , rate changes in ETH-BN messages are denied.
Default	false
Introduced	16.0.R1
Platforms	All

**hs-port-pool-policy** *reference*

Synopsis	HS port pool policy
Context	<b>configure</b> port <i>string</i> ethernet egress hs-port-pool-policy <i>reference</i>
Tree	<a href="#">hs-port-pool-policy</a>
Reference	<b>configure</b> qos hs-port-pool-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-scheduler-policy**

Synopsis	Enter the <b>hs-scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress hs-scheduler-policy
Tree	<a href="#">hs-scheduler-policy</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress hs-scheduler-policy overrides
Tree	<a href="#">overrides</a>
Introduced	19.10.R1

Platforms 7750 SR-7/12/12e

### **group** [group-id] *number*

Synopsis Enter the **group** list instance

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number*

Tree [group](#)

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

### **[group-id]** *number*

Synopsis Group ID

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number*

Tree [group](#)

Range 1

Notes This element is part of a list key.

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis Maximum rate

Context **configure** port *string* ethernet egress hs-scheduler-policy overrides group *number* rate (*number* | *keyword*)

Tree [rate](#)

Range 1 to 100000

Units megabps

Options max

Introduced 19.10.R1

Platforms 7750 SR-7/12/12e

### **max-rate** (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-scheduler-policy</a> <a href="#">overrides</a> <a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 100000
Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

### **scheduling-class** [[class-number](#)] *number*

Synopsis	Enter the <b>scheduling-class</b> list instance
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduling-class</a> <i>number</i>
Tree	<a href="#">scheduling-class</a>
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

### **[class-number]** *number*

Synopsis	Scheduling class value
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduling-class</a> <i>number</i>
Tree	<a href="#">scheduling-class</a>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduling-class</a> <i>number</i> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 100000

Units	megabps
Options	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**weight number**

Synopsis	Weight of the scheduling class within the group
Context	<b>configure</b> port <i>string</i> ethernet egress hs-scheduler-policy overrides scheduling-class number weight number
Tree	weight
Range	1 to 127
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**policy-name reference**

Synopsis	HS scheduler policy name
Context	<b>configure</b> port <i>string</i> ethernet egress hs-scheduler-policy policy-name reference
Tree	policy-name
Reference	<b>configure</b> qos hs-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-secondary-shaper [secondary-shaper-name] string**

Synopsis	Enter the <b>hs-secondary-shaper</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i>
Tree	hs-secondary-shaper
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**[secondary-shaper-name] string**

Synopsis	Secondary shaper name
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Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-secondary-shaper</a> <i>string</i>
Tree	<a href="#">hs-secondary-shaper</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

## aggregate

Synopsis	Enter the <b>aggregate</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-secondary-shaper</a> <i>string</i> <a href="#">aggregate</a>
Tree	<a href="#">aggregate</a>
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

## low-burst-max-class *number*

Synopsis	Highest scheduling class mapped to the low burst limit
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-secondary-shaper</a> <i>string</i> <a href="#">aggregate</a> <a href="#">low-burst-max-class</a> <i>number</i>
Tree	<a href="#">low-burst-max-class</a>
Range	1 to 6
Default	6
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

## rate (*number* | *keyword*)

Synopsis	Rate allowed for the HS secondary shaper aggregate
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">hs-secondary-shaper</a> <i>string</i> <a href="#">aggregate</a> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 100000000
Units	kilobps
Options	max

Default	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**class** [*class-number*] *number*

Synopsis	Enter the <b>class</b> list instance
Context	<b>configure</b> <i>port string ethernet egress hs-secondary-shaper string class number</i>
Tree	<i>class</i>
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**[class-number]** *number*

Synopsis	HS secondary shaper class ID
Context	<b>configure</b> <i>port string ethernet egress hs-secondary-shaper string class number</i>
Tree	<i>class</i>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**rate** (*number* | *keyword*)

Synopsis	Rate allowed for the HS secondary shaper class
Context	<b>configure</b> <i>port string ethernet egress hs-secondary-shaper string class number rate (number   keyword)</i>
Tree	<i>rate</i>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**description** *string*

Synopsis	Text description
Context	<b>configure</b> port <i>string</i> ethernet egress hs-secondary-shaper <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	19.10.R1
Platforms	7750 SR-7/12/12e

**hw-aggr-shaper-scheduler**

Synopsis	Enter the <b>hw-aggr-shaper-scheduler</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress hw-aggr-shaper-scheduler
Tree	hw-aggr-shaper-scheduler
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**monitor** *boolean*

Synopsis	Allow monitoring of the HW aggregate shaper scheduler
Context	<b>configure</b> port <i>string</i> ethernet egress hw-aggr-shaper-scheduler monitor <i>boolean</i>
Tree	monitor
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**policy-name** *reference*

Synopsis	Name of HW aggregate shaper scheduler policy
Context	<b>configure</b> port <i>string</i> ethernet egress hw-aggr-shaper-scheduler policy-name <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i>
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

### **monitor-port-scheduler** *boolean*

Synopsis	Enable monitoring of egress scheduler
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">monitor-port-scheduler</a> <i>boolean</i>
Tree	<a href="#">monitor-port-scheduler</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **port-scheduler-policy**

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

### **overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Description	Commands in this context configure egress scheduler overrides.
Introduced	16.0.R4
Platforms	All

### **level** [[priority-level](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R4
Platforms	All

**[priority-level] number**

Synopsis	Port priority level to be overridden
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R4
Platforms	All

**cir decimal-number**

Synopsis	CIR for the port scheduler policy
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

**pir decimal-number**

Synopsis	PIR for the the port scheduler policy
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir

Range	0.01 to 100.00
Units	percent
Introduced	16.0.R4
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R4
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R4
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy overrides level <i>number</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max

Introduced	16.0.R4
Platforms	All

**max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure</b> <a href="#">port string ethernet egress port-scheduler-policy overrides max-rate</a>
Tree	<a href="#">max-rate</a>
Description	Commands in this context override the <b>max-rate</b> command found in the port scheduler policy associated with the port. When a maximum rate is defined at the port or channel level, the port scheduler's policy <b>max-rate</b> command is ignored.
Introduced	16.0.R4
Platforms	All

**percent-rate** *decimal-number*

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">port string ethernet egress port-scheduler-policy overrides max-rate percent-rate decimal-number</a>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R4
Platforms	All

**rate** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">port string ethernet egress port-scheduler-policy overrides max-rate rate (number   keyword)</a>
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Options	max

Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R4
Platforms	All

### **policy-name** *reference*

Synopsis	Egress scheduler policy name
Context	<b>configure</b> port <i>string</i> ethernet egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

### **rate** *number*

Synopsis	Rate of egress traffic
Context	<b>configure</b> port <i>string</i> ethernet egress rate <i>number</i>
Tree	rate
Description	This command configures the rate of traffic leaving the network. An event log is generated each time the egress rate is modified unless the port is part of a LAG. This command is not supported for all MDA types.
Max. Range	-2147483648 to 2147483647
Units	kilobps
Introduced	16.0.R1
Platforms	All

### **elmi**

Synopsis	Enter the <b>elmi</b> context
Context	<b>configure</b> port <i>string</i> ethernet elmi
Tree	elmi
Introduced	16.0.R4
Platforms	All



**mode keyword**

Synopsis	Ethernet LMI mode
Context	<b>configure</b> port string ethernet elmi mode keyword
Tree	mode
Options	uni-n
Introduced	16.0.R4
Platforms	All

**n393 number**

Synopsis	Monitored count of consecutive errors
Context	<b>configure</b> port string ethernet elmi n393 number
Tree	n393
Range	2 to 10
Default	4
Introduced	16.0.R4
Platforms	All

**t391 number**

Synopsis	Polling timer for UNI-C
Context	<b>configure</b> port string ethernet elmi t391 number
Tree	t391
Range	5 to 30
Units	seconds
Default	10
Introduced	16.0.R4
Platforms	All

**t392 number**

Synopsis	Polling verification timer for UNI-N
Context	<b>configure</b> port string ethernet elmi t392 number
Tree	t392

Range	5 to 30
Units	seconds
Default	15
Introduced	16.0.R4
Platforms	All

### **encap-type** *keyword*

Synopsis	Encapsulation method for the Ethernet port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">encap-type</a> <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	All

### **eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
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Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	<b>configure</b> eth-cfm domain string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Reference	<b>configure</b> eth-cfm domain string association string
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number
Tree	mep
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword
Tree	admin-state

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ais

Synopsis	Enable the <b>ais</b> context
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number <b>ais</b>
Tree	<b>ais</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number <b>ais</b> client-meg-level <i>number</i>
Tree	<b>client-meg-level</b>
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number <b>ais</b> interface-support <i>boolean</i>
Tree	<b>interface-support</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval number**

Synopsis	Transmission interval for AIS messages
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number
Tree	interval
Range	1   60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**low-priority-defect keyword**

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais low-priority-defect keyword
Tree	low-priority-defect
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority number**

Synopsis	Priority of the AIS messages generated by the node
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number
Tree	priority
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
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Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification
Tree	alarm-notification
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** number

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number
Tree	fng-alarm-time
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** number

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number
Tree	fng-reset-time
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** boolean

Synopsis	Generate CCM messages
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Context	<b>configure</b> <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b>) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-tlv-ignore** *keyword*

Synopsis	TLV to ignore on reception
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Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-tlv-ignore keyword
Tree	ccm-tlv-ignore
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.  When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### collect-lmm-stats boolean

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-stats boolean
Tree	collect-lmm-stats
Description	When configured to <b>true</b> , this command enables the collection of statistics on the facility MEPs. (Facility is at a different level of the hierarchy than the collection of LMM statistics for service SAPs and MPLS SDP bindings.)The collection of LMM statistics must be enabled if a MEP is launching or responding to ETH-LMM packets.  This command is mutually exclusive with the <b>collect-lmm-fc-stats</b> command when there is entity resource contention.  When configured to <b>false</b> , this command disables the collection of statistics on the facility MEPs. If LMM statistics collection is disabled, the counters in the LMM and LMR PDU do not represent accurate measurements and all measurements should be ignored.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### csf

Synopsis	Enable the <b>csf</b> context
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf
Tree	csf



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">csf</a> <b>multiplier</b> <i>decimal-number</i>
Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-bn**

Synopsis	Enter the <b>eth-bn</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>eth-bn</b>
Tree	<a href="#">eth-bn</a>
Description	Commands in this context configure Ethernet Bandwidth Notification (ETH-BN) message handling.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**receive boolean**

Synopsis	Enable the reception and processing of ETH-BN messages
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-bn receive boolean
Tree	receive
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-update-pacing number**

Synopsis	Pace of messages to and from ETH-CFM to QoS subsystems
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-bn rx-update-pacing number
Tree	rx-update-pacing
Range	1 to 600
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test
Tree	eth-test
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bit-error-threshold number**

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number

Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## test-pattern

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <b>test-pattern</b>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <b>test-pattern</b> <b>crc-tlv</b> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <b>test-pattern</b> <b>pattern</b> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **facility-fault** *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number facility-fault <i>boolean</i>
Tree	facility-fault
Description	When configured to <b>true</b> , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition.  When configured to <b>false</b> , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace
Tree	grace
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> port <i>string</i> ethernet eth-cfm mep md-admin-name <i>reference</i> ma-admin-name <i>reference</i> mep-id number grace eth-ed
Tree	eth-ed
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <a href="#">number</a>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">priority</a> <a href="#">number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <a href="#">boolean</a>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
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Context	<b>configure</b> <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <i>port string ethernet eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</i>
Tree	<a href="#">mac-address</a>
Description	<p>This command specifies the MAC address of the MEP.</p> <p>When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.</p>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### one-way-delay-threshold *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* one-way-delay-threshold *number*

Tree [one-way-delay-threshold](#)

Range 0 to 600

Units seconds

Default 3

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### vlan (*number* | *keyword*)



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Outer VLAN ID of the tunnel

Context **configure** port *string* ethernet eth-cfm mep md-admin-name *reference* ma-admin-name *reference* mep-id *number* vlan (*number* | *keyword*)

Tree [vlan](#)

Range 1 to 4094

Options none

Default none

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### hold-time

Synopsis Enter the **hold-time** context

Context **configure** port *string* ethernet hold-time

Tree [hold-time](#)

Introduced 16.0.R1



Platforms All

### **down** *number*

Synopsis Delay after interface goes from up state to down state

Context **configure** port *string* ethernet hold-time down *number*

Tree down

Description This command specifies the delay to notify the upper layers after an interface transitions from an up state to a down state.

When an interface transitions from an up state to a down state, it is immediately advertised to the rest of the system if the down interval is zero, but if the down interval is greater than zero, interface down transitions are not advertised to upper layers until the down interval has expired.

Range 1 to 3600000

Introduced 16.0.R1

Platforms All

### **units** *keyword*

Synopsis Hold time units

Context **configure** port *string* ethernet hold-time units *keyword*

Tree units

Options seconds, centiseconds

Default seconds

Introduced 16.0.R1

Platforms All

### **up** *number*

Synopsis Delay after interface goes from down state to up state

Context **configure** port *string* ethernet hold-time up *number*

Tree up

Description This command specifies the delay to notify the upper layers after an interface transitions from a down state to an up state.

When an interface transitions from a down state to an up state, it is immediately advertised as up to the rest of the system if the up interval is zero, but if the up interval is greater than zero, up transitions are not advertised until the up interval has expired.

Range	1 to 3600000
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">port string ethernet ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## rate number

Synopsis	Maximum ingress bandwidth
Context	<b>configure</b> <a href="#">port string ethernet ingress rate number</a>
Tree	<a href="#">rate</a>
Max. Range	-2147483648 to 2147483647
Units	megabps
Introduced	16.0.R1
Platforms	All

## lACP-tunnel boolean

Synopsis	Enable LACP packet tunneling for the Ethernet port
Context	<b>configure</b> <a href="#">port string ethernet lACP-tunnel boolean</a>
Tree	<a href="#">lACP-tunnel</a>
Default	false
Introduced	16.0.R1
Platforms	All

## lldp

Synopsis	Enter the <b>lldp</b> context
Context	<b>configure</b> <a href="#">port string ethernet lldp</a>

Tree	<a href="#">lldp</a>
Description	Commands in this context configure the Link Layer Discovery Protocol (LLDP) on the port.
Introduced	16.0.R1
Platforms	All

### **dest-mac** [[mac-type](#)] *keyword*

Synopsis	Enter the <b>dest-mac</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i>
Tree	<a href="#">dest-mac</a>
Description	Commands in this context configure destination MAC address commands.
Introduced	16.0.R1
Platforms	All

### **[mac-type]** *keyword*

Synopsis	Destination MAC address type
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i>
Tree	<a href="#">dest-mac</a>
Options	nearest-bridge, nearest-non-tpmr, nearest-customer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **notification** *boolean*

Synopsis	Enable LLDP notifications
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i> <a href="#">notification</a> <i>boolean</i>
Tree	<a href="#">notification</a>
Default	false
Introduced	16.0.R1
Platforms	All

**port-id-subtype** *keyword*

Synopsis	Port ID TLV encoding method for transmission to peer
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet lldp dest-mac</a> <i>keyword</i> <a href="#">port-id-subtype</a> <i>keyword</i>
Tree	<a href="#">port-id-subtype</a>
Options	tx-if-alias, tx-if-name, tx-local
Default	tx-local
Introduced	16.0.R1
Platforms	All

**receive** *boolean*

Synopsis	Enable LLDP agent to receive but not transmit frames
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet lldp dest-mac</a> <i>keyword</i> <a href="#">receive</a> <i>boolean</i>
Tree	<a href="#">receive</a>
Default	false
Introduced	16.0.R1
Platforms	All

**transmit** *boolean*

Synopsis	Enable the LLDP agent to transmit frames
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet lldp dest-mac</a> <i>keyword</i> <a href="#">transmit</a> <i>boolean</i>
Tree	<a href="#">transmit</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tunnel-nearest-bridge** *boolean*

Synopsis	Allow received LLDP packets to be tunneled
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet lldp dest-mac</a> <i>keyword</i> <a href="#">tunnel-nearest-bridge</a> <i>boolean</i>
Tree	<a href="#">tunnel-nearest-bridge</a>
Default	false
Introduced	16.0.R1
Platforms	All

**tx-mgmt-address** [[mgmt-address-system-type](#)] *keyword*

Synopsis	Enter the <b>tx-mgmt-address</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i> <b>tx-mgmt-address</b> <i>keyword</i>
Tree	<a href="#">tx-mgmt-address</a>
Introduced	16.0.R1
Platforms	All

**[mgmt-address-system-type]** *keyword*

Synopsis	Management address to transmit
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i> <b>tx-mgmt-address</b> <i>keyword</i>
Tree	<a href="#">tx-mgmt-address</a>
Options	oob, system, system-ipv6, oob-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of transmitting management address
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i> <b>tx-mgmt-address</b> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**tx-tlvs**

Synopsis	Enter the <b>tx-tlvs</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">lldp</a> <a href="#">dest-mac</a> <i>keyword</i> <b>tx-tlvs</b>
Tree	<a href="#">tx-tlvs</a>
Introduced	16.0.R1

Platforms All

### **port-desc** *boolean*

Synopsis Transmit port description TLVs  
Context **configure** [port](#) *string* [ethernet](#) [lldp](#) [dest-mac](#) *keyword* [tx-tlvs](#) [port-desc](#) *boolean*  
Tree [port-desc](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **sys-cap** *boolean*

Synopsis Transmit system capabilities TLVs  
Context **configure** [port](#) *string* [ethernet](#) [lldp](#) [dest-mac](#) *keyword* [tx-tlvs](#) [sys-cap](#) *boolean*  
Tree [sys-cap](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **sys-desc** *boolean*

Synopsis Transmit system description TLVs  
Context **configure** [port](#) *string* [ethernet](#) [lldp](#) [dest-mac](#) *keyword* [tx-tlvs](#) [sys-desc](#) *boolean*  
Tree [sys-desc](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **sys-name** *boolean*

Synopsis Transmit system name TLVs  
Context **configure** [port](#) *string* [ethernet](#) [lldp](#) [dest-mac](#) *keyword* [tx-tlvs](#) [sys-name](#) *boolean*  
Tree [sys-name](#)  
Default false

Introduced	16.0.R1
Platforms	All

### **load-balancing-algorithm** *keyword*

Synopsis	Load balancing algorithm for the Ethernet port
Context	<b>configure</b> <b>port</b> <i>string</i> <b>ethernet</b> <b>load-balancing-algorithm</b> <i>keyword</i>
Tree	<b>load-balancing-algorithm</b>
Options	default, include-l4, exclude-l4
Introduced	16.0.R1
Platforms	All

### **mac-address** *string*

Synopsis	MAC address of the Ethernet port
Context	<b>configure</b> <b>port</b> <i>string</i> <b>ethernet</b> <b>mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Description	This command specifies the MAC address of the Ethernet port. Allowed values are any non-broadcast, non-multicast MAC, and non-IEEE reserved MAC addresses.  The default value indicates that an operation MAC address is to be assigned from the chassis MAC address pool.
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

### **min-frame-length** *number*

Synopsis	Minimum transmitted frame length
Context	<b>configure</b> <b>port</b> <i>string</i> <b>ethernet</b> <b>min-frame-length</b> <i>number</i>
Tree	<b>min-frame-length</b>
Description	This command configures the minimum transmitted frame length.  The option 72 is only supported on FP4 and newer generations of XMA, MDA-e-XP, and MDA-s.
Range	64   68   72
Units	bytes
Default	64

Introduced	16.0.R1
Platforms	All

### **mode** *keyword*

Synopsis	Operation mode for the Ethernet port
Context	<b>configure</b> <i>port string ethernet mode keyword</i>
Tree	<a href="#">mode</a>
Options	access, network, hybrid
Introduced	16.0.R1
Platforms	All

### **mtu** *number*

Synopsis	Maximum payload MTU size for the Ethernet port
Context	<b>configure</b> <i>port string ethernet mtu number</i>
Tree	<a href="#">mtu</a>
Description	<p>This command configures the maximum payload MTU size for the Ethernet port. This command indirectly defines the largest physical packet the port can transmit or the far-end Ethernet port can receive. Packets that cannot be fragmented at egress and exceed the MTU size are discarded.</p> <p>The MTU size includes the destination MAC address, source MAC address, the Ethertype or length field, and the complete Ethernet payload. This value does not include the preamble, start of frame delimiter, or the trailing CRC.</p>
Range	512 to 9800
Units	bytes
Introduced	16.0.R1
Platforms	All

### **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <i>port string ethernet network</i>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	All



**accounting-policy** *reference*

Synopsis	Accounting policy that applies to the network port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet network</a> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet network</a> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Description	<p>When configured to <b>true</b>, this command enables the collection of accounting and statistical data for the network interface. When applying accounting policies, by default the data is collected in the appropriate records and written to the designated billing file.</p> <p>When configured to <b>false</b>, the statistics are still accumulated by the XCM or IOM cards. However, the CPU does not obtain the results and write them to the billing file.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet network</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

**port-queues**

Synopsis	Enter the <b>port-queues</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet network</a> <a href="#">egress</a> <a href="#">port-queues</a>
Tree	<a href="#">port-queues</a>

Introduced	20.10.R1
Platforms	All

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port string ethernet network egress port-queues overrides</a>
Tree	<a href="#">overrides</a>
Description	Commands in this context configure Ethernet network egress port queue override parameters.
Introduced	20.10.R1
Platforms	All

## queue [[queue-id](#)] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">port string ethernet network egress port-queues overrides queue number</a>
Tree	<a href="#">queue</a>
Description	Commands in this context configure an Ethernet network queue.
Introduced	20.10.R1
Platforms	All

## [\[queue-id\]](#) *number*

Synopsis	Queue ID
Context	<b>configure</b> <a href="#">port string ethernet network egress port-queues overrides queue number</a>
Tree	<a href="#">queue</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

## monitor-queue-depth

Synopsis	Enable the <b>monitor-queue-depth</b> context
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Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">port-queues</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">monitor-queue-depth</a>
Tree	<a href="#">monitor-queue-depth</a>
Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	All

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">port-queues</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">monitor-queue-depth</a> <a href="#">fast-polling</a> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to <b>false</b> , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

### **violation-threshold** *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">port-queues</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">monitor-queue-depth</a> <a href="#">violation-threshold</a> <i>decimal-number</i>
Tree	<a href="#">violation-threshold</a>
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

### **queue-group** [[queue-group-name](#)] [reference](#) [instance-id](#) *number*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <i>number</i>

Tree	<a href="#">queue-group</a>
Introduced	16.0.R1
Platforms	All

### **[queue-group-name] reference**

Synopsis	Queue group name
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **instance-id number**

Synopsis	Instance ID for the egress queue group
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i>
Tree	<a href="#">queue-group</a>
Range	1 to 65535
MD-CLI	1
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **accounting-policy reference**

Synopsis	Accounting policy for the Ethernet port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1

Platforms All

### aggregate-rate

Synopsis Enter the **aggregate-rate** context

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* **aggregate-rate**

Tree [aggregate-rate](#)

Introduced 16.0.R1

Platforms All

### limit-unused-bandwidth *boolean*

Synopsis Control unused bandwidth

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* **aggregate-rate** **limit-unused-bandwidth** *boolean*

Tree [limit-unused-bandwidth](#)

Default false

Introduced 16.0.R1

Platforms All

### queue-frame-based-accounting *boolean*

Synopsis Enable frame-based accounting on policers and queues

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* **aggregate-rate** **queue-frame-based-accounting** *boolean*

Tree [queue-frame-based-accounting](#)

Default false

Introduced 16.0.R1

Platforms All

### rate (*number* | *keyword*)

Synopsis Aggregate rate for all queues

Context **configure** port *string* ethernet network egress queue-group *reference* instance-id *number* **aggregate-rate** **rate** (*number* | *keyword*)

Tree [rate](#)

Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number collect-stats <i>boolean</i>
Tree	collect-stats
Default	false
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**hs-turbo** *boolean*

Synopsis	Enable HS turbo queues for higher throughput
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number hs-turbo <i>boolean</i>
Tree	hs-turbo
Description	<p>When configured to <b>true</b>, this command enables HS turbo queues that allow the corresponding HSQ queue group queues to achieve a higher throughput.</p> <p>This command is not applicable to 10G ports and is ignored when it is configured under a queue group instance on a 10G port.</p>

	When configured to <b>false</b> , HS turbo queues are disabled.
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **policer-control-policy** *reference*

Synopsis	Policer control policy for the QoS egress queue group
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number <b>policer-control-policy</b> <i>reference</i>
Tree	<a href="#">policer-control-policy</a>
Reference	<b>configure</b> qos <a href="#">policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue-overrides**

Synopsis	Enter the <b>queue-overrides</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number <b>queue-overrides</b>
Tree	<a href="#">queue-overrides</a>
Description	Commands in this context define queue command overrides for each queue within the queue group.
Introduced	16.0.R1
Platforms	All

### **queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id number <b>queue-overrides</b> <b>queue</b> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id] reference**

Synopsis	Queue ID
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i>
Tree	queue
Reference	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule
Tree	adaptation-rule
Description	<p>Commands in this context specify the method used by the system to derive the operational CIR and PIR settings when the queue is provisioned in hardware. For the CIR and PIR commands individually, the system attempts to find the best operational rate depending on the defined constraint.</p> <p>Commands in this context are ignored for egress HSQ queue group queues that are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the adaptation rule is performed under the <b>hs-wrr-group</b> command within the egress queue group template.</p>
Introduced	16.0.R1
Platforms	All

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> adaptation-rule cir <i>keyword</i>
Tree	cir
Options	max, min, closest
Introduced	16.0.R1
Platforms	All



**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**cbs (number | keyword)**

Synopsis	CBS for the template queue
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">cbs</a> ( <a href="#">number</a>   <a href="#">keyword</a> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a>
Tree	<a href="#">drop-tail</a>
Description	Commands in this context configure queue drop tail commands.
Introduced	16.0.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a>

Tree	<a href="#">low</a>
Description	Commands in this context configure the queue low drop tail commands. The low drop tail defines the queue depth beyond which the out-of-profile packets are not accepted into the queue and discarded.
Introduced	16.0.R1
Platforms	All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Description	This command overrides the low queue drop tail as a percentage reduction from the MBS of the queue. For example, if a queue has an MBS of 600 kbytes and this percentage is configured to be 30% for the low drop tail, the low drop tail is set to 420 kbytes and the out-of-profile packets are not accepted into the queue if its depth is greater than this value, and is therefore discarded.
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

### **mbs** (*number* | *keyword*)

Synopsis	MBS for the template queue
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>reference</i> <a href="#">instance-id</a> <i>number</i> <a href="#">queue-overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

## monitor-queue-depth

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b>
Tree	<a href="#">monitor-queue-depth</a>
Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	All

## fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b> <b>fast-polling</b> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth. When configured to <b>false</b> , fast queue polling is not enabled.
Default	false
Introduced	20.10.R1
Platforms	All

## violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">network</a> <a href="#">egress</a> <a href="#">queue-group</a> <a href="#">reference</a> <a href="#">instance-id</a> <a href="#">number</a> <a href="#">queue-overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b> <b>violation-threshold</b> <i>decimal-number</i>
Tree	<a href="#">violation-threshold</a>
Description	This command specifies threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate
Tree	percent-rate
Description	<p>Commands in this context specify percent rates.</p> <p>This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the percent rate is performed under the <b>hs-wrr-group</b> command within the egress queue group template.</p>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

## cir decimal-number

Synopsis	CIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

## pir decimal-number

Synopsis	PIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> <b>rate</b>
Tree	<b>rate</b>
Description	<p>Commands in this context specify the administrative PIR and CIR for the queue. Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p> <p>This command can be executed at anytime, altering the PIR and CIR rates for all queues created through the association of the SAP egress QoS policy with the queue ID.</p> <p>This command is ignored for egress HSQ queue group queues, which are attached to an HS WRR group within an associated HS attachment policy. In this case, the configuration of the rate is performed under the <b>hs-wrr-group</b> command within the egress queue group template.</p>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Description	<p>This command specifies the administrative CIR used by the queue. When the <b>rate</b> command is executed, a CIR setting is optional. Fractional values are not allowed and must be given as a positive integer.</p> <p>The CIR defines the rate at which the system prioritizes the queue over other queues competing for the same bandwidth. In-profile then out-of-profile packets are preferentially queued by the system at egress and at subsequent next hop nodes where the packet can traverse. To be properly handled throughout the network, the packets must be marked accordingly for profiling at each hop.</p> <p>The CIR can be used by the queue's parent <b>cir-level</b> and <b>cir-weight</b> commands to define the amount of bandwidth considered to be committed for the child queue during bandwidth allocation by the parent scheduler.</p>
Range	0 to 2000000000
Units	kilobps
Options	max

Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	PIR for the queue
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> queue-overrides queue <i>reference</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Description	<p>This command specifies the administrative PIR used by the queue. When the <b>rate</b> command is executed, a valid PIR setting must be explicitly defined. Fractional values are not allowed and must be given as a positive integer. The actual PIR rate is dependent on the queue's <b>adaptation-rule</b> commands and the actual hardware where the queue is provisioned.</p> <p>The PIR defines the maximum rate that the queue can transmit packets out an egress interface (for SAP egress queues). Defining a PIR does not necessarily guarantee that the queue can transmit at the intended rate. The actual rate sustained by the queue can be limited by oversubscription factors or available egress bandwidth.</p>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy
Tree	scheduler-policy
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Scheduler policy for the QoS egress queue group
Context	<b>configure</b> port <i>string</i> ethernet network egress queue-group <i>reference</i> instance-id <i>number</i> scheduler-policy policy-name <i>reference</i>

Tree	<a href="#">policy-name</a>
Reference	<b>configure qos scheduler-policy</b> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **queue-policy** *reference*

Synopsis	Network queue policy
Context	<b>configure port</b> <i>string</i> <a href="#">ethernet network egress queue-policy</a> <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure qos network-queue</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **pbb-etype** *string*

Synopsis	Ethertype for PBB encapsulation
Context	<b>configure port</b> <i>string</i> <a href="#">ethernet pbb-etype</a> <i>string</i>
Tree	<a href="#">pbb-etype</a>
Default	35047
Introduced	16.0.R1
Platforms	All

### **ptp-asymmetry** *number*

Synopsis	PTP asymmetry delay on the Ethernet port
Context	<b>configure port</b> <i>string</i> <a href="#">ethernet ptp-asymmetry</a> <i>number</i>
Tree	<a href="#">ptp-asymmetry</a>
Description	This command configures the PTP asymmetry delay on the Ethernet port. This command is used to correct known asymmetry as part of time of day or phase recovery using PTP packets on both local and downstream PTP clocks.
Max. Range	-2147483648 to 2147483647
Units	nanoseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **qinq-etype** *string*

Synopsis	Ethertype for QinQ encapsulation
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">qinq-etype</a> <a href="#">string</a>
Tree	<a href="#">qinq-etype</a>
Default	33024
Introduced	16.0.R1
Platforms	All

### **report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">report-alarm</a>
Tree	<a href="#">report-alarm</a>
Description	Commands in this context specify the settings for alarm generation and alarm clear notifications for the port. <b>Note:</b> For some DWDM transceivers, if the <b>configure port dwdm coherent rx-los-reaction squelch</b> command is disabled, the signal-fail and no-am-lock alarm conditions are not reported when the media side of the transceiver has an RX LOS condition.
Introduced	16.0.R1
Platforms	All

### **alignment-marker-not-locked** *boolean*

Synopsis	Report 40G/100G PCS Alignment Marker Loss of Lock
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">report-alarm</a> <a href="#">alignment-marker-not-locked</a> <a href="#">boolean</a>
Tree	<a href="#">alignment-marker-not-locked</a>
Description	When configured to <b>true</b> , Alignment Marker Loss of Lock alarms are reported for this port.
Introduced	16.0.R2
Platforms	All

### **block-not-locked** *boolean*

Synopsis	Report 40G/100G PCS Lanes Not Block Locked
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">report-alarm</a> <a href="#">block-not-locked</a> <a href="#">boolean</a>



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Tree	<a href="#">block-not-locked</a>
Introduced	16.0.R2
Platforms	All

### **duplicate-lane** *boolean*

Synopsis	Report 40G/100G PCS Duplicate Lane Marker alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">report-alarm</a> <a href="#">duplicate-lane</a> <i>boolean</i>
Tree	<a href="#">duplicate-lane</a>
Introduced	16.0.R1
Platforms	All

### **frame-not-locked** *boolean*

Synopsis	Report "not locked on the Ethernet framing sequence"
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">report-alarm</a> <a href="#">frame-not-locked</a> <i>boolean</i>
Tree	<a href="#">frame-not-locked</a>
Introduced	16.0.R2
Platforms	All

### **high-ber** *boolean*

Synopsis	Report High Bit Error Rate
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">report-alarm</a> <a href="#">high-ber</a> <i>boolean</i>
Tree	<a href="#">high-ber</a>
Introduced	16.0.R1
Platforms	All

### **local** *boolean*

Synopsis	Report local faults
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">report-alarm</a> <a href="#">local</a> <i>boolean</i>
Tree	<a href="#">local</a>
Introduced	16.0.R1
Platforms	All

**remote** *boolean*

Synopsis	Report remote faults
Context	<b>configure</b> port string ethernet report-alarm remote <i>boolean</i>
Tree	remote
Introduced	16.0.R1
Platforms	All

**signal-fail** *boolean*

Synopsis	Report Ethernet signal lost alarm
Context	<b>configure</b> port string ethernet report-alarm signal-fail <i>boolean</i>
Tree	signal-fail
Introduced	16.0.R1
Platforms	All

**rs-fec-mode** *keyword*

Synopsis	RS-FEC mode on the Ethernet port
Context	<b>configure</b> port string ethernet rs-fec-mode <i>keyword</i>
Tree	rs-fec-mode
Description	This command specifies the RS-FEC (Reed-Solomon Forward Error Correction) mode on the Ethernet port.  See "Forward Error Correction" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Interface Configuration Guide</i> for more information about FEC settings.
Options	cl91-514-528, cl74, cl108
Introduced	16.0.R1
Platforms	All

**single-fiber** *boolean*

Synopsis	Enable packet gathering from a single fiber port
Context	<b>configure</b> port string ethernet single-fiber <i>boolean</i>
Tree	single-fiber
Description	When configured to <b>true</b> , this command enables packet gathering and redirection of IP packets from a single fiber (Rx) port of the Ethernet or SONET/SDH interface and

redistributes packets to other interfaces through static routes or policy-based forwarding. Traffic is no longer transmitted out of the port.

When configured to **false**, packet gathering is disabled.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## speed number

Synopsis	Ethernet port speed
Context	<b>configure</b> port string ethernet speed number
Tree	speed
Description	<p>This command configures the port speed for ports that support multiple speeds. This applies to the following:</p> <ul style="list-style-type: none"> <li>• Fast Ethernet when autonegotiation is not enabled</li> <li>• 10/100/1000 Mb/s Ethernet when autonegotiation is not enabled</li> <li>• 10/1G ports supporting 10G SFP+ or 1G SFP</li> <li>• 40/100G ports supporting QSFP28s on non connector-based MDAs</li> </ul> <p>If autonegotiation is enabled for the port, this command setting is ignored. Speed cannot be configured for ports that are part of a LAG.</p>
Range	10   100   1000   10000   25000   40000   50000   100000
Units	megabps
Introduced	16.0.R1
Platforms	All

## ssm

Synopsis	Enter the <b>ssm</b> context
Context	<b>configure</b> port string ethernet ssm
Tree	ssm
Description	<p>Commands in this context configure the Ethernet Synchronization Messaging Channel (ESMC) for the Ethernet port. The ESMC carries the Synchronization Status Message (SSM) code representing the quality level of the source of the frequency of the central clock of the node.</p>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the ESMC for the Ethernet port
Context	<b>configure</b> <b>port</b> <i>string</i> <b>ethernet ssm admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**code-type** *keyword*

Synopsis	Encoding of synchronization status messages
Context	<b>configure</b> <b>port</b> <i>string</i> <b>ethernet ssm code-type</b> <i>keyword</i>
Tree	<b>code-type</b>
Options	sonet, sdh
Default	sdh
Introduced	16.0.R1
Platforms	All

**esmc-tunnel** *boolean*

Synopsis	Tunnel ESMC frames in Epipe or VPLS services
Context	<b>configure</b> <b>port</b> <i>string</i> <b>ethernet ssm esmc-tunnel</b> <i>boolean</i>
Tree	<b>esmc-tunnel</b>
Description	<p>When configured to <b>true</b>, ESMC frames that are received into the Ethernet port can be tunneled in an Epipe or VPLS service. This is not recommended because it breaks the concepts inherent in Synchronous Ethernet, however it is required for compliance to MEF 6.1.1 EPL Option 2.</p> <p>When configured to <b>false</b>, ESMC frames are extracted upon reception by the port and are not tunneled through the service.</p>
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-dus** *boolean*

Synopsis	Force QL value transmitted be set to QL-DNU or QL-DUS
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">ssm</a> <a href="#">tx-dus</a> <i>boolean</i>
Tree	<a href="#">tx-dus</a>
Introduced	16.0.R1
Platforms	All

**symbol-monitor**

Synopsis	Enter the <b>symbol-monitor</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">symbol-monitor</a>
Tree	<a href="#">symbol-monitor</a>
Description	Commands in this context configure Ethernet symbol monitoring. Support for symbol monitoring is hardware dependent. An error message indicating that the port setting cannot be modified is presented when attempting to enable the feature or configure the individual commands on unsupported hardware.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of symbol monitoring on the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">symbol-monitor</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**signal-degrade**

Synopsis	Enter the <b>signal-degrade</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">symbol-monitor</a> <a href="#">signal-degrade</a>
Tree	<a href="#">signal-degrade</a>
Description	Commands in this context specify the error rate at which to declare the SD condition on an Ethernet interface. The value represents M*10E-N, which is the ratio of errored

frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *number*

Synopsis	SD multiplier used to scale the symbol error ratio
Context	<b>configure</b> <a href="#">port string</a> <a href="#">ethernet symbol-monitor signal-degrade multiplier number</a>
Tree	<a href="#">multiplier</a>
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **threshold** *number*

Synopsis	SD threshold for symbol errors
Context	<b>configure</b> <a href="#">port string</a> <a href="#">ethernet symbol-monitor signal-degrade threshold number</a>
Tree	<a href="#">threshold</a>
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **signal-failure**

Synopsis	Enter the <b>signal-failure</b> context
Context	<b>configure</b> <a href="#">port string</a> <a href="#">ethernet symbol-monitor signal-failure</a>
Tree	<a href="#">signal-failure</a>
Description	Commands in this context specify the error rate at which to declare the SF condition on an Ethernet interface. The value represents $M \cdot 10E-N$ , which is the ratio of errored frames over the total frames received over the sliding window interval. The symbol errors on the interface are sampled once per second.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**multiplier** *number*

Synopsis	SF multiplier used to scale the symbol error ratio
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">symbol-monitor</a> <a href="#">signal-failure</a> <b>multiplier</b> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 9
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**threshold** *number*

Synopsis	SF threshold for symbol errors
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">symbol-monitor</a> <a href="#">signal-failure</a> <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**window-size** *number*

Synopsis	Sliding window size over which errors are measured
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">symbol-monitor</a> <b>window-size</b> <i>number</i>
Tree	<a href="#">window-size</a>
Description	This command specifies the sliding window size over which the symbols are sampled to detect SF or SD conditions.
Range	5 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**util-stats-interval** *number*

Synopsis	Interval to calculate utilization statistics
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <b>util-stats-interval</b> <i>number</i>

Tree	<a href="#">util-stats-interval</a>
Description	<p>This command configures the interval used to calculate the utilization statistics.</p> <p>Port utilization statistics are only available for physical Ethernet ports on a host system. These statistics are not available for the following:</p> <ul style="list-style-type: none"> <li>• Ethernet ports on an Ethernet satellite</li> <li>• Ethernet ports on a VSR</li> <li>• PXC ports</li> <li>• vsm-cca-xp ports</li> </ul>
Range	30 to 600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	All

### **xgig** keyword

Synopsis	Ethernet port mode
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">xgig</a> <i>keyword</i>
Tree	<a href="#">xgig</a>
Description	<p>This command configures a 10 Gb/s interface to be in LAN or WAN mode.</p> <p>When configuring the port to be in WAN mode, certain SONET/SDH commands can be changed to reflect the SONET/SDH requirements for the port. When configuring the port to be in LAN mode, all SONET/SDH commands are pre-determined and not configurable.</p>
Options	lan, wan
Introduced	16.0.R1
Platforms	All

### **gnss**

Synopsis	Enter the <b>gnss</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">gnss</a>
Tree	<a href="#">gnss</a>
Description	Commands in this context configure GNSS port attributes.
Introduced	22.10.R1



Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **antenna-cable-delay** *number*

Synopsis Signal delay resulting from GNSS antenna cable length

Context **configure** *port string gnss antenna-cable-delay number*

Tree [antenna-cable-delay](#)

Description This command configures the expected signal delay resulting from the length of the GNSS antenna cable.  
**Note:** 7750 SR FP5 GNSS platforms support a value range of 0 to 1000.

Range 0 to 32767

Units nanoseconds

Default 0

Introduced 22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **constellation**

Synopsis Enter the **constellation** context

Context **configure** *port string gnss constellation*

Tree [constellation](#)

Description Commands in this context configure the GNSS systems that are used by the GNSS receiver.

Introduced 22.10.R1

Platforms 7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **galileo** *boolean*

Synopsis Enable GNSS receiver to use GALILEO constellation type

Context **configure** *port string gnss constellation galileo boolean*

Tree [galileo](#)

Description When configured to **true**, this command enables the use of the European Galileo GNSS system.

Default false

Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **glonass** *boolean*

Synopsis	Enable GNSS receiver to use GLONASS constellation type
Context	<b>configure</b> port string <a href="#">gnss constellation glonass</a> <i>boolean</i>
Tree	<a href="#">glonass</a>
Description	When configured to <b>true</b> , the system enables the use of the Russian GLONASS GNSS system. <b>Note:</b> The <b>glonass</b> command is currently not supported.
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **gps** *boolean*

Synopsis	Enable GNSS receiver to use GPS constellation type
Context	<b>configure</b> port string <a href="#">gnss constellation gps</a> <i>boolean</i>
Tree	<a href="#">gps</a>
Description	When configured to <b>true</b> , this command enables the use of the American GPS GNSS system. When configured to <b>false</b> , this command disables the use of the American GPS GNSS system.
Default	true
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **elevation-mask-angle** *number*

Synopsis	Minimum elevation mask angle
Context	<b>configure</b> port string <a href="#">gnss elevation-mask-angle</a> <i>number</i>
Tree	<a href="#">elevation-mask-angle</a>

Description	This command configures the elevation mask angle, which provides a method of filtering satellites used by the system.  Satellites with low elevation may provide degraded accuracy because of the long signal path through the atmosphere. Signals from satellites below the configured minimum satellite elevation are not used.  Nokia does not recommend configuring an elevation mask angle below 10.
Range	0 to 89
Units	degrees angle
Default	10
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### hybrid-buffer-allocation

Synopsis	Enter the <b>hybrid-buffer-allocation</b> context
Context	<b>configure</b> port <i>string</i> hybrid-buffer-allocation
Tree	hybrid-buffer-allocation
Introduced	16.0.R1
Platforms	All

### egress-weight

Synopsis	Enter the <b>egress-weight</b> context
Context	<b>configure</b> port <i>string</i> hybrid-buffer-allocation egress-weight
Tree	egress-weight
Introduced	16.0.R1
Platforms	All

### access number

Synopsis	Access weight for the hybrid port
Context	<b>configure</b> port <i>string</i> hybrid-buffer-allocation egress-weight access <i>number</i>
Tree	access
Range	0 to 100
Default	50

Introduced	16.0.R1
Platforms	All

### **network number**

Synopsis	Access weight for the hybrid port
Context	<b>configure port string hybrid-buffer-allocation egress-weight network number</b>
Tree	<a href="#">network</a>
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

### **ingress-weight**

Synopsis	Enter the <b>ingress-weight</b> context
Context	<b>configure port string hybrid-buffer-allocation ingress-weight</b>
Tree	<a href="#">ingress-weight</a>
Introduced	16.0.R1
Platforms	All

### **access number**

Synopsis	Access weight for the hybrid port
Context	<b>configure port string hybrid-buffer-allocation ingress-weight access number</b>
Tree	<a href="#">access</a>
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

### **network number**

Synopsis	Access weight for the hybrid port
Context	<b>configure port string hybrid-buffer-allocation ingress-weight network number</b>

Tree	<a href="#">network</a>
Range	0 to 100
Default	50
Introduced	16.0.R1
Platforms	All

## modify-buffer-allocation

Synopsis	Enter the <b>modify-buffer-allocation</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">modify-buffer-allocation</a>
Tree	<a href="#">modify-buffer-allocation</a>
Description	Commands in this context to configure ingress and egress percentage of rate commands. These commands only apply to physical ports (for example, it does not work on APS or similar logical ports). The percentage of rate commands are used to define a percentage value that affects the amount of buffers used by ingress and egress port managed buffer space.
Introduced	16.0.R1
Platforms	All

## percentage-of-rate

Synopsis	Enter the <b>percentage-of-rate</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">modify-buffer-allocation</a> <a href="#">percentage-of-rate</a>
Tree	<a href="#">percentage-of-rate</a>
Description	Commands in this context increase or decrease the active bandwidth associated with the egress or ingress port that affects the amount of egress or ingress buffer space managed by the port. Changing a ports active bandwidth using the commands in this context are an effective means of artificially lowering the buffers managed by one egress or ingress port and giving them to the other egress or ingress ports on the same MDA.
Introduced	16.0.R1
Platforms	All

## egress *number*

Synopsis	Egress rate percentage
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">modify-buffer-allocation</a> <a href="#">percentage-of-rate</a> <a href="#">egress</a> <i>number</i>
Tree	<a href="#">egress</a>

Range	1 to 1000
Introduced	16.0.R1
Platforms	All

### **ingress** *number*

Synopsis	Ingress rate percentage
Context	<b>configure</b> <a href="#">port string</a> <a href="#">modify-buffer-allocation</a> <a href="#">percentage-of-rate</a> <b>ingress</b> <i>number</i>
Tree	<a href="#">ingress</a>
Range	1 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **monitor-agg-egress-queue-stats** *boolean*

Synopsis	Monitor aggregate queue statistics
Context	<b>configure</b> <a href="#">port string</a> <a href="#">monitor-agg-egress-queue-stats</a> <i>boolean</i>
Tree	<a href="#">monitor-agg-egress-queue-stats</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **monitor-oper-group** *reference*

Synopsis	Operational group to monitor
Context	<b>configure</b> <a href="#">port string</a> <a href="#">monitor-oper-group</a> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Description	This command configures the operational group to monitor the operational group state. The state of the operational group affects the state of this port. When the operational group is inactive, the state of the port goes down and powers off the port to signal to the CE that the connected port is not available.
Reference	<b>configure</b> <a href="#">service oper-group</a> <i>string</i>
Introduced	22.7.R1
Platforms	All

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <i>port string</i> <b>network</b>
Tree	<b>network</b>
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <i>port string</i> <b>network egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	All

## pool [*name*] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <i>port string</i> <b>network egress pool</b> <i>string</i>
Tree	<b>pool</b>
Introduced	16.0.R1
Platforms	All

## [*name*] *string*

Synopsis	Pool name
Context	<b>configure</b> <i>port string</i> <b>network egress pool</b> <i>string</i>
Tree	<b>pool</b>
String Length	1 to 32
MD-CLI Default	default
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**amber-alarm-threshold** *number*

Synopsis	Threshold for the amber alarm on oversubscription
Context	<b>configure</b> <i>port string network egress pool string</i> <b>amber-alarm-threshold</b> <i>number</i>
Tree	<a href="#">amber-alarm-threshold</a>
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**red-alarm-threshold** *number*

Synopsis	Threshold for the red alarm on oversubscription
Context	<b>configure</b> <i>port string network egress pool string</i> <b>red-alarm-threshold</b> <i>number</i>
Tree	<a href="#">red-alarm-threshold</a>
Range	1 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**resv-cbs**

Synopsis	Enter the <b>resv-cbs</b> context
Context	<b>configure</b> <i>port string network egress pool string</i> <b>resv-cbs</b>
Tree	<a href="#">resv-cbs</a>
Introduced	16.0.R1
Platforms	All

**amber-alarm-action**

Synopsis	Enter the <b>amber-alarm-action</b> context
Context	<b>configure</b> <i>port string network egress pool string</i> <b>resv-cbs</b> <b>amber-alarm-action</b>
Tree	<a href="#">amber-alarm-action</a>
Introduced	16.0.R1
Platforms	All



**max number**

Synopsis	Maximum percentage for reserved CBS of the pool
Context	<b>configure</b> port string network egress pool string resv-cbs amber-alarm-action max number
Tree	max
Description	<p>This command specifies the maximum percentage for the reserved CBS of the pool. The maximum reserved CBS must not be less than the value of the reserved CBS.</p> <p>To enable adaptive CBS sizing the <b>max</b>, <b>step</b>, and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**step number**

Synopsis	Step-size percentage for reserved CBS of the pool
Context	<b>configure</b> port string network egress pool string resv-cbs amber-alarm-action step number
Tree	step
Description	<p>This command specifies the step-size percentage for the reserved CBS of the pool.</p> <p>To enable adaptive CBS sizing the <b>max</b>, <b>step</b>, and <b>cbs</b> commands must be configured. The <b>cbs</b> command must also be configured to a percentage other than the default value.</p> <p>When unconfigured, CBS adaptive sizing is not enabled.</p>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**cbs (number | keyword)**

Synopsis	Percentage of the pool buffer space reserved for CBS
Context	<b>configure</b> port string network egress pool string resv-cbs cbs (number   keyword)

Tree	<a href="#">cbs</a>
Range	0 to 100
Units	percent
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **slope-policy** *reference*

Synopsis	Policy for the RED slope and TAF values
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">network egress pool</a> <i>string</i> <a href="#">slope-policy</a> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group ID
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">oper-group</a> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group</a> <i>string</i>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **otu**

Synopsis	Enable the <b>otu</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">otu</a>
Tree	<a href="#">otu</a>
Introduced	16.0.R1
Platforms	All

### **async-mapping** *boolean*

Synopsis	Allow asynchronous mapping of the payload inside OTU
Context	<b>configure</b> port <i>string</i> otu <b>async-mapping</b> <i>boolean</i>
Tree	<a href="#">async-mapping</a>
Introduced	16.0.R1
Platforms	All

### **fec** *keyword*

Synopsis	Forwarding Error Correction (FEC) encapsulation on port
Context	<b>configure</b> port <i>string</i> otu <b>fec</b> <i>keyword</i>
Tree	<a href="#">fec</a>
Options	none, g709, enhanced
Introduced	16.0.R1
Platforms	All

### **fine-granularity-ber**

Synopsis	Enter the <b>fine-granularity-ber</b> context
Context	<b>configure</b> port <i>string</i> otu <b>fine-granularity-ber</b>
Tree	<a href="#">fine-granularity-ber</a>
Introduced	16.0.R1
Platforms	All

### **signal-degrade**

Synopsis	Enter the <b>signal-degrade</b> context
Context	<b>configure</b> port <i>string</i> otu <b>fine-granularity-ber</b> <b>signal-degrade</b>
Tree	<a href="#">signal-degrade</a>
Introduced	16.0.R1
Platforms	All

### **clear**

Synopsis	Enter the <b>clear</b> context
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Context	<b>configure</b> port <i>string</i> otu fine-granularity-ber signal-degrade clear
Tree	clear
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Multiplier of the SD clear threshold
Context	<b>configure</b> port <i>string</i> otu fine-granularity-ber signal-degrade clear multiplier <i>number</i>
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	SD clear threshold
Context	<b>configure</b> port <i>string</i> otu fine-granularity-ber signal-degrade clear threshold <i>number</i>
Tree	threshold
Range	3 to 10
Default	8
Introduced	16.0.R1
Platforms	All

### **raise**

Synopsis	Enter the <b>raise</b> context
Context	<b>configure</b> port <i>string</i> otu fine-granularity-ber signal-degrade raise
Tree	raise
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Multiplier of the SD raise threshold
Context	<b>configure</b> port <i>string</i> otu <i>fine-granularity-ber</i> signal-degrade raise multiplier <i>number</i>
Tree	<a href="#">multiplier</a>
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	SD raise threshold
Context	<b>configure</b> port <i>string</i> otu <i>fine-granularity-ber</i> signal-degrade raise threshold <i>number</i>
Tree	<a href="#">threshold</a>
Range	3 to 9
Default	7
Introduced	16.0.R1
Platforms	All

### **signal-failure**

Synopsis	Enter the <b>signal-failure</b> context
Context	<b>configure</b> port <i>string</i> otu <i>fine-granularity-ber</i> signal-failure
Tree	<a href="#">signal-failure</a>
Introduced	16.0.R1
Platforms	All

### **clear**

Synopsis	Enter the <b>clear</b> context
Context	<b>configure</b> port <i>string</i> otu <i>fine-granularity-ber</i> signal-failure clear
Tree	<a href="#">clear</a>
Introduced	16.0.R1
Platforms	All

**multiplier number**

Synopsis	Threshold for the Multiplier of SD clear
Context	<b>configure</b> port string otu fine-granularity-ber signal-failure clear multiplier number
Tree	multiplier
Range	10 to 99
Default	10
Introduced	16.0.R1
Platforms	All

**threshold number**

Synopsis	Threshold for the Multiplier of SD clear
Context	<b>configure</b> port string otu fine-granularity-ber signal-failure clear threshold number
Tree	threshold
Range	3 to 9
Default	6
Introduced	16.0.R1
Platforms	All

**raise**

Synopsis	Enter the <b>raise</b> context
Context	<b>configure</b> port string otu fine-granularity-ber signal-failure raise
Tree	raise
Introduced	16.0.R1
Platforms	All

**multiplier number**

Synopsis	SF raise threshold
Context	<b>configure</b> port string otu fine-granularity-ber signal-failure raise multiplier number
Tree	multiplier
Range	10 to 99
Default	10

Introduced 16.0.R1  
Platforms All

### **threshold** *number*

Synopsis SF raise threshold  
Context **configure** port *string* otu *fine-granularity-ber* signal-failure raise threshold *number*  
Tree [threshold](#)  
Range 3 to 8  
Default 5  
Introduced 16.0.R1  
Platforms All

### **otu2-lan-data-rate** *keyword*

Synopsis Data rate for 10GE LAN OTU2 on the port  
Context **configure** port *string* otu otu2-lan-data-rate *keyword*  
Tree [otu2-lan-data-rate](#)  
Units gigabps  
Options 11.049, 11.096  
Introduced 16.0.R1  
Platforms All

### **path-monitoring**

Synopsis Enter the **path-monitoring** context  
Context **configure** port *string* otu [path-monitoring](#)  
Tree [path-monitoring](#)  
Introduced 16.0.R4  
Platforms All

### **trail-trace-identifier**

Synopsis Enter the **trail-trace-identifier** context  
Context **configure** port *string* otu [path-monitoring](#) [trail-trace-identifier](#)

Tree	<a href="#">trail-trace-identifier</a>
Introduced	16.0.R4
Platforms	All

### expected

Synopsis	Enter the <b>expected</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">expected</a>
Tree	<a href="#">expected</a>
Introduced	16.0.R4
Platforms	All

### auto-generated

Synopsis	Use the system generated TTI
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">expected</a> <a href="#">auto-generated</a>
Tree	<a href="#">auto-generated</a>
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

### bytes *string*

Synopsis	TTI as a sequence of bytes
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">expected</a> <a href="#">bytes</a> <a href="#">string</a>
Tree	<a href="#">bytes</a>
String Length	0 to 192
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

### string *string*

Synopsis	TTI as a sequence of printable ASCII
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">expected</a> <a href="#">string</a> <a href="#">string</a>



Tree	<a href="#">string</a>
String Length	0 to 64
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

### **mismatch-reaction** *keyword*

Synopsis	Reaction to a mismatched TTI
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">mismatch-reaction</a> <i>keyword</i>
Tree	<a href="#">mismatch-reaction</a>
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

### **transmit**

Synopsis	Enter the <b>transmit</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a>
Tree	<a href="#">transmit</a>
Introduced	16.0.R4
Platforms	All

### **auto-generated**

Synopsis	Use the system generated TTI
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a> <a href="#">auto-generated</a>
Tree	<a href="#">auto-generated</a>
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**bytes** *string*

Synopsis	TTI as a sequence of bytes
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a> <a href="#">bytes</a> <i>string</i>
Tree	<a href="#">bytes</a>
String Length	0 to 192
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**string** *string*

Synopsis	TTI as a sequence of printable ASCII
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">path-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	0 to 64
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**payload-structure-identifier**

Synopsis	Enter the <b>payload-structure-identifier</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">payload-structure-identifier</a>
Tree	<a href="#">payload-structure-identifier</a>
Introduced	16.0.R4
Platforms	All

**payload**

Synopsis	Enter the <b>payload</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">payload-structure-identifier</a> <a href="#">payload</a>
Tree	<a href="#">payload</a>
Introduced	16.0.R4
Platforms	All

**expected** *keyword*

Synopsis	Configure the port's PSI payload expected parameters.
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">payload-structure-identifier</a> <a href="#">payload</a> <b>expected</b> <i>keyword</i>
Tree	<a href="#">expected</a>
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Default	auto
Introduced	16.0.R4
Platforms	All

**mismatch-reaction** *keyword*

Synopsis	Reaction to a mismatched payload
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">payload-structure-identifier</a> <a href="#">payload</a> <b>mismatch-reaction</b> <i>keyword</i>
Tree	<a href="#">mismatch-reaction</a>
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

**transmit** *keyword*

Synopsis	Transmit payload type
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">payload-structure-identifier</a> <a href="#">payload</a> <b>transmit</b> <i>keyword</i>
Tree	<a href="#">transmit</a>
Options	auto, experimental, asynchronous-cbr, bit-synchronous-cbr, atm, gfp, vcat, gmp, bit-stream-octet, bit-stream-non-octet, odu-mux, reserved-80, reserved-81, reserved-82, reserved-83, reserved-84, reserved-85, reserved-86, reserved-87, reserved-88, reserved-89, reserved-8a, reserved-8b, reserved-8c, reserved-8d, reserved-8e, reserved-8f, null-test, prbs-test
Default	auto
Introduced	16.0.R4
Platforms	All

## report-alarm

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a>
Tree	<a href="#">report-alarm</a>
Introduced	16.0.R1
Platforms	All

## fec-fail *boolean*

Synopsis	Report FEC mode mismatch alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">fec-fail</a> <i>boolean</i>
Tree	<a href="#">fec-fail</a>
Default	false
Introduced	16.0.R1
Platforms	All

## fec-sd *boolean*

Synopsis	Report Signal Degrade alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">fec-sd</a> <i>boolean</i>
Tree	<a href="#">fec-sd</a>
Default	false
Introduced	16.0.R1
Platforms	All

## fec-sf *boolean*

Synopsis	Report Signal Fail alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">fec-sf</a> <i>boolean</i>
Tree	<a href="#">fec-sf</a>
Default	true
Introduced	16.0.R1
Platforms	All

**fec-uncorr** *boolean*

Synopsis	Report one or more Uncorrectable FEC errors alarm
Context	<b>configure</b> <i>port string otu report-alarm fec-uncorr boolean</i>
Tree	<i>fec-uncorr</i>
Default	false
Introduced	16.0.R1
Platforms	All

**loc** *boolean*

Synopsis	Report OTU alarm for loss of clock
Context	<b>configure</b> <i>port string otu report-alarm loc boolean</i>
Tree	<i>loc</i>
Default	true
Introduced	16.0.R1
Platforms	All

**lof** *boolean*

Synopsis	Report alarm for the loss of OTU framing
Context	<b>configure</b> <i>port string otu report-alarm lof boolean</i>
Tree	<i>lof</i>
Default	true
Introduced	16.0.R1
Platforms	All

**lom** *boolean*

Synopsis	Report alarm for the loss of multi-frame
Context	<b>configure</b> <i>port string otu report-alarm lom boolean</i>
Tree	<i>lom</i>
Default	true
Introduced	16.0.R1
Platforms	All

**los** *boolean*

Synopsis	Report alarm for the loss of signal transitions on data
Context	<b>configure</b> <i>port string otu report-alarm los boolean</i>
Tree	<a href="#">los</a>
Default	true
Introduced	16.0.R1
Platforms	All

**odu-ais** *boolean*

Synopsis	Report ODU Alarm Indication Signal alarm
Context	<b>configure</b> <i>port string otu report-alarm odu-ais boolean</i>
Tree	<a href="#">odu-ais</a>
Default	false
Introduced	16.0.R1
Platforms	All

**odu-bdi** *boolean*

Synopsis	Report PM Backward Defect Indication alarm
Context	<b>configure</b> <i>port string otu report-alarm odu-bdi boolean</i>
Tree	<a href="#">odu-bdi</a>
Default	false
Introduced	16.0.R1
Platforms	All

**odu-lck** *boolean*

Synopsis	Report ODU Locked alarm
Context	<b>configure</b> <i>port string otu report-alarm odu-lck boolean</i>
Tree	<a href="#">odu-lck</a>
Default	false
Introduced	16.0.R1
Platforms	All

**odu-oci** *boolean*

Synopsis	Report ODU Open Connection Indication alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">odu-oci</a> <i>boolean</i>
Tree	<a href="#">odu-oci</a>
Default	false
Introduced	16.0.R1
Platforms	All

**odu-tim** *boolean*

Synopsis	Report PM Trace ID Mismatch alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">odu-tim</a> <i>boolean</i>
Tree	<a href="#">odu-tim</a>
Default	false
Introduced	16.0.R1
Platforms	All

**opu-plm** *boolean*

Synopsis	Report PSI Payload Type Mismatch alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">opu-plm</a> <i>boolean</i>
Tree	<a href="#">opu-plm</a>
Default	false
Introduced	16.0.R1
Platforms	All

**otu-ais** *boolean*

Synopsis	Report OTU Alarm Indication Signal alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">otu-ais</a> <i>boolean</i>
Tree	<a href="#">otu-ais</a>
Default	false
Introduced	16.0.R1
Platforms	All

**otu-bdi** *boolean*

Synopsis	Report SM Backward Defect Indication alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">otu-bdi</a> <i>boolean</i>
Tree	<a href="#">otu-bdi</a>
Default	true
Introduced	16.0.R1
Platforms	All

**otu-ber-sd** *boolean*

Synopsis	Report SM Signal Degrade alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">otu-ber-sd</a> <i>boolean</i>
Tree	<a href="#">otu-ber-sd</a>
Default	false
Introduced	16.0.R1
Platforms	All

**otu-ber-sf** *boolean*

Synopsis	Report SM Signal Fail alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">otu-ber-sf</a> <i>boolean</i>
Tree	<a href="#">otu-ber-sf</a>
Default	true
Introduced	16.0.R1
Platforms	All

**otu-biae** *boolean*

Synopsis	Report SM Backward Incoming Alignment Error alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">report-alarm</a> <a href="#">otu-biae</a> <i>boolean</i>
Tree	<a href="#">otu-biae</a>
Default	false
Introduced	16.0.R1
Platforms	All



**otu-iae** *boolean*

Synopsis	Report SM Incoming Alignment Error alarm
Context	<b>configure</b> <i>port string otu report-alarm otu-iae boolean</i>
Tree	<a href="#">otu-iae</a>
Default	false
Introduced	16.0.R1
Platforms	All

**otu-tim** *boolean*

Synopsis	Report SM Trace ID Mismatch alarm
Context	<b>configure</b> <i>port string otu report-alarm otu-tim boolean</i>
Tree	<a href="#">otu-tim</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sd-threshold** *number*

Synopsis	Error rate at which to declare signal degrade condition
Context	<b>configure</b> <i>port string otu sd-threshold number</i>
Tree	<a href="#">sd-threshold</a>
Range	5 to 9
Default	7
Introduced	16.0.R1
Platforms	All

**section-monitoring**

Synopsis	Enter the <b>section-monitoring</b> context
Context	<b>configure</b> <i>port string otu section-monitoring</i>
Tree	<a href="#">section-monitoring</a>
Introduced	16.0.R4
Platforms	All

## trail-trace-identifier

Synopsis	Enter the <b>trail-trace-identifier</b> context
Context	<b>configure</b> port <i>string</i> otu section-monitoring trail-trace-identifier
Tree	trail-trace-identifier
Introduced	16.0.R4
Platforms	All

## expected

Synopsis	Enter the <b>expected</b> context
Context	<b>configure</b> port <i>string</i> otu section-monitoring trail-trace-identifier expected
Tree	expected
Introduced	16.0.R4
Platforms	All

## auto-generated

Synopsis	Use the system generated TTI
Context	<b>configure</b> port <i>string</i> otu section-monitoring trail-trace-identifier expected auto-generated
Tree	auto-generated
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

## bytes *string*

Synopsis	TTI as a sequence of bytes
Context	<b>configure</b> port <i>string</i> otu section-monitoring trail-trace-identifier expected bytes <i>string</i>
Tree	bytes
String Length	0 to 192
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**string** *string*

Synopsis	TTI as a sequence of printable ASCII
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">expected</a> <a href="#">string</a> <a href="#">string</a>
Tree	<a href="#">string</a>
String Length	0 to 64
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	All

**mismatch-reaction** *keyword*

Synopsis	Reaction to a mismatched TTI
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">mismatch-reaction</a> <a href="#">keyword</a>
Tree	<a href="#">mismatch-reaction</a>
Options	squelch-rx
Introduced	16.0.R4
Platforms	All

**transmit**

Synopsis	Enter the <b>transmit</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a>
Tree	<a href="#">transmit</a>
Introduced	16.0.R4
Platforms	All

**auto-generated**

Synopsis	Use the system generated TTI
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">otu</a> <a href="#">section-monitoring</a> <a href="#">trail-trace-identifier</a> <a href="#">transmit</a> <a href="#">auto-generated</a>
Tree	<a href="#">auto-generated</a>
Notes	The following elements are part of a choice: <b>auto-generated</b> , <b>bytes</b> , or <b>string</b> .
Introduced	16.0.R4

Platforms All

### **bytes** *string*

Synopsis TTI as a sequence of bytes

Context **configure** [port](#) [string](#) [otu](#) [section-monitoring](#) [trail-trace-identifier](#) [transmit](#) **bytes** *string*

Tree [bytes](#)

String Length 0 to 192

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 16.0.R4

Platforms All

### **string** *string*

Synopsis TTI as a sequence of printable ASCII

Context **configure** [port](#) [string](#) [otu](#) [section-monitoring](#) [trail-trace-identifier](#) [transmit](#) **string** *string*

Tree [string](#)

String Length 0 to 64

Notes The following elements are part of a choice: **auto-generated**, **bytes**, or **string**.

Introduced 16.0.R4

Platforms All

### **sf-sd-method** *keyword*

Synopsis Method used to determine the SF and SD alarms

Context **configure** [port](#) [string](#) [otu](#) **sf-sd-method** *keyword*

Tree [sf-sd-method](#)

Options fec, bip8

Default fec

Introduced 16.0.R1

Platforms All

### **sf-threshold** *number*

Synopsis Error rate at which to declare signal fail condition

Context	<b>configure port string otu sf-threshold number</b>
Tree	<a href="#">sf-threshold</a>
Range	3 to 6
Default	5
Introduced	16.0.R1
Platforms	All

## sonet-sdh

Synopsis	Enter the <b>sonet-sdh</b> context
Context	<b>configure port string sonet-sdh</b>
Tree	<a href="#">sonet-sdh</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## clock-source *keyword*

Synopsis	Clock used for transmitted data
Context	<b>configure port string sonet-sdh clock-source keyword</b>
Tree	<a href="#">clock-source</a>
Options	loop-timed, node-timed
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## framing *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET or SDH framing
Context	<b>configure port string sonet-sdh framing keyword</b>
Tree	<a href="#">framing</a>
Options	sonet, sdh
Default	sonet
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **group** [group-index] *string*

Synopsis Enter the **group** list instance  
 Context **configure** port *string* sonet-sdh group *string*  
 Tree [group](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[group-index]** *string*

Synopsis Components making up the specified SONET/SDH path  
 Context **configure** port *string* sonet-sdh group *string*  
 Tree [group](#)  
 Notes This element is part of a list key.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **payload** *keyword*

Synopsis SONET/SDH group payload  
 Context **configure** port *string* sonet-sdh group *string* payload *keyword*  
 Tree [payload](#)  
 Options vt15, vt2, tu3  
 Default tu3  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **hold-time**

Synopsis Enter the **hold-time** context  
 Context **configure** port *string* sonet-sdh hold-time  
 Tree [hold-time](#)  
 Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **down** *number*

Synopsis Hold timer for link down event dampening  
 Context **configure** *port string sonet-sdh hold-time down number*  
 Tree [down](#)  
 Range 0 to 100  
 Units deciseconds  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **up** *number*

Synopsis Hold timer for link up event dampening  
 Context **configure** *port string sonet-sdh hold-time up number*  
 Tree [up](#)  
 Range 0 to 100  
 Units deciseconds  
 Default 5  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **loopback** *keyword*

Synopsis Loopback to activate on SONET port  
 Context **configure** *port string sonet-sdh loopback keyword*  
 Tree [loopback](#)  
 Options line, internal  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **path** [[path-index](#)] *string*

Synopsis Enter the **path** list instance

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Context	<b>configure port string sonet-sdh path string</b>
Tree	<a href="#">path</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[path-index] string**

Synopsis	SONET/SDH path index
Context	<b>configure port string sonet-sdh path string</b>
Tree	<a href="#">path</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state keyword**

Synopsis	Administrative state of the SONET/SDH path
Context	<b>configure port string sonet-sdh path string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**crc number**

Synopsis	Cyclic redundancy check
Context	<b>configure port string sonet-sdh path string crc number</b>
Tree	<a href="#">crc</a>
Range	16   32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**port-scheduler-policy**

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">egress</a> <a href="#">port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**level** [[priority-level](#)] *number*

Synopsis	Enter the <b>level</b> list instance
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Context	<b>configure</b> <i>port string sonet-sdh path string egress port-scheduler-policy overrides level number</i>
Tree	<a href="#">level</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[priority-level]** *number*

Synopsis	Port priority levels override
Context	<b>configure</b> <i>port string sonet-sdh path string egress port-scheduler-policy overrides level number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <i>port string sonet-sdh path string egress port-scheduler-policy overrides level number percent-rate</i>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir** *decimal-number*

Synopsis	CIR for the priority level
Context	<b>configure</b> <i>port string sonet-sdh path string egress port-scheduler-policy overrides level number percent-rate cir decimal-number</i>
Tree	<a href="#">cir</a>
Range	0 to 100
Units	percent
Default	100

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pir** *decimal-number*

Synopsis	PIR for the priority level
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir** (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides level <i>number</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pir** (*number* | *keyword*)

Synopsis PIR for the priority level

Context **configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides level *number* rate pir (*number* | *keyword*)

Tree pir

Range 1 to 3200000000

Units kilobps

Options max

Default max

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-rate**

Synopsis Enter the **max-rate** context

Context **configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides max-rate

Tree max-rate

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **percent-rate** *decimal-number*

Synopsis PIR

Context **configure** port *string* sonet-sdh path *string* egress port-scheduler-policy overrides max-rate percent-rate *decimal-number*

Tree percent-rate

Range 0.01 to 100

Units percent

Default 100

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rate** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy overrides max-rate rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policy-name** *reference*

Synopsis	Port egress scheduler policy name
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**load-balancing-algorithm** *keyword*

Synopsis	Load balancing algorithm
Context	<b>configure</b> port <i>string</i> sonet-sdh path <i>string</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mac-address** *string*

Synopsis	MAC address for the SONET/SDH path
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">mac-address string</a>
Tree	<a href="#">mac-address</a>
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation port mode for the SONET/SDH path
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">mode keyword</a>
Tree	<a href="#">mode</a>
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mtu** *number*

Synopsis	Maximum payload MTU size
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">mtu number</a>
Tree	<a href="#">mtu</a>
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">port string</a> <a href="#">sonet-sdh path string</a> <a href="#">network</a>
Tree	<a href="#">network</a>

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **accounting-policy** *reference*

Synopsis Accounting policy  
 Context **configure** *port string sonet-sdh path string network accounting-policy reference*  
 Tree [accounting-policy](#)  
 Reference **configure** *log accounting-policy number*  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-stats** *boolean*

Synopsis Collect accounting and statistical data  
 Context **configure** *port string sonet-sdh path string network collect-stats boolean*  
 Tree [collect-stats](#)  
 Default false  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **queue-policy** *reference*

Synopsis Queue policy on the SONET/SDH network path  
 Context **configure** *port string sonet-sdh path string network queue-policy reference*  
 Tree [queue-policy](#)  
 Reference **configure** *qos network-queue string*  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **payload** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

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Synopsis	SONET/SDH path payload
Context	<b>configure</b> port string sonet-sdh path string payload keyword
Tree	payload
Options	sts3, tug3, vt15, vt2, ds3, e3, ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### report-alarm

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> port string sonet-sdh path string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### pais boolean

Synopsis	Report path alarm indication signal errors
Context	<b>configure</b> port string sonet-sdh path string report-alarm pais boolean
Tree	pais
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### plcd boolean

Synopsis	Report path loss of code group delineation errors
Context	<b>configure</b> port string sonet-sdh path string report-alarm plcd boolean
Tree	plcd
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**plop** *boolean*

Synopsis	Report path loss of pointer errors as a trap
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">sonet-sdh</a> <a href="#">path</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">plop</a> <i>boolean</i>
Tree	<a href="#">plop</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pplm** *boolean*

Synopsis	Report a path payload mismatch trap
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">sonet-sdh</a> <a href="#">path</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">pplm</a> <i>boolean</i>
Tree	<a href="#">pplm</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**prdi** *boolean*

Synopsis	Report path remote defect indication errors
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">sonet-sdh</a> <a href="#">path</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">prdi</a> <i>boolean</i>
Tree	<a href="#">prdi</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**prei** *boolean*

Synopsis	Report a path error condition as a result of b3 error
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">sonet-sdh</a> <a href="#">path</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">prei</a> <i>boolean</i>
Tree	<a href="#">prei</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **puneq** *boolean*

Synopsis	Report path unequipped errors
Context	<b>configure</b> port string sonet-sdh path string report-alarm puneq boolean
Tree	puneq
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **scramble** *boolean*

Synopsis	Enable SONET/SDH payload scrambling
Context	<b>configure</b> port string sonet-sdh path string scramble boolean
Tree	scramble
Description	When configured to <b>true</b> , the SONET/SDH frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking.  When configured to <b>false</b> , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **signal-label** *string*

Synopsis	C2 byte value that communicates the payload type
Context	<b>configure</b> port string sonet-sdh path string signal-label string
Tree	signal-label
String Length	1 to 4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **trace-string** (*keyword* | *string*)

Synopsis	J1 path-trace string that identifies the circuit
Context	<b>configure</b> port string sonet-sdh path string trace-string ( <i>keyword</i>   <i>string</i> )
Tree	trace-string

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String Length	0 to 62
Options	zeros
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## report-alarm

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">sonet-sdh</a> <a href="#">report-alarm</a>
Tree	<a href="#">report-alarm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lais *boolean*

Synopsis	Report Line Indication Signal Errors alarm
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">sonet-sdh</a> <a href="#">report-alarm</a> <a href="#">lais</a> <i>boolean</i>
Tree	<a href="#">lais</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lb2er-sd *boolean*

Synopsis	Report line and section alarms for SONET/SDH ports
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">sonet-sdh</a> <a href="#">report-alarm</a> <a href="#">lb2er-sd</a> <i>boolean</i>
Tree	<a href="#">lb2er-sd</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lb2er-sf *boolean*

Synopsis	Report alarm line signal failure BER errors
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">sonet-sdh</a> <a href="#">report-alarm</a> <a href="#">lb2er-sf</a> <i>boolean</i>

Tree	<a href="#">lb2er-sf</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**loc boolean**

Synopsis	Report alarm for a loss of clock
Context	<b>configure</b> <a href="#">port string sonet-sdh report-alarm loc boolean</a>
Tree	<a href="#">loc</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lrdi boolean**

Synopsis	Report Line Remote Defect Indication Errors alarm
Context	<b>configure</b> <a href="#">port string sonet-sdh report-alarm lrdi boolean</a>
Tree	<a href="#">lrdi</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**lrei boolean**

Synopsis	Report alarm for a line error condition
Context	<b>configure</b> <a href="#">port string sonet-sdh report-alarm lrei boolean</a>
Tree	<a href="#">lrei</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**slof boolean**

Synopsis	Report alarm for section loss of frame errors
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Context	<b>configure port string sonet-sdh report-alarm slof boolean</b>
Tree	<b>slof</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **slos boolean**

Synopsis	Report alarm for section loss of signal error on send
Context	<b>configure port string sonet-sdh report-alarm slos boolean</b>
Tree	<b>slos</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ss1f boolean**

Synopsis	Report alarm for section synchronization failure
Context	<b>configure port string sonet-sdh report-alarm ss1f boolean</b>
Tree	<b>ss1f</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sd-threshold number**

Synopsis	Threshold for line signal failure BER
Context	<b>configure port string sonet-sdh sd-threshold number</b>
Tree	<b>sd-threshold</b>
Range	3 to 9
Default	6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## section-trace

Synopsis	Enter the <b>section-trace</b> context
Context	<b>configure</b> port <i>string</i> sonet-sdh section-trace
Tree	section-trace
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## byte *string*

Synopsis	Section trace bytes in the SONET section header
Context	<b>configure</b> port <i>string</i> sonet-sdh section-trace byte <i>string</i>
Tree	byte
String Length	1 to 4
Default	1
Notes	The following elements are part of a choice: <b>byte</b> , <b>increment-z0</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## increment-z0

Synopsis	Configure incrementing STM ID instead of a static value
Context	<b>configure</b> port <i>string</i> sonet-sdh section-trace increment-z0
Tree	increment-z0
Notes	The following elements are part of a choice: <b>byte</b> , <b>increment-z0</b> , or <b>string</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## string *string*

Synopsis	Text string that identifies the section
Context	<b>configure</b> port <i>string</i> sonet-sdh section-trace string <i>string</i>
Tree	string
String Length	0 to 16
Notes	The following elements are part of a choice: <b>byte</b> , <b>increment-z0</b> , or <b>string</b> .

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sf-threshold** *number*

Synopsis	Threshold for line signal failure BER
Context	<b>configure</b> <i>port string sonet-sdh sf-threshold number</i>
Tree	<a href="#">sf-threshold</a>
Range	3 to 6
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **single-fiber** *boolean*

Synopsis	Allow packet gathering and redirection from single port
Context	<b>configure</b> <i>port string sonet-sdh single-fiber boolean</i>
Tree	<a href="#">single-fiber</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **speed** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SONET/SDH port speed
Context	<b>configure</b> <i>port string sonet-sdh speed keyword</i>
Tree	<a href="#">speed</a>
Options	oc3, oc12, oc48, oc192, oc768, oc1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**suppress-low-order-alarms** *boolean*

Synopsis	Suppress low order alarms
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">sonet-sdh</a> <a href="#">suppress-low-order-alarms</a> <i>boolean</i>
Tree	<a href="#">suppress-low-order-alarms</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-dus** *boolean*

Synopsis	Force the QL value to be set to QL-DUS/QL-DNU
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">sonet-sdh</a> <a href="#">tx-dus</a> <i>boolean</i>
Tree	<a href="#">tx-dus</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tdm**

Synopsis	Enter the <b>tdm</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm</a>
Tree	<a href="#">tdm</a>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**buildout** *keyword*

Synopsis	Line buildout for physical DS1/DS3 ports
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm</a> <a href="#">buildout</a> <i>keyword</i>
Tree	<a href="#">buildout</a>
Options	short, long
Default	short
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



**ds1** [[ds1-index](#)] *string*

Synopsis	Enter the <b>ds1</b> list instance
Context	<b>configure port string tdm ds1 string</b>
Tree	<a href="#">ds1</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[ds1-index]** *string*

Synopsis	DS-1 channel ID
Context	<b>configure port string tdm ds1 string</b>
Tree	<a href="#">ds1</a>
MD-CLI	physical
Default	
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state** *keyword*

Synopsis	Administrative state of the DS1 channel
Context	<b>configure port string tdm ds1 string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**ber-threshold**

Synopsis	Enter the <b>ber-threshold</b> context
Context	<b>configure port string tdm ds1 string ber-threshold</b>
Tree	<a href="#">ber-threshold</a>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **signal-degrade** *number*

Synopsis BER signal degradation threshold  
 Context **configure** port *string* tdm ds1 *string* ber-threshold signal-degrade *number*  
 Tree [signal-degrade](#)  
 Range 1 | 5 | 10 | 50 | 100  
 Default 5  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **signal-failure** *number*

Synopsis BER signal failure threshold  
 Context **configure** port *string* tdm ds1 *string* ber-threshold signal-failure *number*  
 Tree [signal-failure](#)  
 Range 1 | 5 | 10 | 50 | 100  
 Default 50  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **channel-group** [[ds0-index](#)] *number*

Synopsis Enter the **channel-group** list instance  
 Context **configure** port *string* tdm ds1 *string* channel-group *number*  
 Tree [channel-group](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **[ds0-index]** *number*

Synopsis Channel group ID  
 Context **configure** port *string* tdm ds1 *string* channel-group *number*  
 Tree [channel-group](#)

Range	1 to 24
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **admin-state** *keyword*

Synopsis	Administrative state of the DS1 channel group
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 160
Default	DS0GRP
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## port-scheduler-policy

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy
Tree	port-scheduler-policy
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides
Tree	overrides
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## level [*priority-level*] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## [*priority-level*] *number*

Synopsis	Port priority levels override
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## cir decimal-number

Synopsis	CIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate cir decimal-number
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pir decimal-number

Synopsis	PIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**cir** (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**pir** (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**percent-rate** *decimal-number*

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rate** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides max-rate rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**policy-name** *reference*

Synopsis	Port egress scheduler policy name
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy <i>policy-name reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**encap-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> encap-type <i>keyword</i>
Tree	<a href="#">encap-type</a>
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**idle-payload-fill**

Synopsis	Enter the <b>idle-payload-fill</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill
Tree	<a href="#">idle-payload-fill</a>
Description	<p>Commands in this context configure the data pattern to be transmitted when the circuit emulation service is not operational or temporarily experiences under-run conditions.</p> <p>This command is only valid for CESoPSN and CESoPSN CAS circuit emulation services. It is blocked with a warning for unstructured (SATOP) circuit emulation services.</p>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



## all-ones

Synopsis	Transmit 8-bit value to be 11111111
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-payload-fill pattern <i>number</i>
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## idle-signal-fill

Synopsis	Enter the <b>idle-signal-fill</b> context
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill
Tree	idle-signal-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## all-ones

Synopsis	Transmit 8-bit value as 11111111
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**pattern** *number*

Synopsis	User-defined pattern to be transmitted
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> idle-signal-fill <b>pattern</b> <i>number</i>
Tree	<b>pattern</b>
Range	0 to 15
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**load-balancing-algorithm** *keyword*

Synopsis	Load balancing algorithm to be used on the port
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> load-balancing-algorithm <i>keyword</i>
Tree	<b>load-balancing-algorithm</b>
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mac-address** *string*

Synopsis	MAC address for the port
Context	<b>configure</b> port <i>string</i> tdm ds1 <i>string</i> channel-group <i>number</i> mac-address <i>string</i>
Tree	<b>mac-address</b>
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode for the TDM channel group
Context	<b>configure</b> port string tdm ds1 string channel-group number mode keyword
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### mtu number

Synopsis	Maximum payload MTU size for the port
Context	<b>configure</b> port string tdm ds1 string channel-group number mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> port string tdm ds1 string channel-group number network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### accounting-policy reference

Synopsis	Accounting policy
Context	<b>configure</b> port string tdm ds1 string channel-group number network accounting-policy reference
Tree	accounting-policy
Reference	<b>configure</b> log accounting-policy number
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">network</a> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**queue-policy** *reference*

Synopsis	Queue policy on the TDM DS0 network channel group
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">network</a> <a href="#">queue-policy</a> <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">network-queue</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**speed** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the DS0 channels in the channel group
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">speed</a> <i>number</i>
Tree	<a href="#">speed</a>
Range	56   64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**timeslot** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Timeslot for the channel group
Context	<b>configure</b> <i>port string tdm ds1 string channel-group number timeslot number</i>
Tree	<a href="#">timeslot</a>
Range	1 to 24
Max.	24
Instances	
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**clock-source** *keyword*

Synopsis	Clock source for data transmission
Context	<b>configure</b> <i>port string tdm ds1 string clock-source keyword</i>
Tree	<a href="#">clock-source</a>
Description	This command specifies the clock source to use for the link transmit timing. The options are to use the locally recovered clock from the line's receive data stream, the node central reference, or an adaptively recovered clock using the received packets.
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**framing** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the DS1 channel
Context	<b>configure</b> <i>port string tdm ds1 string framing keyword</i>
Tree	<a href="#">framing</a>
Options	extended-super-frame, super-frame, ds1-unframed
Default	extended-super-frame

Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **loopback** *keyword*

Synopsis Loopback mode for the port  
Context **configure** port string tdm ds1 string loopback keyword  
Tree loopback  
Options line, internal, fdl-ansi, fdl-bellcore, payload-ansi, inband-ansi, inband-bellcore  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **remote-loop-respond** *boolean*

Synopsis Respond to requests for remote loopbacks  
Context **configure** port string tdm ds1 string remote-loop-respond boolean  
Tree remote-loop-respond  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **report-alarm**

Synopsis Enter the **report-alarm** context  
Context **configure** port string tdm ds1 string report-alarm  
Tree report-alarm  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ais** *boolean*

Synopsis Report alarm indication signal errors  
Context **configure** port string tdm ds1 string report-alarm ais boolean  
Tree ais  
Default true

Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ber-sd** *boolean*

Synopsis Report the BER that specifies signal degradation  
Context **configure** port string tdm ds1 string report-alarm ber-sd boolean  
Tree [ber-sd](#)  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ber-sf** *boolean*

Synopsis Report the BER that species signal failure  
Context **configure** port string tdm ds1 string report-alarm ber-sf boolean  
Tree [ber-sf](#)  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **looped** *boolean*

Synopsis Report looped packet errors  
Context **configure** port string tdm ds1 string report-alarm looped boolean  
Tree [looped](#)  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **los** *boolean*

Synopsis Report loss of signal errors  
Context **configure** port string tdm ds1 string report-alarm los boolean  
Tree [los](#)

Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**oof** *boolean*

Synopsis	Report out-of-frame errors
Context	<b>configure</b> port string tdm ds1 string report-alarm oof boolean
Tree	oof
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rai** *boolean*

Synopsis	Report resource availability indicator events
Context	<b>configure</b> port string tdm ds1 string report-alarm rai boolean
Tree	rai
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**signal-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	<b>configure</b> port string tdm ds1 string signal-mode keyword
Tree	signal-mode
Description	This command configures the signal mode on the channel. When enabled, it uses routing information to direct the payload of voice or data to its destination.
Options	channel-associated-signaling
Introduced	20.10.R1



Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ds3** [[ds3-index](#)] *string*

Synopsis Enter the **ds3** list instance  
Context **configure** [port](#) *string* [tdm ds3](#) *string*  
Tree [ds3](#)  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **[ds3-index]** *string*

Synopsis TDM DS3 index  
Context **configure** [port](#) *string* [tdm ds3](#) *string*  
Tree [ds3](#)  
MD-CLI physical  
Default  
Notes This element is part of a list key.  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **admin-state** *keyword*

Synopsis Administrative state of the DS3 port  
Context **configure** [port](#) *string* [tdm ds3](#) *string* [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**channelized** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channelization of the DS3
Context	<b>configure</b> port string tdm ds3 string channelized keyword
Tree	channelized
Options	ds1, e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**clock-source** *keyword*

Synopsis	Clock for data transmission
Context	<b>configure</b> port string tdm ds3 string clock-source keyword
Tree	clock-source
Options	loop-timed, node-timed
Default	node-timed
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**crc** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the cyclic redundancy check (CRC)
Context	<b>configure</b> port string tdm ds3 string crc number
Tree	crc
Range	16   32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port string tdm ds3 string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 160
Default	DS3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">port string tdm ds3 string egress</a>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **port-scheduler-policy**

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port string tdm ds3 string egress port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port string tdm ds3 string egress port-scheduler-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**level** [*priority-level*] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure port string tdm ds3 string egress port-scheduler-policy overrides level number</b>
Tree	<a href="#">level</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[priority-level]** *number*

Synopsis	Port priority levels override
Context	<b>configure port string tdm ds3 string egress port-scheduler-policy overrides level number</b>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure port string tdm ds3 string egress port-scheduler-policy overrides level number percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**cir** *decimal-number*

Synopsis	CIR for the priority level
Context	<b>configure port string tdm ds3 string egress port-scheduler-policy overrides level number percent-rate cir decimal-number</b>
Tree	<a href="#">cir</a>
Range	0 to 100
Units	percent

Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pir** *decimal-number*

Synopsis	PIR for the priority level
Context	<b>configure</b> <a href="#">port string</a> <a href="#">tdm ds3 string</a> <a href="#">egress port-scheduler-policy overrides level number</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">port string</a> <a href="#">tdm ds3 string</a> <a href="#">egress port-scheduler-policy overrides level number</a> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **cir** (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure</b> <a href="#">port string</a> <a href="#">tdm ds3 string</a> <a href="#">egress port-scheduler-policy overrides level number</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pir** (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	<b>configure</b> <a href="#">port string tdm ds3 string egress port-scheduler-policy overrides level number rate pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure</b> <a href="#">port string tdm ds3 string egress port-scheduler-policy overrides max-rate</a>
Tree	<a href="#">max-rate</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **percent-rate** *decimal-number*

Synopsis	PIR
Context	<b>configure</b> <a href="#">port string tdm ds3 string egress port-scheduler-policy overrides max-rate percent-rate decimal-number</a>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rate** (*number* | *keyword*)

Synopsis PIR

Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy overrides max-rate **rate** (*number* | *keyword*)

Tree [rate](#)

Range 1 to 3200000000

Units kilobps

Options max

Default max

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **policy-name** *reference*

Synopsis Port egress scheduler policy name

Context **configure** port *string* tdm ds3 *string* egress port-scheduler-policy *policy-name* *reference*

Tree [policy-name](#)

Reference **configure** qos port-scheduler-policy *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **encap-type** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Encapsulation method

Context **configure** port *string* tdm ds3 *string* **encap-type** *keyword*

Tree [encap-type](#)

Options cem

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **feac-loop-respond** *boolean*

Synopsis Enable DS-3 interface to respond to remote loop signals  
 Context **configure** *port string tdm ds3 string feac-loop-respond boolean*  
 Tree [feac-loop-respond](#)  
 Default false  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **framing** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Framing for the DS3 channel  
 Context **configure** *port string tdm ds3 string framing keyword*  
 Tree [framing](#)  
 Options c-bit, m23, ds3-unframed  
 Default c-bit  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **idle-cycle-flag** *keyword*

Synopsis Value transmitted during idle cycles  
 Context **configure** *port string tdm ds3 string idle-cycle-flag keyword*  
 Tree [idle-cycle-flag](#)  
 Options flags, ones  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



### **load-balancing-algorithm** *keyword*

Synopsis	Load balancing algorithm to be used on the port
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> load-balancing-algorithm <i>keyword</i>
Tree	load-balancing-algorithm
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **loopback** *keyword*

Synopsis	Loopback mode on the channel
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> loopback <i>keyword</i>
Tree	loopback
Options	line, internal, remote
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mac-address** *string*

Synopsis	MAC address for the port
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> mac-address <i>string</i>
Tree	mac-address
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **maintenance-data-link**

Synopsis	Enter the <b>maintenance-data-link</b> context
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> maintenance-data-link
Tree	maintenance-data-link
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**equipment-id-code** *string*

Synopsis	Equipment ID Code (EIC) of the MDL
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">maintenance-data-link</a> <a href="#">equipment-id-code</a> <i>string</i>
Tree	<a href="#">equipment-id-code</a>
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**facility-id-code** *string*

Synopsis	Facility ID Code sent in the MDL Path message
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">maintenance-data-link</a> <a href="#">facility-id-code</a> <i>string</i>
Tree	<a href="#">facility-id-code</a>
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**frame-id-code** *string*

Synopsis	Frame ID Code (FIC) of the MDL
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">maintenance-data-link</a> <a href="#">frame-id-code</a> <i>string</i>
Tree	<a href="#">frame-id-code</a>
String Length	0 to 10
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**generator-string** *string*

Synopsis	Generator number string sent in MDL test signal message
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">maintenance-data-link</a> <a href="#">generator-string</a> <i>string</i>
Tree	<a href="#">generator-string</a>
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### location-id-code *string*

Synopsis	Location ID Code (LIC) of the MDL
Context	<b>configure</b> <a href="#">port string tdm ds3 string maintenance-data-link location-id-code string</a>
Tree	<a href="#">location-id-code</a>
String Length	0 to 11
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### port-string *string*

Synopsis	Port number string sent in the MDL idle signal message
Context	<b>configure</b> <a href="#">port string tdm ds3 string maintenance-data-link port-string string</a>
Tree	<a href="#">port-string</a>
String Length	0 to 38
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### transmit-message-type

Synopsis	Enter the <b>transmit-message-type</b> context
Context	<b>configure</b> <a href="#">port string tdm ds3 string maintenance-data-link transmit-message-type</a>
Tree	<a href="#">transmit-message-type</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### idle-signal *boolean*

Synopsis	Enable transmission of MDL idle signal messages
Context	<b>configure</b> <a href="#">port string tdm ds3 string maintenance-data-link transmit-message-type idle-signal boolean</a>
Tree	<a href="#">idle-signal</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**path** *boolean*

Synopsis	Enable transmission of MDL path messages
Context	<b>configure</b> port string tdm ds3 string maintenance-data-link transmit-message-type path <i>boolean</i>
Tree	path
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**test-signal** *boolean*

Synopsis	Enable transmission of MDL test signal messages
Context	<b>configure</b> port string tdm ds3 string maintenance-data-link transmit-message-type test-signal <i>boolean</i>
Tree	test-signal
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**unit-id-code** *string*

Synopsis	Unit ID Code (UIC) of the MDL
Context	<b>configure</b> port string tdm ds3 string maintenance-data-link unit-id-code <i>string</i>
Tree	unit-id-code
String Length	0 to 6
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	<b>configure</b> port string tdm ds3 string mode <i>keyword</i>

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Tree	<a href="#">mode</a>
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mtu number**

Synopsis	Maximum payload MTU size for the port
Context	<b>configure</b> <a href="#">port string tdm ds3 string mtu number</a>
Tree	<a href="#">mtu</a>
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">port string tdm ds3 string network</a>
Tree	<a href="#">network</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **accounting-policy reference**

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">port string tdm ds3 string network accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **collect-stats boolean**

Synopsis	Collect accounting and statistical data
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Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">network</a> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **queue-policy** *reference*

Synopsis	Queue policy on the TDM DS3 network channel
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">network</a> <a href="#">queue-policy</a> <i>reference</i>
Tree	<a href="#">queue-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">network-queue</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">report-alarm</a>
Tree	<a href="#">report-alarm</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ais** *boolean*

Synopsis	Report alarm indication signal errors
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm ds3</a> <i>string</i> <a href="#">report-alarm</a> <a href="#">ais</a> <i>boolean</i>
Tree	<a href="#">ais</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **looped** *boolean*

Synopsis	Report looped packet errors
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Context	<b>configure port string tdm ds3 string report-alarm looped boolean</b>
Tree	<b>looped</b>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **los boolean**

Synopsis	Report loss of signal errors
Context	<b>configure port string tdm ds3 string report-alarm los boolean</b>
Tree	<b>los</b>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **oof boolean**

Synopsis	Report out-of-frame errors
Context	<b>configure port string tdm ds3 string report-alarm oof boolean</b>
Tree	<b>oof</b>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rai boolean**

Synopsis	Report resource availability indicator events
Context	<b>configure port string tdm ds3 string report-alarm rai boolean</b>
Tree	<b>rai</b>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**scramble** *boolean*

Synopsis	Enable TDM DS3 payload scrambling
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> scramble <i>boolean</i>
Tree	scramble
Description	When configured to <b>true</b> , the TDM DS3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to <b>false</b> , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**subrate**

Synopsis	Enter the <b>subrate</b> context
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> subrate
Tree	subrate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**csu-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Channel Service Unit (CSU) compatibility mode
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> subrate csu-mode <i>keyword</i>
Tree	csu-mode
Options	digital-link, larscom
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



**rate-step** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subrate for the associated DS3
Context	<b>configure</b> port <i>string</i> tdm ds3 <i>string</i> subrate rate-step <i>number</i>
Tree	rate-step
Range	0 to 147
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**e1** [**e1-index**] *string*

Synopsis	Enter the <b>e1</b> list instance
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i>
Tree	e1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[e1-index]** *string*

Synopsis	E-1 channel
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i>
Tree	e1
MD-CLI	physical
Default	
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state** *keyword*

Synopsis	Administrative state of the E1 channel
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> admin-state <i>keyword</i>
Tree	admin-state

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Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ber-threshold**

Synopsis	Enter the <b>ber-threshold</b> context
Context	<b>configure</b> port string tdm e1 string ber-threshold
Tree	ber-threshold
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **signal-degrade** *number*

Synopsis	BER signal degradation threshold
Context	<b>configure</b> port string tdm e1 string ber-threshold signal-degrade <i>number</i>
Tree	signal-degrade
Range	1   5   10   50   100
Default	5
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **signal-failure** *number*

Synopsis	BER signal failure threshold
Context	<b>configure</b> port string tdm e1 string ber-threshold signal-failure <i>number</i>
Tree	signal-failure
Range	1   5   10   50   100
Default	50
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**channel-group** [ds0-index] *number*

Synopsis	Enter the <b>channel-group</b> list instance
Context	<b>configure port string tdm e1 string channel-group number</b>
Tree	<a href="#">channel-group</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[ds0-index]** *number*

Synopsis	DS0 channel group in a channelized DS1 or E1 circuit
Context	<b>configure port string tdm e1 string channel-group number</b>
Tree	<a href="#">channel-group</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state** *keyword*

Synopsis	Administrative state of the E1 channel group
Context	<b>configure port string tdm e1 string channel-group number admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**description** *string*

Synopsis	Text description
Context	<b>configure port string tdm e1 string channel-group number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 160
Default	DS0GRP
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## egress

Synopsis Enter the **egress** context

Context **configure** *port string tdm e1 string channel-group number egress*

Tree [egress](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## port-scheduler-policy

Synopsis Enter the **port-scheduler-policy** context

Context **configure** *port string tdm e1 string channel-group number egress port-scheduler-policy*

Tree [port-scheduler-policy](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## overrides

Synopsis Enable the **overrides** context

Context **configure** *port string tdm e1 string channel-group number egress port-scheduler-policy overrides*

Tree [overrides](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## level [[priority-level](#)] *number*

Synopsis Enter the **level** list instance

Context **configure** *port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number*

Tree [level](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[priority-level]** *number*

Synopsis	Port priority levels override
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i>
Tree	level
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**cir** *decimal-number*

Synopsis	CIR for the priority level
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> egress port-scheduler-policy overrides level <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	cir
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**pir** *decimal-number*

Synopsis	PIR for the priority level
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Context	<b>configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number percent-rate pir decimal-number</b>
Tree	<a href="#">pir</a>
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## cir (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number rate cir (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">cir</a>
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pir (*number* | *keyword*)

Synopsis	PIR for the priority level
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Context	<b>configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides level number rate pir</b> ( <i>number   keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **max-rate**

Synopsis	Enter the <b>max-rate</b> context
Context	<b>configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides max-rate</b>
Tree	<a href="#">max-rate</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **percent-rate decimal-number**

Synopsis	PIR
Context	<b>configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides max-rate percent-rate decimal-number</b>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rate (number | keyword)**

Synopsis	PIR
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Context	<b>configure port string tdm e1 string channel-group number egress port-scheduler-policy overrides max-rate rate</b> ( <i>number   keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **policy-name** *reference*

Synopsis	Port egress scheduler policy name
Context	<b>configure port string tdm e1 string channel-group number egress port-scheduler-policy policy-name reference</b>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos port-scheduler-policy string</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **encap-type** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	<b>configure port string tdm e1 string channel-group number encap-type keyword</b>
Tree	<a href="#">encap-type</a>
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



## idle-payload-fill

Synopsis	Enter the <b>idle-payload-fill</b> context
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill
Tree	idle-payload-fill
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## all-ones

Synopsis	Transmit 8-bit value to be 11111111
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill all-ones
Tree	all-ones
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pattern *number*

Synopsis	User-defined pattern to be transmitted
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-payload-fill <i>pattern number</i>
Tree	pattern
Range	0 to 255
Notes	The following elements are part of a choice: <b>all-ones</b> or <b>pattern</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## idle-signal-fill

Synopsis	Enter the <b>idle-signal-fill</b> context
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> idle-signal-fill
Tree	idle-signal-fill
Description	Commands in this context configure the signaling pattern to be transmitted when the circuit emulation service is not operational or temporarily experiences under-run conditions.

This command is only valid for CESoPSN-CAS circuit emulation services. It is blocked with a warning for unstructured (SATOP) and basic CESoPSN circuit emulation services.

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## all-ones

Synopsis Transmit 8-bit value as 11111111  
 Context **configure** port string tdm e1 string channel-group number idle-signal-fill all-ones  
 Tree [all-ones](#)  
 Notes The following elements are part of a choice: **all-ones** or **pattern**.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pattern number

Synopsis User-defined pattern to be transmitted  
 Context **configure** port string tdm e1 string channel-group number idle-signal-fill pattern number  
 Tree [pattern](#)  
 Range 0 to 15  
 Notes The following elements are part of a choice: **all-ones** or **pattern**.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## load-balancing-algorithm keyword

Synopsis Load balancing algorithm to be used on this port  
 Context **configure** port string tdm e1 string channel-group number load-balancing-algorithm keyword  
 Tree [load-balancing-algorithm](#)  
 Options default, include-l4, exclude-l4  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mac-address** *string*

Synopsis	MAC address for the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mtu** *number*

Synopsis	Maximum payload MTU
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">mtu</a> <i>number</i>
Tree	<a href="#">mtu</a>
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e1</a> <i>string</i> <a href="#">channel-group</a> <i>number</i> <a href="#">network</a>
Tree	<a href="#">network</a>

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **accounting-policy** *reference*

Synopsis Accounting policy  
 Context **configure** [port string tdm e1 string channel-group number network accounting-policy reference](#)  
 Tree [accounting-policy](#)  
 Reference **configure** [log accounting-policy number](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **collect-stats** *boolean*

Synopsis Collect accounting and statistical data  
 Context **configure** [port string tdm e1 string channel-group number network collect-stats boolean](#)  
 Tree [collect-stats](#)  
 Default false  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **queue-policy** *reference*

Synopsis Network queue policy on TDM E0 network channel group  
 Context **configure** [port string tdm e1 string channel-group number network queue-policy reference](#)  
 Tree [queue-policy](#)  
 Reference **configure** [qos network-queue string](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## speed *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Speed of the E0 channels in this channel group
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> speed <i>number</i>
Tree	speed
Range	56   64
Default	64
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## timeslot *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Timeslot list for the channel group
Context	<b>configure</b> port <i>string</i> tdm e1 <i>string</i> channel-group <i>number</i> timeslot <i>number</i>
Tree	timeslot
Description	This command configures the list of timeslots to be used in a channel group.  For the list of DS-0 timeslots to be used in the DS-1 or E1 channel-group, the timeslots are defaulted as defined by the encapsulation type. ATM channel groups do not allow timeslots to change.
Range	1 to 32
Max.	32
Instances	
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## clock-source *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clock source for data transmission
Context	<b>configure</b> port string tdm e1 string clock-source keyword
Tree	clock-source
Description	This command specifies the clock source to use for the link transmit timing. The options are to use the locally recovered clock from the line's receive data stream, the node central reference, or an adaptively recovered clock using the received packets.
Options	loop-timed, node-timed, adaptive, differential
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### framing keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing on the E1 channel
Context	<b>configure</b> port string tdm e1 string framing keyword
Tree	framing
Description	This command specifies the E1 framing to use with the associated channel.
Options	no-crc-g704, g704, e1-unframed
Default	g704
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### loopback keyword

Synopsis	Loopback mode
Context	<b>configure</b> port string tdm e1 string loopback keyword
Tree	loopback
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **national-bits**

Synopsis	Enter the <b>national-bits</b> context
Context	<b>configure port string tdm e1 string national-bits</b>
Tree	<a href="#">national-bits</a>
Description	Commands in this context configure the national use bits.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **sa4 boolean**

Synopsis	Enable bit Sa4
Context	<b>configure port string tdm e1 string national-bits sa4 boolean</b>
Tree	<a href="#">sa4</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **sa5 boolean**

Synopsis	Enable bit Sa5
Context	<b>configure port string tdm e1 string national-bits sa5 boolean</b>
Tree	<a href="#">sa5</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## **sa6 boolean**

Synopsis	Enable bit Sa6
Context	<b>configure port string tdm e1 string national-bits sa6 boolean</b>
Tree	<a href="#">sa6</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**sa7 boolean**

Synopsis	Enable bit Sa7
Context	<b>configure</b> port string tdm e1 string national-bits sa7 boolean
Tree	sa7
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**sa8 boolean**

Synopsis	Enable bit Sa8
Context	<b>configure</b> port string tdm e1 string national-bits sa8 boolean
Tree	sa8
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> port string tdm e1 string report-alarm
Tree	report-alarm
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**ais boolean**

Synopsis	Report alarm indication signal errors
Context	<b>configure</b> port string tdm e1 string report-alarm ais boolean
Tree	ais
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e



**ber-sd** *boolean*

Synopsis	Enable/disable ber-sd alarm.
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm e1</a> <a href="#">string</a> <a href="#">report-alarm</a> <a href="#">ber-sd</a> <i>boolean</i>
Tree	<a href="#">ber-sd</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**ber-sf** *boolean*

Synopsis	Enable/disable ber-sf alarm.
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm e1</a> <a href="#">string</a> <a href="#">report-alarm</a> <a href="#">ber-sf</a> <i>boolean</i>
Tree	<a href="#">ber-sf</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**looped** *boolean*

Synopsis	Report looped packet errors
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm e1</a> <a href="#">string</a> <a href="#">report-alarm</a> <a href="#">looped</a> <i>boolean</i>
Tree	<a href="#">looped</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**los** *boolean*

Synopsis	Report loss of signal errors
Context	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">tdm e1</a> <a href="#">string</a> <a href="#">report-alarm</a> <a href="#">los</a> <i>boolean</i>
Tree	<a href="#">los</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**oof** *boolean*

Synopsis	Report out-of-frame errors
Context	<b>configure</b> <i>port string tdm e1 string report-alarm oof boolean</i>
Tree	<i>oof</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**rai** *boolean*

Synopsis	Report resource availability indicator events
Context	<b>configure</b> <i>port string tdm e1 string report-alarm rai boolean</i>
Tree	<i>rai</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**signal-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal mode on the channel
Context	<b>configure</b> <i>port string tdm e1 string signal-mode keyword</i>
Tree	<i>signal-mode</i>
Description	This command configures the signal mode on the channel. When enabled, it uses routing information to direct the payload of voice or data to its destination.
Options	channel-associated-signaling
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**e3** [[e3-index](#)] *string*

Synopsis	Enter the <b>e3</b> list instance
Context	<b>configure port string tdm e3 string</b>
Tree	<a href="#">e3</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**[e3-index]** *string*

Synopsis	Components making up the SONET/SDH Path
Context	<b>configure port string tdm e3 string</b>
Tree	<a href="#">e3</a>
MD-CLI Default	physical
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**admin-state** *keyword*

Synopsis	Administrative state of the E3 channel
Context	<b>configure port string tdm e3 string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**clock-source** *keyword*

Synopsis	Clock for data transmission
Context	<b>configure port string tdm e3 string clock-source keyword</b>
Tree	<a href="#">clock-source</a>
Options	loop-timed, node-timed
Default	node-timed

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**crc number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precision of the CRC
Context	<b>configure</b> port string tdm e3 string crc number
Tree	crc
Range	16   32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**description string**

Synopsis	Text description
Context	<b>configure</b> port string tdm e3 string description string
Tree	description
String Length	1 to 160
Default	E3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> port string tdm e3 string egress
Tree	egress
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## port-scheduler-policy

Synopsis	Enter the <b>port-scheduler-policy</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">egress</a> <a href="#">port-scheduler-policy</a>
Tree	<a href="#">port-scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## level [[priority-level](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## [[priority-level](#)] *number*

Synopsis	Port priority levels override
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">egress</a> <a href="#">port-scheduler-policy</a> <a href="#">overrides</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <i>port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate</i>
Tree	<i>percent-rate</i>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## cir decimal-number

Synopsis	CIR for the priority level
Context	<b>configure</b> <i>port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate cir decimal-number</i>
Tree	<i>cir</i>
Range	0 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## pir decimal-number

Synopsis	PIR for the priority level
Context	<b>configure</b> <i>port string tdm e3 string egress port-scheduler-policy overrides level number percent-rate pir decimal-number</i>
Tree	<i>pir</i>
Range	0.01 to 100
Units	percent
Default	100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

## rate

Synopsis	Enter the <b>rate</b> context
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Context	<b>configure port string tdm e3 string egress port-scheduler-policy overrides level number rate</b>
Tree	<b>rate</b>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **cir** (*number* | *keyword*)

Synopsis	CIR for the priority level
Context	<b>configure port string tdm e3 string egress port-scheduler-policy overrides level number rate cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **pir** (*number* | *keyword*)

Synopsis	PIR for the priority level
Context	<b>configure port string tdm e3 string egress port-scheduler-policy overrides level number rate pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **max-rate**

Synopsis	Enter the <b>max-rate</b> context
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Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides max-rate
Tree	max-rate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **percent-rate** *decimal-number*

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides max-rate percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100
Units	percent
Default	100
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rate** (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy overrides max-rate rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **policy-name** *reference*

Synopsis	Port egress scheduler policy name
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Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> egress port-scheduler-policy policy-name <i>reference</i>
Tree	policy-name
Reference	<b>configure</b> qos port-scheduler-policy <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### encap-type keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Encapsulation method used on a port, path, or channel
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> encap-type keyword
Tree	encap-type
Options	cem
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### framing keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Framing for the E3 channel
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> framing keyword
Tree	framing
Options	g751, g832, e3-unframed
Default	g751
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### idle-cycle-flag keyword

Synopsis	Value transmitted by channel group during idle cycle
Context	<b>configure</b> port <i>string</i> tdm e3 <i>string</i> idle-cycle-flag keyword

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Tree	<a href="#">idle-cycle-flag</a>
Options	flags, ones
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **load-balancing-algorithm** *keyword*

Synopsis	Load balancing algorithm to be used on this port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">load-balancing-algorithm</a> <i>keyword</i>
Tree	<a href="#">load-balancing-algorithm</a>
Options	default, include-l4, exclude-l4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **loopback** *keyword*

Synopsis	Loopback mode
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">loopback</a> <i>keyword</i>
Tree	<a href="#">loopback</a>
Options	line, internal
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **mac-address** *string*

Synopsis	MAC address for the port
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Operation mode
Context	<b>configure</b> port string tdm e3 string mode keyword
Tree	mode
Options	access, network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**mtu** *number*

Synopsis	Maximum payload MTU size
Context	<b>configure</b> port string tdm e3 string mtu number
Tree	mtu
Range	512 to 9208
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> port string tdm e3 string network
Tree	network
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> port string tdm e3 string network accounting-policy reference
Tree	accounting-policy
Reference	<b>configure</b> log accounting-policy number

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **collect-stats** *boolean*

Synopsis Collect accounting and statistical data  
 Context **configure** port string tdm e3 string network collect-stats boolean  
 Tree [collect-stats](#)  
 Default false  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **queue-policy** *reference*

Synopsis Queue policy on the TDM E3 network channel  
 Context **configure** port string tdm e3 string network queue-policy reference  
 Tree [queue-policy](#)  
 Reference **configure** qos network-queue string  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **report-alarm**

Synopsis Enter the **report-alarm** context  
 Context **configure** port string tdm e3 string report-alarm  
 Tree [report-alarm](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **ais** *boolean*

Synopsis Report alarm indication signal errors  
 Context **configure** port string tdm e3 string report-alarm ais boolean  
 Tree [ais](#)  
 Default true

Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **looped** *boolean*

Synopsis Report looped packet errors  
Context **configure** port string tdm e3 string report-alarm looped boolean  
Tree looped  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **los** *boolean*

Synopsis Report loss of signal errors  
Context **configure** port string tdm e3 string report-alarm los boolean  
Tree los  
Default true  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **oof** *boolean*

Synopsis Report out-of-frame errors  
Context **configure** port string tdm e3 string report-alarm oof boolean  
Tree oof  
Default false  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **rai** *boolean*

Synopsis Report resource availability indicator events  
Context **configure** port string tdm e3 string report-alarm rai boolean  
Tree rai

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Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **scramble** *boolean*

Synopsis	Enable TDM E3 payload scrambling
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm e3</a> <i>string</i> <b>scramble</b> <i>boolean</i>
Tree	<a href="#">scramble</a>
Description	When configured to <b>true</b> , the TDM E3 frame carries randomized patterns of 1s and 0s, which prevents continuous strings of all 1s or all 0s. This meets the needs of physical layer protocols that rely on sufficient transitions between 1s and 0s to maintain clocking. When configured to <b>false</b> , the strings of all 1s or all 0s are continuous.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm</a> <b>hold-time</b>
Tree	<a href="#">hold-time</a>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **down** *number*

Synopsis	Hold timer for link down event dampening
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">tdm</a> <a href="#">hold-time</a> <b>down</b> <i>number</i>
Tree	<a href="#">down</a>
Range	0 to 100
Default	5
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**up number**

Synopsis	Hold timer for link up event dampening
Context	<b>configure</b> port <i>string</i> tdm hold-time up <i>number</i>
Tree	up
Range	1 to 100
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**transceiver**

Synopsis	Enter the <b>transceiver</b> context
Context	<b>configure</b> port <i>string</i> transceiver
Tree	transceiver
Introduced	16.0.R4
Platforms	All

**digital-coherent-optics boolean**

Synopsis	Enable digital coherent optics module for transceiver
Context	<b>configure</b> port <i>string</i> transceiver digital-coherent-optics <i>boolean</i>
Tree	digital-coherent-optics
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**optical-line-system**

Synopsis	Enable the <b>optical-line-system</b> context
Context	<b>configure</b> port <i>string</i> transceiver optical-line-system
Tree	optical-line-system
Description	Commands in this context configure the QSFP-LS pluggable optical line system, used in conjunction with 400G ZR/ZR+ coherent pluggable modules.
Introduced	23.10.R1
Platforms	All

**egress-amplifier-gain** *decimal-number*

Synopsis	Gain for the egress amplifier
Context	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">transceiver</a> <a href="#">optical-line-system</a> <a href="#">egress-amplifier-gain</a> <i>decimal-number</i>
Tree	<a href="#">egress-amplifier-gain</a>
Range	0.00 to 25.00
Units	dB
Default	25.00
Introduced	23.10.R1
Platforms	All



### 3.33 port-policy commands

```
configure
- port-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress-port-scheduler-policy reference
```

### 3.33.1 port-policy command descriptions

#### **port-policy** [[name](#)] *string*

Synopsis	Enter the <b>port-policy</b> list instance
Context	<b>configure</b> <a href="#">port-policy</a> <i>string</i>
Tree	<a href="#">port-policy</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **[name]** *string*

Synopsis	Port policy name
Context	<b>configure</b> <a href="#">port-policy</a> <i>string</i>
Tree	<a href="#">port-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

#### **egress-port-scheduler-policy** *reference*

Synopsis	Policy for egress port scheduler
Context	<b>configure</b> <a href="#">port-policy</a> <i>string</i> <a href="#">egress-port-scheduler-policy</a> <i>reference</i>

---

Tree	<a href="#">egress-port-scheduler-policy</a>
Reference	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.34 port-xc commands

```
configure
- port-xc
  - apply-groups reference
  - apply-groups-exclude reference
  - pxc number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - port-id reference
```

### 3.34.1 port-xc command descriptions

#### port-xc

Synopsis	Enter the <b>port-xc</b> context
Context	<b>configure port-xc</b>
Tree	<a href="#">port-xc</a>
Description	Commands in this context configure port cross-connect (PXC) functionality.
Introduced	16.0.R1
Platforms	All

#### pxc [[pxc-id](#)] *number*

Synopsis	Enter the <b>pxc</b> list instance
Context	<b>configure port-xc pxc number</b>
Tree	<a href="#">pxc</a>
Description	Commands in this context configure port cross-connect (PXC) information.
Introduced	16.0.R1
Platforms	All

#### [\[pxc-id\]](#) *number*

Synopsis	PXC ID
Context	<b>configure port-xc pxc number</b>
Tree	<a href="#">pxc</a>
Range	1 to 256
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of the PXC
Context	<b>configure port-xc pxc number admin-state keyword</b>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">port-xc pxc number</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **port-id** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PXC port ID
Context	<b>configure</b> <a href="#">port-xc pxc number</a> <a href="#">port-id reference</a>
Tree	<a href="#">port-id</a>
Reference	<b>configure</b> <a href="#">port string</a>
Introduced	16.0.R1
Platforms	All

### 3.35 pw-port commands

```

configure
- pw-port number
- apply-groups reference
- apply-groups-exclude reference
- description string
- dot1q-etype string
- encap-type keyword
- epipe reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- down-on-peer-tldp-pw-status-faults boolean
- egress
- shaper
  - intermediate-destination-id string
  - virtual-port string
- fpe-id reference
- monitor-oper-group reference
- oper-up-on-mh-standby boolean
- oper-group reference
- qinq-etype string
- sdp reference
- admin-state keyword
- adv-service-mtu number
- apply-groups reference
- apply-groups-exclude reference
- control-word boolean
- egress
- shaper
  - intermediate-destination-id string
  - pw-sap-secondary-shaper string
  - virtual-port string
- vc-label number
- entropy-label boolean
- ingress
- vc-label number
- monitor-oper-group reference
- vc-id number
- vc-type keyword
- vlan-vc-tag number

```

### 3.35.1 pw-port command descriptions

#### **pw-port** [*pw-port-id*] *number*

Synopsis	Enter the <b>pw-port</b> list instance
Context	<b>configure</b> <i>pw-port number</i>
Tree	<i>pw-port</i>
Introduced	16.0.R4
Platforms	All

#### **[pw-port-id]** *number*

Synopsis	Pseudowire port ID
Context	<b>configure</b> <i>pw-port number</i>
Tree	<i>pw-port</i>
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

#### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>pw-port number description string</i>
Tree	<i>description</i>
String Length	1 to 255
Default	PW Port
Introduced	16.0.R4
Platforms	All

#### **dot1q-etype** *string*

Synopsis	Dot1q Ethertype on the PW port
Context	<b>configure</b> <i>pw-port number dot1q-etype string</i>
Tree	<i>dot1q-etype</i>



Default	33024
Introduced	16.0.R4
Platforms	All

### **encap-type** *keyword*

Synopsis	Encap type of the pseudo-wire port
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">encap-type keyword</a>
Tree	<a href="#">encap-type</a>
Options	dot1q, qinq
Default	dot1q
Introduced	16.0.R4
Platforms	All

### **epipe** [[service-name](#)] *reference*

Synopsis	Enter the <b>epipe</b> list instance
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a>
Tree	<a href="#">epipe</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>epipe</b> or <b>sdp</b> .
Introduced	16.0.R4
Platforms	All

### **[service-name]** *reference*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a>
Tree	<a href="#">epipe</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">epipe string</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the pseudowire port
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">epipe</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**down-on-peer-tldp-pw-status-faults** *boolean*

Synopsis	Force PW port to go down for certain PW status bits
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">epipe</a> <i>reference</i> <a href="#">down-on-peer-tldp-pw-status-faults</a> <i>boolean</i>
Tree	<a href="#">down-on-peer-tldp-pw-status-faults</a>
Description	<p>When configured to <b>true</b>, the router causes the PW port configured on an Epipe to go locally operationally down if any of the following status bits are received on a mate spoke SDP across an FPE:</p> <ul style="list-style-type: none"> <li>• 0x00000001 - Pseudowire Not Forwarding</li> <li>• 0x00000002 - Local Attachment Circuit (ingress) Receive Fault</li> <li>• 0x00000004 - Local Attachment Circuit (egress) Transmit Fault</li> <li>• 0x00000008 - Local PSN-facing PW (ingress) Receive Fault</li> <li>• 0x00000010 - Local PSN-facing PW (egress) Transmit Fault</li> </ul> <p>When configured to <b>false</b>, the mate PW status fault bits are not taken into account in the operational state of the PW port.</p>
Default	false
Introduced	22.2.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">epipe</a> <i>reference</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R4
Platforms	All

## shaper

Synopsis	Enter the <b>shaper</b> context
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a> <a href="#">egress shaper</a>
Tree	<a href="#">shaper</a>
Introduced	16.0.R4
Platforms	All

## intermediate-destination-id *string*

Synopsis	Intermediate destination ID for ESM PW SAPs
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a> <a href="#">egress shaper intermediate-destination-id string</a>
Tree	<a href="#">intermediate-destination-id</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

## virtual-port *string*

Synopsis	Virtual port name of the egress shaper
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a> <a href="#">egress shaper virtual-port string</a>
Tree	<a href="#">virtual-port</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

## fpe-id *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding Path Extension ID
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">epipe reference</a> <a href="#">fpe-id reference</a>
Tree	<a href="#">fpe-id</a>

Reference	<b>configure</b> <a href="#">fwd-path-ext fpe number</a>
Introduced	16.0.R4
Platforms	All

### **monitor-oper-group** *reference*

Synopsis	Name of the operational group to monitor
Context	<b>configure</b> <a href="#">pw-port number epipe reference</a> <a href="#">monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group string</a>
Introduced	16.0.R4
Platforms	All

### **oper-up-on-mh-standby** *boolean*

Synopsis	Sets PW port to operationally up on MH standby
Context	<b>configure</b> <a href="#">pw-port number epipe reference</a> <a href="#">oper-up-on-mh-standby boolean</a>
Tree	<a href="#">oper-up-on-mh-standby</a>
Description	<p>When configured to <b>true</b>, this command allows the PW port to remain operationally up on the non-DF PE and all the PW SAPs contained in the PW port.</p> <p>The PW port status shows operationally up status with a flag MH Standby.</p> <p>When configured to <b>false</b>, this command causes the PW port to remain operationally down on the non-DF PE and all the PW SAPs contained in the PW port.</p>
Default	false
Introduced	22.2.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group ID
Context	<b>configure</b> <a href="#">pw-port number oper-group reference</a>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group string</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **qinq-etype** *string*

Synopsis	QinQ Ethertype encapsulation on the PW port
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">qinq-etype string</a>
Tree	<a href="#">qinq-etype</a>
Default	33024
Introduced	16.0.R4
Platforms	All

### **sdp** [[sdp-id](#)] *reference*

Synopsis	Enter the <b>sdp</b> list instance
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">sdp reference</a>
Tree	<a href="#">sdp</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>epipe</b> or <b>sdp</b> .
Introduced	16.0.R4
Platforms	All

### **[sdp-id]** *reference*

Synopsis	SDP ID
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">sdp reference</a>
Tree	<a href="#">sdp</a>
Reference	<b>configure</b> <a href="#">service sdp number</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the pseudowire port
Context	<b>configure</b> <a href="#">pw-port number</a> <a href="#">sdp reference</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>

---

Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **adv-service-mtu** *number*

Synopsis	Service MTU size to be used
Context	<b>configure</b> <a href="#">pw-port number sdp reference</a> <a href="#">adv-service-mtu number</a>
Tree	<a href="#">adv-service-mtu</a>
Range	0 to 9782
Units	bytes
Introduced	21.7.R1
Platforms	All

### **control-word** *boolean*

Synopsis	Allow control word bit setting in the label message
Context	<b>configure</b> <a href="#">pw-port number sdp reference</a> <a href="#">control-word boolean</a>
Tree	<a href="#">control-word</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">pw-port number sdp reference</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R4
Platforms	All

### **shaper**

Synopsis	Enter the <b>shaper</b> context
----------	---------------------------------

---

Context	<b>configure</b> <a href="#">pw-port number sdp reference egress shaper</a>
Tree	<a href="#">shaper</a>
Introduced	16.0.R4
Platforms	All

### **intermediate-destination-id** *string*

Synopsis	Intermediate destination ID applicable to ESM PW SAPs
Context	<b>configure</b> <a href="#">pw-port number sdp reference egress shaper intermediate-destination-id string</a>
Tree	<a href="#">intermediate-destination-id</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

### **pw-sap-secondary-shaper** *string*

Synopsis	Secondary shaper applicable to PW SAPs
Context	<b>configure</b> <a href="#">pw-port number sdp reference egress shaper pw-sap-secondary-shaper string</a>
Tree	<a href="#">pw-sap-secondary-shaper</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

### **virtual-port** *string*

Synopsis	Virtual port applicable to all PW SAPs
Context	<b>configure</b> <a href="#">pw-port number sdp reference egress shaper virtual-port string</a>
Tree	<a href="#">virtual-port</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress VC label representing the PW port
Context	<b>configure</b> <i>pw-port number sdp reference egress vc-label number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	16.0.R4
Platforms	All

**entropy-label** *boolean*

Synopsis	Enable entropy level insertion on the PW port
Context	<b>configure</b> <i>pw-port number sdp reference entropy-label boolean</i>
Tree	<a href="#">entropy-label</a>
Description	<p>When configured to <b>true</b>, the entropy label and ELI are inserted in packets for which at least one LSP in the stack for the far-end of the tunnel used by the service has advertised entropy label capability.</p> <ul style="list-style-type: none"> <li>For RSVP or SR-TE tunnels, the <b>entropy-label</b> command must be set to <b>true</b> under the <b>configure router mpls</b> or <b>configure router mpls lsp</b> context.</li> <li>For SR-ISIS, SR-OSPF, or SR-TE tunnels, the <b>override-tunnel-elic</b> command must be set to <b>true</b> under the <b>configure router isis entropy-label</b> or <b>configure router ospf entropy-label</b> context.</li> <li>For LDP tunnels, the <b>entropy-label-capability</b> command must be set to <b>true</b> under the <b>configure router ldp</b> context.</li> </ul> <p>When configured to <b>false</b>, entropy label insertion on the PW port is not allowed.</p> <p>The entropy label is only applicable to PW ports bound to a static port; it is not applicable to ports using an FPE.</p>
Default	false
Introduced	21.5.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <i>pw-port number sdp reference ingress</i>



Tree	<a href="#">ingress</a>
Introduced	16.0.R4
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress VC label representing the PW-port
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">sdp</a> <i>reference</i> <a href="#">ingress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	1 to 1048575
Introduced	16.0.R4
Platforms	All

**monitor-oper-group** *reference*

Synopsis	Name of the operational group to monitor
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">sdp</a> <i>reference</i> <a href="#">monitor-oper-group</a> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Introduced	16.0.R4
Platforms	All

**vc-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual Circuit ID signaled to the peer
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">sdp</a> <i>reference</i> <a href="#">vc-id</a> <i>number</i>
Tree	<a href="#">vc-id</a>
Range	1 to 4294967295

---

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **vc-type** *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding mode for the PW-port
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">sdp</a> <i>reference</i> <a href="#">vc-type</a> <i>keyword</i>
Tree	<a href="#">vc-type</a>
Options	ether, vlan
Default	ether
Introduced	16.0.R4
Platforms	All

### **vlan-vc-tag** *number*

Synopsis	VLAN VC tag
Context	<b>configure</b> <a href="#">pw-port</a> <i>number</i> <a href="#">sdp</a> <i>reference</i> <a href="#">vlan-vc-tag</a> <i>number</i>
Tree	<a href="#">vlan-vc-tag</a>
Range	0 to 4094
Introduced	16.0.R4
Platforms	All

### 3.36 python commands

```

configure
- python
  - apply-groups reference
  - apply-groups-exclude reference
  - python-policy string
    - apply-groups reference
    - apply-groups-exclude reference
  - cache
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - entry-size number
    - max-entries number
    - max-entry-lifetime number
    - mcs-peer
      - apply-groups reference
      - apply-groups-exclude reference
      - ip-address reference
      - sync-tag string
    - minimum-lifetimes
      - high-availability number
      - multi-chassis-redundancy number
      - persistence number
    - persistence boolean
  - description string
  - dhcp keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - dhcp6 keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - diameter keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - gtpv1-c keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - gtpv2-c keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - nat-group reference
  - pfcf keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - pppoe keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - radius keyword direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - script reference
  - syslog

```

---

configure python python-policy syslog apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **script** *reference*
- **wlan-gw-group** *reference*
- **python-script** *string*
- **action-on-fail** *keyword*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **protection**
  - **hmac-sha256** *string*
- **run-as-user** *string*
- **urls** *string*
- **version** *keyword*

### 3.36.1 python command descriptions

#### python

Synopsis	Enter the <b>python</b> context
Context	<b>configure</b> <a href="#">python</a>
Tree	<a href="#">python</a>
Introduced	16.0.R1
Platforms	All

#### python-policy [[name](#)] *string*

Synopsis	Enter the <b>python-policy</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Tree	<a href="#">python-policy</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	All

#### [\[name\]](#) *string*

Synopsis	Python policy name
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Tree	<a href="#">python-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### cache

Synopsis	Enable the <b>cache</b> context
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a>
Tree	<a href="#">cache</a>

Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the Python cache
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **entry-size** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum data structure size for Python cache entry
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>entry-size</b> <i>number</i>
Tree	<a href="#">entry-size</a>
Range	32 to 2048
Units	bytes
Default	256
Introduced	16.0.R1
Platforms	All

### **max-entries** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of Python cache entries to be stored
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>max-entries</b> <i>number</i>
Tree	<a href="#">max-entries</a>

Range	1 to 1000000
Default	128000
Introduced	16.0.R1
Platforms	All

### **max-entry-lifetime** *number*

Synopsis	Maximum lifetime for each Python cache entry
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">max-entry-lifetime</a> <i>number</i>
Tree	<a href="#">max-entry-lifetime</a>
Range	1 to 604800
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	All

### **mcs-peer**

Synopsis	Enable the <b>mcs-peer</b> context
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">mcs-peer</a>
Tree	<a href="#">mcs-peer</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** *reference*

Synopsis	IP address of the MCS peer
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">mcs-peer</a> <a href="#">ip-address</a> <i>reference</i>
Tree	<a href="#">ip-address</a>
Reference	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sync-tag** *string*

Synopsis	Tag to synchronize the cached entries in the policy
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">mcs-peer</a> <b>sync-tag</b> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **minimum-lifetimes**

Synopsis	Enter the <b>minimum-lifetimes</b> context
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <b>minimum-lifetimes</b>
Tree	<a href="#">minimum-lifetimes</a>
Introduced	16.0.R1
Platforms	All

### **high-availability** *number*

Synopsis	Minimum lifetime of a cache entry to be synced with CPM
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">minimum-lifetimes</a> <b>high-availability</b> <i>number</i>
Tree	<a href="#">high-availability</a>
Range	1 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

### **multi-chassis-redundancy** *number*

Synopsis	Minimum lifetime for synchronization with the MCS peer
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">minimum-lifetimes</a> <b>multi-chassis-redundancy</b> <i>number</i>
Tree	<a href="#">multi-chassis-redundancy</a>
Range	1 to 600



Units	seconds
Introduced	16.0.R1
Platforms	All

### **persistence** *number*

Synopsis	Minimum lifetime for cache entry to be made persistent
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">minimum-lifetimes</a> <a href="#">persistence</a> <i>number</i>
Tree	<a href="#">persistence</a>
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **persistence** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow persistence for cached entries
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">cache</a> <a href="#">persistence</a> <i>boolean</i>
Tree	<a href="#">persistence</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dhcp** [message-type] keyword direction keyword

Synopsis	Enter the <b>dhcp</b> list instance
Context	<b>configure</b> python python-policy string dhcp keyword direction keyword
Tree	dhcp
Introduced	16.0.R1
Platforms	All

**[message-type]** keyword

Synopsis	DHCP message type
Context	<b>configure</b> python python-policy string dhcp keyword direction keyword
Tree	dhcp
Options	discover, offer, request, decline, ack, nak, release, inform, force-renew, lease-query, lease-unassigned, lease-unknown, lease-active
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** keyword

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> python python-policy string dhcp keyword direction keyword
Tree	dhcp
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**script** reference

Synopsis	Python script to handle the message
Context	<b>configure</b> python python-policy string dhcp keyword direction keyword script reference
Tree	script
Reference	<b>configure</b> python python-script string

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **dhcp6** [[message-type](#)] *keyword direction keyword*

Synopsis	Enter the <b>dhcp6</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">dhcp6</a> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	All

### **[message-type]** *keyword*

Synopsis	DHCPv6 message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">dhcp6</a> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp6</a>
Options	solicit, advertise, request, confirm, renew, rebind, reply, release, decline, reconfigure, info-request, relay-forward, relay-reply
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">dhcp6</a> <i>keyword direction keyword</i>
Tree	<a href="#">dhcp6</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">dhcp6</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**diameter** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>diameter</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">diameter</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Introduced	16.0.R1
Platforms	All

**[message-type]** *keyword*

Synopsis	Diameter message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">diameter</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Options	ccr, cca, rar, raa, cer, cea, dwr, dwa, dpr, dpa, asr, asa, aar, aaa
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">diameter</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">diameter</a>
Options	ingress, egress
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

### **script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">diameter</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **gtpv1-c** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>gtpv1-c</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv1-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv1-c</a>
Introduced	16.0.R1
Platforms	All

### **[message-type]** *keyword*

Synopsis	GTPv1-C message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv1-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv1-c</a>
Options	echo-request, echo-response, version-not-supported, create-pdp-context-request, create-pdp-context-response, delete-pdp-context-request, delete-pdp-context-response, error-indication, end-marker
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv1-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv1-c</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv1-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**gtpv2-c** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>gtpv2-c</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv2-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv2-c</a>
Introduced	16.0.R1
Platforms	All

**[message-type]** *keyword*

Synopsis	GTPv2-C message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv2-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv2-c</a>
Options	echo-request, echo-response, version-not-supported, create-session-request, create-session-response, modify-bearer-request, modify-bearer-response, delete-session-request, delete-session-response, delete-bearer-request,

delete-bearer-response, release-access-bearers-request, release-access-bearers-response, downlink-data-notification, downlink-data-notification-ack, change-notification-request, change-notification-response, stop-paging-indication

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv2-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">gtpv2-c</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">gtpv2-c</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **nat-group** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT ISA group for this Python policy
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">nat-group</a> <i>reference</i>

Tree	<a href="#">nat-group</a>
Reference	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i>
Notes	The following elements are part of a choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **pfcp** [[message-type](#)] *keyword direction keyword*

Synopsis	Enter the <b>pfcp</b> list instance
Context	<b>configure</b> <a href="#">python python-policy</a> <i>string pfcp keyword direction keyword</i>
Tree	<a href="#">pfcp</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[message-type]** *keyword*

Synopsis	Message type applied to the script
Context	<b>configure</b> <a href="#">python python-policy</a> <i>string pfcp keyword direction keyword</i>
Tree	<a href="#">pfcp</a>
Options	heartbeat-request, heartbeat-response, association-setup-request, association-setup-response, association-update-request, association-update-response, association-release-request, association-release-response, node-report-request, node-report-response, session-estab-request, session-estab-response, session-mod-request, session-mod-response, session-del-request, session-del-response, session-report-request, session-report-response
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis	Event that is either incoming or outgoing
Context	<b>configure</b> <a href="#">python python-policy</a> <i>string pfcp keyword direction keyword</i>
Tree	<a href="#">pfcp</a>
Options	ingress, egress
Notes	This element is part of a list key.



Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pfcf</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>pppoe</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pppoe</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	All

**[message-type]** *keyword*

Synopsis	PPPoE message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pppoe</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Options	session-lcp, session-pap, session-chap, session-ipcp, session-ip6cp, pado, padi, padr, pads, padt
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** *keyword*

Synopsis	Event that is either incoming or outgoing
----------	---

Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pppoe</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">pppoe</a>
Options	ingress, egress
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **script** *reference*

Synopsis	Python script to handle the message
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">pppoe</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i> <a href="#">script</a> <i>reference</i>
Tree	<a href="#">script</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **radius** [[message-type](#)] *keyword* [direction](#) *keyword*

Synopsis	Enter the <b>radius</b> list instance
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">radius</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">radius</a>
Introduced	16.0.R1
Platforms	All

### **[message-type]** *keyword*

Synopsis	RADIUS message type
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i> <a href="#">radius</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">radius</a>
Options	access-request, access-accept, access-reject, accounting-request, accounting-response, access-challenge, disconnect-request, change-of-authorization-request
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **direction** *keyword*

Synopsis Event that is either incoming or outgoing

Context **configure** [python](#) [python-policy](#) *string* [radius](#) *keyword* **direction** *keyword*

Tree [radius](#)

Options ingress, egress

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **script** *reference*

Synopsis Python script to handle the message

Context **configure** [python](#) [python-policy](#) *string* [radius](#) *keyword* **direction** *keyword* **script** *reference*

Tree [script](#)

Reference **configure** [python](#) [python-script](#) *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **syslog**

Synopsis Enable the **syslog** context

Context **configure** [python](#) [python-policy](#) *string* **syslog**

Tree [syslog](#)

Introduced 16.0.R1

Platforms All

### **script** *reference*

Synopsis Python script name for outgoing syslog messages

Context **configure** [python](#) [python-policy](#) *string* **syslog** **script** *reference*

Tree [script](#)

Reference	<b>configure</b> <a href="#">python python-script</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### wlan-gw-group *reference*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN ISA group for this Python policy
Context	<b>configure</b> <a href="#">python python-policy</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s

### python-script [[name](#)] *string*

Synopsis	Enter the <b>python-script</b> list instance
Context	<b>configure</b> <a href="#">python python-script</a> <i>string</i>
Tree	<a href="#">python-script</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	All

### [[name](#)] *string*

Synopsis	Python script policy name
Context	<b>configure</b> <a href="#">python python-script</a> <i>string</i>
Tree	<a href="#">python-script</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1  
Platforms All

### **action-on-fail** *keyword*

Synopsis Action taken when the Python execution fails  
Context **configure** [python](#) [python-script](#) *string* **action-on-fail** *keyword*  
Tree [action-on-fail](#)  
Options passthrough, drop  
Default drop  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the Python script  
Context **configure** [python](#) [python-script](#) *string* **admin-state** *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [python](#) [python-script](#) *string* **description** *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **protection**

Synopsis Enter the **protection** context

Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <a href="#">protection</a>
Tree	<a href="#">protection</a>
Introduced	16.0.R1
Platforms	All

### **hmac-sha256** *string*

Synopsis	Hash value to include as first line in Python script
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <a href="#">protection</a> <a href="#">hmac-sha256</a> <i>string</i>
Tree	<a href="#">hmac-sha256</a>
String Length	1 to 199
Introduced	16.0.R1
Platforms	All

### **run-as-user** *string*

Synopsis	User authenticated for scripts
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <a href="#">run-as-user</a> <i>string</i>
Tree	<a href="#">run-as-user</a>
Description	This command configures a user that is different from the current user of the session. Script authentication, authorization, accounting, and any activity within the script, is run as the specified user.  If this command is not configured, the current user of the session is used.
String Length	1 to 32
Introduced	22.10.R1
Platforms	All

### **urls** *string*

Synopsis	Script location in URL format
Context	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i> <a href="#">urls</a> <i>string</i>
Tree	<a href="#">urls</a>
String Length	1 to 180
Max. Instances	3
Notes	This element is ordered by the user.

Introduced 16.0.R4  
Platforms All

### **version** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Python version the script is written for  
Context **configure** `python` `python-script` *string* `version` *keyword*  
Tree `version`  
Options python2, python3  
Default python2  
Introduced 21.2.R1  
Platforms All

### 3.37 qos commands

```

configure
- qos
  - adv-config-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - child-control
    - bandwidth-distribution
      - above-offered-allowance
        - delta-consumed-agg-rate
          - percent decimal-number
        - delta-consumed-higher-tier-rate
          - percent decimal-number
        - unconsumed-agg-rate
          - percent decimal-number
        - unconsumed-higher-tier-rate
          - percent decimal-number
      - above-offered-cap
        - percent decimal-number
        - rate (number | keyword)
      - enqueue-on-pir-zero boolean
      - granularity
        - percent decimal-number
        - rate number
      - internal-scheduler-weight-mode keyword
      - limit-pir-zero-drain boolean
      - lub-init-min-pir boolean
    - offered-measurement
      - add
        - active-min-only boolean
        - min-only boolean
        - percent decimal-number
        - rate number
        - fast-start boolean
        - fast-stop boolean
        - granularity
          - percent decimal-number
          - rate number
        - hold-time
          - active-min-only boolean
          - high-rate number
        - max-decrement
          - percent decimal-number
          - rate number
        - sample-interval number
        - time-average-factor
          - dec-only boolean
          - weighting-factor number
      - description string
      - apply-groups reference
      - apply-groups-exclude reference
      - fp-resource-policy string
    - aggregate-shapers
      - auto-creation boolean
      - hw-agg-shapers
        - saps boolean
        - subscribers boolean
    - queue-sets
      - default-size
        - queue-groups (number | keyword)

```



configure qos fp-resource-policy aggregate-shapers queue-sets default-size saps

```

    - saps (number | keyword)
    - subscribers (number | keyword)
  - size number
    - allocation-weight number
    - apply-groups reference
    - apply-groups-exclude reference
  - reserved-non-shaper-queues number
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ports
    - hqos-mode keyword
  - queues
    - ingress-percent-of-total decimal-number
- hs-attachment-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - low-burst-max-class number
  - queue number
    - apply-groups reference
    - apply-groups-exclude reference
    - sched-class number
    - unattached
  - wrr-group number
- wrr-group number
  - apply-groups reference
  - apply-groups-exclude reference
  - sched-class number
  - unattached
- hs-pool-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - mid-tier
    - mid-pool number
      - allocation-percent decimal-number
      - apply-groups reference
      - apply-groups-exclude reference
      - parent-root-pool
        - none
        - pool-id reference
      - port-bw-oversubscription-factor number
      - slope-policy reference
  - root-tier
    - root-pool number
      - allocation-weight number
      - apply-groups reference
      - apply-groups-exclude reference
      - slope-policy reference
  - system-reserve decimal-number
- hs-port-pool-policy string
  - alt-port-class-pools
    - class-pool number
      - allocation
        - explicit-percent decimal-number
        - port-bw-weight number
      - apply-groups reference
      - apply-groups-exclude reference
      - parent-mid-pool
        - none
        - pool-id number
      - slope-policy reference
  - apply-groups reference

```

configure qos hs-port-pool-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **description** *string*
- **std-port-class-pools**
  - **class-pool** *number*
    - **allocation**
      - **explicit-percent** *decimal-number*
      - **port-bw-weight** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **parent-mid-pool**
      - **none**
      - **pool-id** *number*
    - **slope-policy** *reference*
- **hs-scheduler-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **group** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **rate** (*number* | *keyword*)
  - **max-rate** (*number* | *keyword*)
  - **scheduling-class** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **group**
    - **group-id** *number*
    - **weight** *number*
  - **rate** (*number* | *keyword*)
- **hw-agg-shaper-scheduler-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **congestion-threshold** *number*
  - **description** *string*
  - **group** *string*
  - **max-percent-rate** *decimal-number*
  - **max-rate** (*number* | *keyword*)
  - **monitor-threshold** *number*
  - **sched-class** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **group** *reference*
  - **weight** *number*
- **match-list**
  - **ip-prefix-list** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **prefix** *string*
  - **ipv6-prefix-list** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **prefix** *string*
  - **port-list** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **port** *number*
    - **range** *number* **end** *number*
- **md-auto-id**
  - **qos-policy-id-range**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*

```
configure qos md-auto-id qos-policy-id-range end
```

```

- end number
- start number
- network string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress
  - dscp keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - fc keyword
    - profile keyword
  - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - de-mark
      - force number
    - dot1p-in-profile number
    - dot1p-out-profile number
    - dscp-in-profile keyword
    - dscp-out-profile keyword
    - lsp-exp-in-profile number
    - lsp-exp-out-profile number
    - port-redirect-group
      - policer number
      - queue number
- ip-criteria
  - entry number
    - action
      - fc keyword
      - port-redirect-group
        - policer number
        - queue number
      - profile keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip
        - address (ipv4-prefix-with-host-bits | ipv4-address)
        - ip-prefix-list reference
        - mask string
      - dst-port
        - eq number
        - gt number
        - lt number
        - port-list reference
        - range
          - end number
          - start number
      - fragment keyword
      - icmp-type number
      - protocol (number | keyword)
      - src-ip
        - address (ipv4-prefix-with-host-bits | ipv4-address)
        - ip-prefix-list reference
        - mask string
      - src-port
        - eq number
        - gt number
        - lt number
        - port-list reference

```

configure qos network egress ip-criteria entry match src-port range

```

    - range
      - end number
      - start number
- ipv6-criteria
- entry number
- action
- fc keyword
- port-redirect-group
- policer number
- queue number
- profile keyword
- type keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- match
- dscp keyword
- dst-ip
- address (ipv6-prefix-with-host-bits | ipv6-address)
- ipv6-prefix-list reference
- mask string
- dst-port
- eq number
- gt number
- lt number
- port-list reference
- range
- end number
- start number
- fragment keyword
- icmp-type number
- next-header (number | keyword)
- src-ip
- address (ipv6-prefix-with-host-bits | ipv6-address)
- ipv6-prefix-list reference
- mask string
- src-port
- eq number
- gt number
- lt number
- port-list reference
- range
- end number
- start number
- prec number
- apply-groups reference
- apply-groups-exclude reference
- fc keyword
- profile keyword
- remark-trusted
- force-egress-marking boolean
- ingress
- default-action
- fc keyword
- profile keyword
- dot1p number
- apply-groups reference
- apply-groups-exclude reference
- fc keyword
- profile keyword
- dscp keyword
- apply-groups reference
- apply-groups-exclude reference
- fc keyword

```

## configure qos network ingress dscp profile

- **profile** *keyword*
- **fc** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fp-redirect-group**
  - **broadcast-policer** *number*
  - **multicast-policer** *number*
  - **policer** *number*
  - **unknown-policer** *number*
- **ip-criteria**
  - **entry** *number*
  - **action**
    - **fc** *keyword*
    - **profile** *keyword*
    - **type** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **match**
    - **dscp** *keyword*
    - **dst-ip**
      - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
      - **ip-prefix-list** *reference*
      - **mask** *string*
    - **dst-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **port-list** *reference*
      - **range**
        - **end** *number*
        - **start** *number*
    - **fragment** *keyword*
    - **protocol** (*number* | *keyword*)
    - **src-ip**
      - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
      - **ip-prefix-list** *reference*
      - **mask** *string*
    - **src-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **port-list** *reference*
      - **range**
        - **end** *number*
        - **start** *number*
- **ipv6-criteria**
  - **entry** *number*
  - **action**
    - **fc** *keyword*
    - **profile** *keyword*
    - **type** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **match**
    - **dscp** *keyword*
    - **dst-ip**
      - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
      - **ipv6-prefix-list** *reference*
      - **mask** *string*
    - **dst-port**
      - **eq** *number*
      - **gt** *number*

configure qos network ingress ipv6-criteria entry match dst-port lt

```

    - lt number
    - port-list reference
    - range
      - end number
      - start number
    - fragment keyword
    - next-header (number | keyword)
    - src-ip
      - address (ipv6-prefix-with-host-bits | ipv6-address)
      - ipv6-prefix-list reference
      - mask string
    - src-port
      - eq number
      - gt number
      - lt number
      - port-list reference
      - range
        - end number
        - start number
  - lsr-use-dscp boolean
  - lsp-exp number
    - apply-groups reference
    - apply-groups-exclude reference
    - fc keyword
    - profile keyword
  - policy-id number
  - scope keyword
- network-queue string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - multicast-queue reference
    - queue reference
  - hs-attachment-policy reference
  - hs-wrr-group number
    - adaptation-rule
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hs-class-weight number
    - rate number
  - queue number
    - adaptation-rule
      - cir keyword
      - fir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - cbs decimal-number
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
  - hs-alt-port-class-pool boolean
  - hs-class-weight number
  - hs-mbs decimal-number
  - hs-wred-queue
    - policy reference
  - hs-wrr-weight number
  - mbs decimal-number
  - multipoint boolean

```

configure qos network-queue queue port-parent

- **port-parent**
    - **cir-level** *number*
    - **cir-weight** *number*
    - **level** *number*
    - **weight** *number*
  - **queue-type** *keyword*
  - **rate**
    - **cir** *number*
    - **fir** *number*
    - **pir** *number*
  - **policer-control-policy** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
  - **root**
    - **max-percent-rate** *decimal-number*
    - **max-rate** (*number* | *keyword*)
    - **priority-mbs-thresholds**
      - **min-thresh-separation** (*number* | *keyword*)
      - **priority** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **fixed-mbs** *boolean*
        - **mbs-contribution** (*number* | *keyword*)
    - **profile-preferred** *boolean*
  - **tier** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **arbiter** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **arbiter-parent**
      - **arbiter-name** *string*
      - **level** *number*
      - **weight** *number*
    - **description** *string*
    - **percent-rate** *decimal-number*
    - **rate** (*number* | *keyword*)
    - **reference-rate** *keyword*
- **port-scheduler-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **dist-lag-rate-shared** *boolean*
  - **group** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **monitor-threshold** *number*
    - **percent-rate**
      - **cir** *decimal-number*
      - **pir** *decimal-number*
  - **rate**
    - **cir** (*number* | *keyword*)
    - **pir** (*number* | *keyword*)
- **hqos-algorithm** *keyword*
- **level** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group** *reference*
  - **monitor-threshold** *number*
  - **percent-rate**
    - **cir** *decimal-number*
    - **pir** *decimal-number*
- **rate**

configure qos port-scheduler-policy level rate cir

- **cir** (number | keyword)
- **pir** (number | keyword)
- **weight** number
- **max-percent-rate** decimal-number
- **max-rate** (number | keyword)
- **monitor-threshold** number
- **orphan-overrides**
  - **cir-level** number
  - **cir-weight** number
  - **level** number
  - **weight** number
- **post-policer-mapping** string
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **description** string
  - **fc** keyword **profile** keyword
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **maps-to**
      - **fc** keyword
      - **profile** keyword
- **queue-group-redirect-list** string
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **match** number
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **instance** number
  - **type** keyword
- **queue-group-templates**
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **egress**
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **queue-group** string
      - **apply-groups** reference
      - **apply-groups-exclude** reference
      - **description** string
      - **fc** keyword
        - **apply-groups** reference
        - **apply-groups-exclude** reference
      - **queue**
        - **none**
        - **queue-id** reference
    - **hs-attachment-policy** reference
    - **hs-wrr-group** number
      - **adaptation-rule**
        - **pir** keyword
        - **apply-groups** reference
        - **apply-groups-exclude** reference
      - **hs-class-weight** number
      - **percent-rate** decimal-number
      - **rate** (number | keyword)
    - **policer** number
      - **adaptation-rule**
        - **cir** keyword
        - **pir** keyword
      - **adv-config-policy** reference
      - **apply-groups** reference
      - **apply-groups-exclude** reference
      - **arbiter-parent**
        - **arbiter-name** string
        - **level** number



configure qos queue-group-templates egress queue-group policer arbiter-parent weight

```

- weight number
- cbs (number | keyword)
- description string
- exceed-pir boolean
- high-prio-only (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- reference-rate keyword
- profile-capped boolean
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- queue number
- adaptation-rule
- cir keyword
- pir keyword
- adv-config-policy reference
- apply-groups reference
- apply-groups-exclude reference
- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
- exceed
- percent-reduction-from-mbs (number | keyword)
- high
- percent-reduction-from-mbs (number | keyword)
- highplus
- percent-reduction-from-mbs (number | keyword)
- low
- percent-reduction-from-mbs (number | keyword)
- dynamic-mbs boolean
- hs-alt-port-class-pool boolean
- hs-class-weight number
- hs-wred-queue
- policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- reference-rate keyword
- port-parent
- cir-level number
- cir-weight number
- level number
- weight number
- queue-delay number
- queue-type keyword
- rate
- cir (number | keyword)
- pir (number | keyword)
- scheduler-parent
- cir-level number
- cir-weight number
- level number
- scheduler-name string
- weight number
- wred-queue
- mode keyword

```

configure qos queue-group-templates egress queue-group queue wred-queue policy

```

    - policy reference
    - usage keyword
  - queues-hqos-manageable boolean
- ingress
  - apply-groups reference
  - apply-groups-exclude reference
  - queue-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - policer number
    - adaptation-rule
      - cir keyword
      - pir keyword
    - adv-config-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - arbiter-parent
      - arbiter-name string
      - level number
      - weight number
    - cbs (number | keyword)
    - description string
    - high-prio-only (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - profile-capped boolean
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue number
    - adaptation-rule
      - cir keyword
      - fir keyword
      - pir keyword
    - adv-config-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - burst-limit (number | keyword)
    - cbs (number | keyword)
    - cir-non-profiling boolean
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - multipoint boolean
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - fir decimal-number
      - pir decimal-number
      - police
      - reference-rate keyword
    - queue-mode keyword
    - queue-type keyword
    - rate
      - cir (number | keyword)
      - fir (number | keyword)
      - pir (number | keyword)
      - police

```

configure qos queue-group-templates ingress queue-group queue scheduler-parent

- **scheduler-parent**
  - **cir-level** *number*
  - **cir-weight** *number*
  - **level** *number*
  - **scheduler-name** *string*
  - **weight** *number*
- **sap-egress** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **dot1p** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **fc** *keyword*
  - **profile** *keyword*
- **dscp** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **fc** *keyword*
  - **profile** *keyword*
- **ethernet-ctag** *boolean*
- **fc** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **de-mark**
    - **force** *number*
  - **de-mark-inner**
    - **force** *number*
  - **de-mark-outer**
    - **force** *number*
  - **dot1p**
    - **exceed-profile** *number*
    - **in-profile** *number*
    - **out-profile** *number*
  - **dot1p-inner**
    - **exceed-profile** *number*
    - **in-profile** *number*
    - **out-profile** *number*
  - **dot1p-outer**
    - **exceed-profile** *number*
    - **in-profile** *number*
    - **out-profile** *number*
  - **dscp**
    - **exceed-profile** *keyword*
    - **in-profile** *keyword*
    - **out-profile** *keyword*
- **policer** *reference*
- **port-redirect-group-queue**
  - **queue** *number*
- **prec**
  - **exceed-profile** *number*
  - **in-profile** *number*
  - **out-profile** *number*
- **queue** *reference*
- **queue-group-queue**
  - **instance** *number*
  - **queue** *reference*
  - **queue-group-name** *reference*
- **hs-attachment-policy** *reference*
- **hs-wrr-group** *number*
  - **adaptation-rule**
    - **pir** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

configure qos sap-egress hs-wrr-group hs-class-weight

- **hs-class-weight** *number*
- **percent-rate** *decimal-number*
- **rate** (*number* | *keyword*)
- **hw-agg-shaper-queues**
  - **queue-set-size** (*number* | *keyword*)
- **ip-criteria**
  - **entry** *number*
    - **action**
      - **fc** *keyword*
      - **policer** *reference*
      - **port-redirect-group-queue** *boolean*
      - **profile** *keyword*
      - **queue** *number*
      - **type** *keyword*
      - **use-fc-mapped-queue** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **match**
      - **dscp** *keyword*
      - **dst-ip**
        - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
        - **ip-prefix-list** *reference*
        - **mask** *string*
      - **dst-port**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **range**
          - **end** *number*
          - **start** *number*
      - **fragment** *keyword*
      - **protocol** (*number* | *keyword*)
      - **src-ip**
        - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
        - **ip-prefix-list** *reference*
        - **mask** *string*
      - **src-port**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **range**
          - **end** *number*
          - **start** *number*
- **ipv6-criteria**
  - **entry** *number*
    - **action**
      - **fc** *keyword*
      - **policer** *reference*
      - **port-redirect-group-queue** *boolean*
      - **profile** *keyword*
      - **queue** *number*
      - **type** *keyword*
      - **use-fc-mapped-queue** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **match**
      - **dscp** *keyword*
      - **dst-ip**
        - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
        - **ipv6-prefix-list** *reference*
        - **mask** *string*
      - **dst-port**

configure qos sap-egress ipv6-criteria entry match dst-port eq

```

    - eq number
    - gt number
    - lt number
    - range
      - end number
      - start number
    - next-header (number | keyword)
    - src-ip
      - address (ipv6-prefix-with-host-bits | ipv6-address)
      - ipv6-prefix-list reference
      - mask string
    - src-port
      - eq number
      - gt number
      - lt number
      - range
        - end number
        - start number
  - parent-location keyword
  - policer number
    - adaptation-rule
      - cir keyword
      - pir keyword
    - adv-config-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - arbiter-parent
      - arbiter-name string
      - level number
      - weight number
    - cbs (number | keyword)
    - description string
    - dscp-prec-remarking boolean
    - exceed-pir boolean
    - high-prio-only (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
      - reference-rate keyword
    - port-parent
      - cir-level number
      - cir-weight number
      - level number
      - weight number
    - profile-capped boolean
    - profile-out-preserve boolean
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - scheduler-parent
      - cir-level number
      - cir-weight number
      - level number
      - scheduler-name string
      - weight number
      - stat-mode keyword
  - policers-hqos-manageable boolean
  - policy-id number
  - post-policer-mapping reference
  - prec number
    - apply-groups reference
    - apply-groups-exclude reference

```

## configure qos sap-egress prec fc

- **fc** *keyword*
- **profile** *keyword*
- **queue** *number*
- **adaptation-rule**
  - **cir** *keyword*
  - **pir** *keyword*
- **adv-config-policy** *reference*
- **agg-shaper-weight** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **avg-frame-overhead** *decimal-number*
- **burst-limit** (*number* | *keyword*)
- **cbs** (*number* | *keyword*)
- **drop-tail**
  - **exceed**
    - **percent-reduction-from-mbs** (*number* | *keyword*)
  - **high**
    - **percent-reduction-from-mbs** (*number* | *keyword*)
  - **highplus**
    - **percent-reduction-from-mbs** (*number* | *keyword*)
  - **low**
    - **percent-reduction-from-mbs** (*number* | *keyword*)
- **fir-burst-limit** (*number* | *keyword*)
- **hs-alt-port-class-pool** *boolean*
- **hs-class-weight** *number*
- **hs-wred-queue**
  - **policy** *reference*
- **hs-wrr-weight** *number*
- **maximum-data-transmission** (*number* | *keyword*)
- **mbs** (*number* | *keyword*)
- **packet-byte-offset** *number*
- **percent-rate**
  - **cir** *decimal-number*
  - **pir** *decimal-number*
  - **reference-rate** *keyword*
- **port-parent**
  - **cir-level** *number*
  - **cir-weight** *number*
  - **level** *number*
  - **weight** *number*
- **queue-type** *keyword*
- **rate**
  - **cir** (*number* | *keyword*)
  - **pir** (*number* | *keyword*)
- **sched-class** (*number* | *keyword*)
- **scheduler-parent**
  - **cir-level** *number*
  - **cir-weight** *number*
  - **level** *number*
  - **scheduler-name** *string*
  - **weight** *number*
- **wred-queue**
  - **mode** *keyword*
  - **policy** *reference*
  - **usage** *keyword*
- **sched-class-elevation**
  - **sched-class** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **weight** *number*
- **scope** *keyword*
- **subscriber-mgmt**
  - **dynamic-policer**
    - **arbiter-parent**

configure qos sap-egress subscriber-mgmt dynamic-policer arbiter-parent arbiter-name

```

    - arbiter-name string
    - level number
    - weight number
  - cbs (number | keyword)
  - mbs (number | keyword)
  - packet-byte-offset number
  - policer-id-range
    - end number
    - start number
  - stat-mode keyword
  - dynamic-queue
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - port-parent
      - cir-level number
      - cir-weight number
      - level number
      - weight number
    - queue-id-range
      - end number
      - start number
    - scheduler-parent
      - cir-level number
      - cir-weight number
      - level number
      - scheduler-name string
      - weight number
  - pcc-rule-entry
    - range
      - end number
      - start number
  - use-policer-result-marking-dot1p-inner boolean
- sap-ingress string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-fc string
  - default-priority keyword
  - description string
  - dot1p number
    - apply-groups reference
    - apply-groups-exclude reference
    - fc string
    - priority keyword
  - dscp keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - fc string
    - priority keyword
  - fc string
    - apply-groups reference
    - apply-groups-exclude reference
    - broadcast-policer number
    - broadcast-queue reference
    - broadcast-queue-group-queue
      - queue reference
      - queue-group-name reference
    - de-1-out-profile boolean
    - egress-fc keyword
    - fp-redirect-group-broadcast-policer
    - fp-redirect-group-multicast-policer
    - fp-redirect-group-policer
    - fp-redirect-group-unknown-policer
    - in-remark

```

configure qos sap-ingress fc in-remark dscp

- **dscp** *keyword*
- **prec** *number*
- **multicast-policer** *number*
- **multicast-queue** *reference*
- **multicast-queue-group-queue**
  - **queue** *reference*
  - **queue-group-name** *reference*
- **out-remark**
  - **dscp** *keyword*
  - **prec** *number*
- **policer** *number*
- **profile** *keyword*
- **queue** *reference*
- **queue-group-queue**
  - **queue** *reference*
  - **queue-group-name** *reference*
- **unknown-policer** *number*
- **unknown-queue** *reference*
- **unknown-queue-group-queue**
  - **queue** *reference*
  - **queue-group-name** *reference*
- **ip-criteria**
  - **entry** *number*
  - **action**
    - **fc** *string*
    - **policer** *reference*
    - **priority** *keyword*
    - **type** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **match**
    - **dscp** *keyword*
    - **dst-ip**
      - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
      - **ip-prefix-list** *reference*
      - **mask** *string*
    - **dst-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **range**
        - **end** *number*
        - **start** *number*
    - **fragment** *keyword*
    - **protocol** (*number* | *keyword*)
    - **src-ip**
      - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
      - **ip-prefix-list** *reference*
      - **mask** *string*
    - **src-port**
      - **eq** *number*
      - **gt** *number*
      - **lt** *number*
      - **range**
        - **end** *number*
        - **start** *number*
    - **vxlan-vni**
      - **eq** *number*
      - **range**
        - **end** *number*
        - **start** *number*
    - **tag** *number*
    - **type** *keyword*



configure qos sap-ingress ipv6-criteria

```

- ipv6-criteria
  - entry number
    - action
      - fc string
      - policer reference
      - priority keyword
      - type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - ipv6-prefix-list reference
        - mask string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - fragment keyword
      - next-header (number | keyword)
      - src-ip
        - address (ipv6-prefix-with-host-bits | ipv6-address)
        - ipv6-prefix-list reference
        - mask string
      - src-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - vlan-vni
        - eq number
        - range
          - end number
          - start number
    - tag number
    - type keyword
  - lsp-exp number
    - apply-groups reference
    - apply-groups-exclude reference
    - fc string
    - priority keyword
  - mac-criteria
    - entry number
      - action
        - fc string
        - policer reference
        - priority keyword
        - type keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - match
        - dot1p
          - mask number
          - priority number
        - dst-mac
          - address string

```

configure qos sap-ingress mac-criteria entry match dst-mac mask

```

    - mask string
    - etype string
    - frame-type keyword
    - inner-tag
      - mask number
      - vlan number
    - llc-dsap
      - dsap number
      - mask number
    - llc-ssap
      - mask number
      - ssap number
    - outer-tag
      - mask number
      - vlan number
    - snap-oui keyword
    - snap-pid number
    - src-mac
      - address string
      - mask string
  - type keyword
- policer number
- adaptation-rule
  - cir keyword
  - pir keyword
- adv-config-policy reference
- apply-groups reference
- apply-groups-exclude reference
- arbiter-parent
  - arbiter-name string
  - level number
  - weight number
- cbs (number | keyword)
- description string
- high-prio-only (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
  - reference-rate keyword
- profile-capped boolean
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- scheduler-parent
  - cir-level number
  - cir-weight number
  - level number
  - scheduler-name string
  - weight number
- stat-mode keyword
- policers-hqos-manageable boolean
- policy-id number
- prec number
  - apply-groups reference
  - apply-groups-exclude reference
  - fc string
  - priority keyword
- queue number
  - adaptation-rule
    - cir keyword
    - fir keyword
    - pir keyword

```

configure qos sap-ingress queue adv-config-policy

```

- adv-config-policy reference
- apply-groups reference
- apply-groups-exclude reference
- burst-limit (number | keyword)
- cbs (number | keyword)
- cir-non-profiling boolean
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- multipoint boolean
- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - fir decimal-number
  - pir decimal-number
  - police
  - reference-rate keyword
- queue-mode keyword
- queue-type keyword
- rate
  - cir (number | keyword)
  - fir (number | keyword)
  - pir (number | keyword)
  - police
- scheduler-parent
  - cir-level number
  - cir-weight number
  - level number
  - scheduler-name string
  - weight number
- scope keyword
- subscriber-mgmt
  - dynamic-policer
    - arbiter-parent
      - arbiter-name string
      - level number
      - weight number
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - policer-id-range
      - end number
      - start number
    - stat-mode keyword
  - pcc-rule-entry
    - range
      - end number
      - start number
- scheduler-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - frame-based-accounting boolean
  - tier number
    - apply-groups reference
    - apply-groups-exclude reference
    - parent-location keyword
    - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - limit-unused-bandwidth boolean
      - percent-rate

```

configure qos scheduler-policy tier scheduler percent-rate cir

```

    - cir (keyword | decimal-number)
    - pir decimal-number
    - reference-rate keyword
  - port-parent
    - cir-level number
    - cir-weight number
    - level number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - scheduler-parent
    - cir-level number
    - cir-weight number
    - level number
    - scheduler-name string
    - weight number
- shared-queue string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - broadcast-queue number
    - multicast-queue number
    - queue number
    - unknown-queue number
  - queue number
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs number
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - mbs number
    - multipoint boolean
    - queue-type keyword
    - rate
      - cir number
      - fir number
      - pir number
- slope-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - exceed-slope
    - admin-state keyword
    - max-avg number
    - max-prob number
    - start-avg number
  - high-slope
    - admin-state keyword
    - max-avg number
    - max-prob number
    - start-avg number
  - highplus-slope
    - admin-state keyword
    - max-avg number
    - max-prob number
    - start-avg number
  - low-slope
    - admin-state keyword
    - max-avg number

```

---

configure qos slope-policy low-slope max-prob

- **max-prob** *number*
- **start-avg** *number*
- **time-average-factor** *number*

### 3.37.1 qos command descriptions

#### qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure qos</b>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

#### **adv-config-policy** [[adv-config-policy-name](#)] *string*

Synopsis	Enter the <b>adv-config-policy</b> list instance
Context	<b>configure qos</b> <a href="#">adv-config-policy</a> <i>string</i>
Tree	<a href="#">adv-config-policy</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

#### [[adv-config-policy-name](#)] *string*

Synopsis	Advanced QoS policy name
Context	<b>configure qos</b> <a href="#">adv-config-policy</a> <i>string</i>
Tree	<a href="#">adv-config-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### child-control

Synopsis	Enter the <b>child-control</b> context
Context	<b>configure qos</b> <a href="#">adv-config-policy</a> <i>string</i> <b>child-control</b>
Tree	<a href="#">child-control</a>

Introduced 16.0.R1  
 Platforms All

### **bandwidth-distribution**

Synopsis Enter the **bandwidth-distribution** context  
 Context **configure qos adv-config-policy** *string* *child-control* *bandwidth-distribution*  
 Tree [bandwidth-distribution](#)  
 Introduced 16.0.R1  
 Platforms All

### **above-offered-allowance**

Synopsis Enter the **above-offered-allowance** context  
 Context **configure qos adv-config-policy** *string* *child-control* *bandwidth-distribution* *above-offered-allowance*  
 Tree [above-offered-allowance](#)  
 Description Commands in this context control the child's above offered allowance bandwidth. The configuration is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm (specified via the **configure qos port-scheduler-policy hqos-algorithm** command).  
 Introduced 19.10.R2  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **delta-consumed-agg-rate**

Synopsis Enter the **delta-consumed-agg-rate** context  
 Context **configure qos adv-config-policy** *string* *child-control* *bandwidth-distribution* *above-offered-allowance* *delta-consumed-agg-rate*  
 Tree [delta-consumed-agg-rate](#)  
 Introduced 19.10.R2  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **percent** *decimal-number*

Synopsis Percentage of the delta consumed aggregate rate

Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control bandwidth-distribution above-offered-allowance delta-consumed-agg-rate percent</b> <i>decimal-number</i>
Tree	<b>percent</b>
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the aggregate rate consumed by other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass.  This command is only applicable when the port scheduler is configured to use the <b>above-offered-allowance-control</b> algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	20.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### delta-consumed-higher-tier-rate

Synopsis	Enter the <b>delta-consumed-higher-tier-rate</b> context
Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate</b>
Tree	<b>delta-consumed-higher-tier-rate</b>
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### percent *decimal-number*

Synopsis	Percentage of the delta consumed higher-tier rate
Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control bandwidth-distribution above-offered-allowance delta-consumed-higher-tier-rate percent</b> <i>decimal-number</i>
Tree	<b>percent</b>
Description	This command configures the percentage of the delta (from the beginning to the end of the current H-QoS below CIR or above CIR pass) of the higher-tier rate consumed by its other members that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates.  This command is only applicable when the port scheduler is configured to use the <b>above-offered-allowance-control</b> algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	5.00
Introduced	19.10.R2



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### unconsumed-agg-rate

Synopsis Enter the **unconsumed-agg-rate** context

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate

Tree [unconsumed-agg-rate](#)

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### percent *decimal-number*

Synopsis Percentage of the unconsumed aggregate rate

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-agg-rate percent *decimal-number*

Tree [percent](#)

Description This command configures the percentage of the unconsumed aggregate rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. This command is only applicable when the port scheduler is configured to use the **above-offered-allowance-control** algorithm; otherwise it is ignored.

Range 0.00 to 100.00

Default 100.00

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### unconsumed-higher-tier-rate

Synopsis Enter the **unconsumed-higher-tier-rate** context

Context **configure** qos adv-config-policy *string* child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate

Tree [unconsumed-higher-tier-rate](#)

Introduced 19.10.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**percent** *decimal-number*

Synopsis	Percentage of the unconsumed higher-tier rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-allowance unconsumed-higher-tier-rate percent <i>decimal-number</i>
Tree	<a href="#">percent</a>
Description	This command configures the percentage of the unconsumed higher tier rate that can be given to a queue at the end of an H-QoS below CIR pass and above CIR pass. Higher tier refers to the Vport aggregate rate and port scheduler level, group, and maximum rates.  This command is only applicable when the port scheduler is configured to use the <b>above-offered-allowance-control</b> algorithm; otherwise it is ignored.
Range	0.00 to 100.00
Default	100.00
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**above-offered-cap**

Synopsis	Enter the <b>above-offered-cap</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap
Tree	<a href="#">above-offered-cap</a>
Introduced	16.0.R1
Platforms	All

**percent** *decimal-number*

Synopsis	Percentage of PIR used as the fair share increase limit
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap percent <i>decimal-number</i>
Tree	<a href="#">percent</a>
Range	0.00 to 100.00
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**rate** (*number* | *keyword*)

Synopsis	Explicit rate as the fair share increase limit
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution above-offered-cap rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	0 to 100000000
Options	max
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**enqueue-on-pir-zero** *boolean*

Synopsis	Queue packets when bandwidth distribution set to zero
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution enqueue-on-pir-zero <i>boolean</i>
Tree	enqueue-on-pir-zero
Default	false
Introduced	16.0.R1
Platforms	All

**granularity**

Synopsis	Enter the <b>granularity</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution granularity
Tree	granularity
Introduced	16.0.R1
Platforms	All

**percent** *decimal-number*

Synopsis	Rounding percentage value for administrative PIR
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution granularity percent <i>decimal-number</i>
Tree	percent
Range	0.00 to 100.00

Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**rate number**

Synopsis	Rounding rate step value
Context	<b>configure</b> <a href="#">qos adv-config-policy string</a> <a href="#">child-control bandwidth-distribution granularity</a> <a href="#">rate number</a>
Tree	<a href="#">rate</a>
Range	0 to 100000000
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**internal-scheduler-weight-mode keyword**

Synopsis	Weight mode applied to this advanced QoS policy
Context	<b>configure</b> <a href="#">qos adv-config-policy string</a> <a href="#">child-control bandwidth-distribution internal-scheduler-weight-mode keyword</a>
Tree	<a href="#">internal-scheduler-weight-mode</a>
Options	auto, force-equal, offered-load, capped-offered-load
Introduced	16.0.R1
Platforms	All

**limit-pir-zero-drain boolean**

Synopsis	Throttle draining when operational PIR set to zero
Context	<b>configure</b> <a href="#">qos adv-config-policy string</a> <a href="#">child-control bandwidth-distribution limit-pir-zero-drain boolean</a>
Tree	<a href="#">limit-pir-zero-drain</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **lub-init-min-pir** *boolean*

Synopsis	Apply minimal PIR for new queues when LUB is enabled
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control bandwidth-distribution lub-init-min-pir <i>boolean</i>
Tree	lub-init-min-pir
Default	false
Introduced	16.0.R1
Platforms	All

### **offered-measurement**

Synopsis	Enter the <b>offered-measurement</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement
Tree	offered-measurement
Introduced	16.0.R1
Platforms	All

### **add**

Synopsis	Enter the <b>add</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add
Tree	add
Introduced	16.0.R1
Platforms	All

### **active-min-only** *boolean*

Synopsis	Use minimum offered rate for active queues or policers
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add active-min-only <i>boolean</i>
Tree	active-min-only
Default	false
Introduced	16.0.R1
Platforms	All

**min-only** *boolean*

Synopsis	Use increase in operational PIR as minimum offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add min-only <i>boolean</i>
Tree	<a href="#">min-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

**percent** *decimal-number*

Synopsis	Percentage of child PIR to add to offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add percent <i>decimal-number</i>
Tree	<a href="#">percent</a>
Range	0.00 to 100.00
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**rate** *number*

Synopsis	Rate value to add to child's offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement add rate <i>number</i>
Tree	<a href="#">rate</a>
Range	0 to 100000000
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**fast-start** *boolean*

Synopsis	Allow fast detection of initial bandwidth
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement fast-start <i>boolean</i>

Tree	<a href="#">fast-start</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **fast-stop** *boolean*

Synopsis	Allow fast detection of lack of offered rate
Context	<b>configure</b> <a href="#">qos adv-config-policy</a> <i>string</i> <a href="#">child-control</a> <a href="#">offered-measurement</a> <a href="#">fast-stop</a> <i>boolean</i>
Tree	<a href="#">fast-stop</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **granularity**

Synopsis	Enter the <b>granularity</b> context
Context	<b>configure</b> <a href="#">qos adv-config-policy</a> <i>string</i> <a href="#">child-control</a> <a href="#">offered-measurement</a> <a href="#">granularity</a>
Tree	<a href="#">granularity</a>
Introduced	16.0.R1
Platforms	All

### **percent** *decimal-number*

Synopsis	Percentage of PIR used as threshold sensitivity to offered rate change
Context	<b>configure</b> <a href="#">qos adv-config-policy</a> <i>string</i> <a href="#">child-control</a> <a href="#">offered-measurement</a> <a href="#">granularity</a> <a href="#">percent</a> <i>decimal-number</i>
Tree	<a href="#">percent</a>
Range	0.00 to 100.00
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **rate** *number*

Synopsis	Rate as child's offered rate change sensitivity value
Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control offered-measurement granularity</b> <b>rate</b> <i>number</i>
Tree	<b>rate</b>
Range	0 to 100000000
Notes	The following elements are part of a choice: <b>percent</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control offered-measurement hold-time</b>
Tree	<b>hold-time</b>
Introduced	16.0.R1
Platforms	All

### **active-min-only** *boolean*

Synopsis	Use minimum offered rate for active queues or policers
Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control offered-measurement hold-time</b> <b>active-min-only</b> <i>boolean</i>
Tree	<b>active-min-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **high-rate** *number*

Synopsis	Time to maintain current offered rate
Context	<b>configure qos adv-config-policy</b> <i>string</i> <b>child-control offered-measurement hold-time</b> <b>high-rate</b> <i>number</i>
Tree	<b>high-rate</b>
Range	0 to 60
Default	0



Introduced 16.0.R1  
Platforms All

### **max-decrement**

Synopsis Enter the **max-decrement** context  
Context **configure** qos adv-config-policy *string* child-control offered-measurement max-decrement  
Tree [max-decrement](#)  
Introduced 16.0.R1  
Platforms All

### **percent** *decimal-number*

Synopsis percentage as decrement limit to offered rate change  
Context **configure** qos adv-config-policy *string* child-control offered-measurement max-decrement percent *decimal-number*  
Tree [percent](#)  
Range 0.00 to 100.00  
Notes The following elements are part of a choice: **percent** or **rate**.  
Introduced 16.0.R1  
Platforms All

### **rate** *number*

Synopsis Value to use as decrement limit to offered rate change  
Context **configure** qos adv-config-policy *string* child-control offered-measurement max-decrement rate *number*  
Tree [rate](#)  
Range 0 to 100000000  
Notes The following elements are part of a choice: **percent** or **rate**.  
Introduced 16.0.R1  
Platforms All

**sample-interval** *number*

Synopsis	Interval for sampling the child's offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement sample-interval <i>number</i>
Tree	sample-interval
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**time-average-factor**

Synopsis	Enter the <b>time-average-factor</b> context
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement time-average-factor
Tree	time-average-factor
Introduced	16.0.R1
Platforms	All

**dec-only** *boolean*

Synopsis	Apply time adjustment when the offered rate decreases
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement time-average-factor dec-only <i>boolean</i>
Tree	dec-only
Default	false
Introduced	16.0.R1
Platforms	All

**weighting-factor** *number*

Synopsis	New offered rate with a sample of the previous offered rate
Context	<b>configure</b> qos adv-config-policy <i>string</i> child-control offered-measurement time-average-factor weighting-factor <i>number</i>
Tree	weighting-factor
Range	0 to 64

Default	0
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos adv-config-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**fp-resource-policy** [**fp-resource-policy-name**] *string*

Synopsis	Enter the <b>fp-resource-policy</b> list instance
Context	<b>configure</b> qos fp-resource-policy <i>string</i>
Tree	fp-resource-policy
Max. Instances	15
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[fp-resource-policy-name]** *string*

Synopsis	FP resource policy name
Context	<b>configure</b> qos fp-resource-policy <i>string</i>
Tree	fp-resource-policy
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## aggregate-shapers

Synopsis	Enter the <b>aggregate-shapers</b> context
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers
Tree	aggregate-shapers
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## auto-creation *boolean*



### WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enables auto-creation of hardware aggregate shapers
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers auto-creation <i>boolean</i>
Tree	auto-creation
Description	When configured to <b>true</b> , enables the auto-creation of hardware aggregate shapers on the specified FP. After enabling, the corresponding FP is rebooted.
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## hw-agg-shapers

Synopsis	Enter the <b>hw-agg-shapers</b> context
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers
Tree	hw-agg-shapers
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**saps** *boolean***WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enable hardware aggregate shapers for SAPs
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers saps <i>boolean</i>
Tree	saps
Default	false
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**subscribers** *boolean***WARNING:**

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Enable hardware aggregate shapers for subscribers
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers hw-agg-shapers subscribers <i>boolean</i>
Tree	subscribers
Default	false
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**queue-sets**

Synopsis	Enter the <b>queue-sets</b> context
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets
Tree	queue-sets
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**default-size**

Synopsis	Enter the <b>default-size</b> context
Context	<b>configure</b> qos fp-resource-policy string aggregate-shapers queue-sets default-size
Tree	default-size
Description	Commands in this context configure the default queue-set size for individual object types.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**queue-groups** (*number* | *keyword*)

Synopsis	Default size of queue-groups
Context	<b>configure</b> qos fp-resource-policy string aggregate-shapers queue-sets default-size queue-groups ( <i>number</i>   <i>keyword</i> )
Tree	queue-groups
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**saps** (*number* | *keyword*)

Synopsis	Default queue-set size for SAPs
Context	<b>configure</b> qos fp-resource-policy string aggregate-shapers queue-sets default-size saps ( <i>number</i>   <i>keyword</i> )
Tree	saps
Description	This command configures the default queue-set size for SAPs.  When the <b>non-shaper-queues</b> keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**subscribers** (*number* | *keyword*)

Synopsis	Default queue-set size for subscribers
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets default-size subscribers ( <i>number</i>   <i>keyword</i> )
Tree	subscribers
Description	This command configures the default queue-set size for subscribers. When the <b>non-shaper-queues</b> keyword is configured, SAPs do not use hardware aggregate shapers on FPs where the specified FP resource policy is applied.
Range	2 to 8
Options	non-shaper-queues
Default	8
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**size** [*qset-size*] *number*

Synopsis	Enter the <b>size</b> list instance
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i>
Tree	size
Description	Commands in this context configure parameters for the specified queue-set size.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**[qset-size]** *number*

Synopsis	Size of the queue-sets
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i>
Tree	size
Range	2 to 8
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**allocation-weight** *number*

Synopsis	Allocation weight of the queue-set size
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers queue-sets size <i>number</i> allocation-weight <i>number</i>
Tree	allocation-weight
Description	This command configures the allocation weight for the specified queue-set size. The available queue-sets are distributed based on the allocation weight among different queue-set sizes.
Range	0 to 100
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**reserved-non-shaper-queues** *number*

Synopsis	Number of queues reserved for non-shaper queues
Context	<b>configure</b> qos fp-resource-policy <i>string</i> aggregate-shapers reserved-non-shaper-queues <i>number</i>
Tree	reserved-non-shaper-queues
Description	This command configures the number of egress queues that will not be used by hardware aggregate shapers.
Range	2048 to 262144
Default	8192
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos fp-resource-policy <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS



## ports

Synopsis	Enter the <b>ports</b> context
Context	<b>configure qos fp-resource-policy string ports</b>
Tree	<a href="#">ports</a>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## hqos-mode *keyword*



### WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Default HQOS mode of the port
Context	<b>configure qos fp-resource-policy string ports hqos-mode keyword</b>
Tree	<a href="#">hqos-mode</a>
Options	port-scheduler, hw-agg-shaping
Default	port-scheduler
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## queues

Synopsis	Enter the <b>queues</b> context
Context	<b>configure qos fp-resource-policy string queues</b>
Tree	<a href="#">queues</a>
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## ingress-percent-of-total *decimal-number*



### WARNING:

Modifying this element resets the associated cards/XIOMs/MDAs for the new value to take effect. On the 7750 SR-1, the configuration must be saved and the router must be rebooted for the new value to take effect.

Synopsis	Percentage of total ingress queues allocated
Context	<b>configure qos fp-resource-policy</b> <i>string</i> <b>queues ingress-percent-of-total</b> <i>decimal-number</i>
Tree	<b>ingress-percent-of-total</b>
Description	<p>This command configures the percentage of the total number of queues on the FP on which the policy is applied that are allocated to ingress, with the remainder allocated to egress. The ingress and egress buffer pool sizes are not affected by the queue allocation.</p> <p>The allocation is performed in sets of 8192 queues, with a minimum of 8192 queues at ingress and 8192 queues at egress. If the percentage configured results in the queue allocation not being a multiple of 8192, the number of queues at ingress is rounded down to the next 8192 boundary, and consequently the number of queues at egress is rounded up to the next 8192 boundary, both while respecting the minimum at ingress and egress.</p> <p>If the FP resource policy is applied to any FP and the updated allocation is not achievable with the current ingress or egress queue consumption on any of the related FPs, the command fails.</p> <p>The configuration of this command (which includes removing the configuration) causes the router to immediately reset the associated cards, XIOMs and MDAs on all FPs on which the FP resource policy is applied, except on the 7750 SR-1, where the configuration must be saved and the router rebooted, immediately after committing the configuration transaction.</p>
Range	4.00 to 97.00
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **hs-attachment-policy** [*name*] *string*

Synopsis	Enter the <b>hs-attachment-policy</b> list instance
Context	<b>configure qos hs-attachment-policy</b> <i>string</i>
Tree	<b>hs-attachment-policy</b>
Max. Instances	31
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[name]** *string*

Synopsis	HS attachment policy name
Context	<b>configure qos hs-attachment-policy</b> <i>string</i>
Tree	<b>hs-attachment-policy</b>

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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> qos hs-attachment-policy <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **low-burst-max-class** *number*

Synopsis	Low priority burst threshold
Context	<b>configure</b> qos hs-attachment-policy <i>string</i> <b>low-burst-max-class</b> <i>number</i>
Tree	<b>low-burst-max-class</b>
Range	1 to 6
Default	6
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **queue** [*queue-id*] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> qos hs-attachment-policy <i>string</i> <b>queue</b> <i>number</i>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[queue-id]** *number*

Synopsis	Queue identifier for the HS attachment policy
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Context	<b>configure qos hs-attachment-policy</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **sched-class** *number*

Synopsis	Scheduling class associated with the queue
Context	<b>configure qos hs-attachment-policy</b> <i>string queue number sched-class number</i>
Tree	<a href="#">sched-class</a>
Range	1 to 6
Notes	The following elements are part of a choice: <b>sched-class</b> , <b>unattached</b> , or <b>wrr-group</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **unattached**

Synopsis	Do not attach queue to scheduling class or WRR group
Context	<b>configure qos hs-attachment-policy</b> <i>string queue number unattached</i>
Tree	<a href="#">unattached</a>
Notes	The following elements are part of a choice: <b>sched-class</b> , <b>unattached</b> , or <b>wrr-group</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **wrr-group** *number*

Synopsis	WRR group attached to the queue
Context	<b>configure qos hs-attachment-policy</b> <i>string queue number wrr-group number</i>
Tree	<a href="#">wrr-group</a>
Range	1 to 2
Notes	The following elements are part of a choice: <b>sched-class</b> , <b>unattached</b> , or <b>wrr-group</b> .
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

### **wrr-group** [[wrr-group-id](#)] *number*

Synopsis Enter the **wrr-group** list instance  
Context **configure qos hs-attachment-policy** *string wrr-group number*  
Tree [wrr-group](#)  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **[wrr-group-id]** *number*

Synopsis WRR group ID for the HS attachment policy  
Context **configure qos hs-attachment-policy** *string wrr-group number*  
Tree [wrr-group](#)  
Range 1 to 2  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **sched-class** *number*

Synopsis Scheduling class associated with the WRR group  
Context **configure qos hs-attachment-policy** *string wrr-group number sched-class number*  
Tree [sched-class](#)  
Range 1 to 6  
Notes The following elements are part of a choice: **sched-class** or **unattached**.  
Introduced 16.0.R1  
Platforms 7750 SR-7/12/12e

### **unattached**

Synopsis Do not attach group ID to scheduling class or WRR group  
Context **configure qos hs-attachment-policy** *string wrr-group number unattached*  
Tree [unattached](#)

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Notes	The following elements are part of a choice: <b>sched-class</b> or <b>unattached</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-pool-policy** [*name*] *string*

Synopsis	Enter the <b>hs-pool-policy</b> list instance
Context	<b>configure qos hs-pool-policy</b> <i>string</i>
Tree	<a href="#">hs-pool-policy</a>
Max. Instances	63
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[name]** *string*

Synopsis	HS pool policy name
Context	<b>configure qos hs-pool-policy</b> <i>string</i>
Tree	<a href="#">hs-pool-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **description** *string*

Synopsis	Text description
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**mid-tier**

Synopsis	Enter the <b>mid-tier</b> context
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier</b>
Tree	<b>mid-tier</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**mid-pool** [**mid-pool-id**] *number*

Synopsis	Enter the <b>mid-pool</b> list instance
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier mid-pool</b> <i>number</i>
Tree	<b>mid-pool</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[mid-pool-id]** *number*

Synopsis	Mid-pool identifier for the HS pool policy
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier mid-pool</b> <i>number</i>
Tree	<b>mid-pool</b>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**allocation-percent** *decimal-number*

Synopsis	Root pool size to derive the mid-pool size
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier mid-pool</b> <i>number</i> <b>allocation-percent</b> <i>decimal-number</i>
Tree	<b>allocation-percent</b>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## parent-root-pool

Synopsis	Enter the <b>parent-root-pool</b> context
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> <b>parent-root-pool</b>
Tree	<b>parent-root-pool</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## none

Synopsis	Assign no buffers to the mid-tier pool
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> <b>parent-root-pool none</b>
Tree	<b>none</b>
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## pool-id reference

Synopsis	Parent root pool to which the mid-pool is associated
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> <b>parent-root-pool pool-id reference</b>
Tree	<b>pool-id</b>
Reference	<b>configure qos hs-pool-policy</b> <i>string</i> <i>root-tier</i> <i>root-pool</i> <i>number</i>
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## port-bw-oversubscription-factor *number*

Synopsis	Over subscription factor for port-class pool sizes
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <i>mid-tier</i> <i>mid-pool</i> <i>number</i> <b>port-bw-oversubscription-factor</b> <i>number</i>
Tree	<b>port-bw-oversubscription-factor</b>
Description	This command modifies the size of the mid-pool when calculating the port-class pool sizes based on port bandwidth ratios. The over subscription factor for a mid-pool can



be modified at any time, causing the corresponding port-class pool dynamic sizes to be recalculated. A similar behavior can be obtained by increasing the mid-pool's allocation-percent of its parent root-pool. However, the major difference in using this command is that it provides larger port-class pools without allowing the mid-pool to use a higher number of buffers in the root pool.

Range	1 to 10
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **slope-policy** *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>mid-tier mid-pool</b> <i>number</i> <b>slope-policy</b> <i>reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure qos slope-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **root-tier**

Synopsis	Enter the <b>root-tier</b> context
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>root-tier</b>
Tree	<a href="#">root-tier</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **root-pool** [**root-pool-id**] *number*

Synopsis	Enter the <b>root-pool</b> list instance
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>root-tier root-pool</b> <i>number</i>
Tree	<a href="#">root-pool</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[root-pool-id] number**

Synopsis	Root pool identifier for the HS pool policy
Context	<b>configure</b> qos hs-pool-policy string root-tier root-pool number
Tree	root-pool
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**allocation-weight number**

Synopsis	Root pool allocation weight used to calculate pool size
Context	<b>configure</b> qos hs-pool-policy string root-tier root-pool number allocation-weight number
Tree	allocation-weight
Description	<p>This command specifies the weight that is applied to the root pool and is divided by the sum of all root pool weights to derive the pool's buffer allocation factor. The amount of buffers remaining after the system-reserve percentage is applied is multiplied by the buffer allocation factor to derive the pool size.</p> <p>A root pool with an allocation weight set to "0" is considered inactive and is not allocated buffers.</p> <p>When a root pool's allocation weight is modified, all root pools, mid-tier pools, and port class pool sizes are reevaluated and modified when necessary.</p>
Range	0 to 100
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**slope-policy reference**

Synopsis	Slope policy to define high, low, and exceed slopes
Context	<b>configure</b> qos hs-pool-policy string root-tier root-pool number slope-policy reference
Tree	slope-policy
Reference	<b>configure</b> qos slope-policy string
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**system-reserve** *decimal-number*

Synopsis	Percentage of buffers reserved for internal system use
Context	<b>configure qos hs-pool-policy</b> <i>string</i> <b>system-reserve</b> <i>decimal-number</i>
Tree	<a href="#">system-reserve</a>
Range	1.00 to 30.00
Default	5.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-port-pool-policy** [*name*] *string*

Synopsis	Enter the <b>hs-port-pool-policy</b> list instance
Context	<b>configure qos hs-port-pool-policy</b> <i>string</i>
Tree	<a href="#">hs-port-pool-policy</a>
Max. Instances	2047
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[name]** *string*

Synopsis	HS port pool policy name
Context	<b>configure qos hs-port-pool-policy</b> <i>string</i>
Tree	<a href="#">hs-port-pool-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**alt-port-class-pools**

Synopsis	Enter the <b>alt-port-class-pools</b> context
Context	<b>configure qos hs-port-pool-policy</b> <i>string</i> <b>alt-port-class-pools</b>
Tree	<a href="#">alt-port-class-pools</a>
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

### **class-pool** [[alt-class-pool-id](#)] *number*

Synopsis Enter the **class-pool** list instance

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)

Tree [class-pool](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **[alt-class-pool-id]** *number*

Synopsis Class pool ID

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number](#)

Tree [class-pool](#)

Range 1 to 6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **allocation**

Synopsis Enter the **allocation** context

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number allocation](#)

Tree [allocation](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **explicit-percent** *decimal-number*

Synopsis Percentage of parent pool to be allocated

Context **configure qos hs-port-pool-policy** *string* [alt-port-class-pools class-pool number allocation explicit-percent decimal-number](#)

Tree [explicit-percent](#)

Range 0.01 to 100.00

Notes	The following elements are part of a choice: <b>explicit-percent</b> or <b>port-bw-weight</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **port-bw-weight** *number*

Synopsis	Port bandwidth weight to be allocated
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> allocation port-bw-weight <i>number</i>
Tree	port-bw-weight
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: <b>explicit-percent</b> or <b>port-bw-weight</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **parent-mid-pool**

Synopsis	Enter the <b>parent-mid-pool</b> context
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool
Tree	parent-mid-pool
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **none**

Synopsis	Deactivate the port-class pool; pool size is zero
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> alt-port-class-pools class-pool <i>number</i> parent-mid-pool none
Tree	none
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **pool-id** *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	<b>configure qos hs-port-pool-policy</b> <i>string alt-port-class-pools class-pool number parent-mid-pool pool-id number</i>
Tree	<a href="#">pool-id</a>
Range	1 to 16
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **slope-policy** *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	<b>configure qos hs-port-pool-policy</b> <i>string alt-port-class-pools class-pool number slope-policy reference</i>
Tree	<a href="#">slope-policy</a>
Reference	<b>configure qos slope-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **description** *string*

Synopsis	Text description
Context	<b>configure qos hs-port-pool-policy</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **std-port-class-pools**

Synopsis	Enter the <b>std-port-class-pools</b> context
Context	<b>configure qos hs-port-pool-policy</b> <i>string std-port-class-pools</i>
Tree	<a href="#">std-port-class-pools</a>
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

### **class-pool** [**std-class-pool-id**] *number*

Synopsis Enter the **class-pool** list instance

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number**

Tree **class-pool**

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **[std-class-pool-id]** *number*

Synopsis Class pool ID

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number**

Tree **class-pool**

Range 1 to 6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **allocation**

Synopsis Enter the **allocation** context

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number allocation**

Tree **allocation**

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **explicit-percent** *decimal-number*

Synopsis Percentage of parent pool to be allocated

Context **configure qos hs-port-pool-policy** *string* **std-port-class-pools class-pool number allocation explicit-percent decimal-number**

Tree **explicit-percent**

Range 0.01 to 100.00

Notes	The following elements are part of a choice: <b>explicit-percent</b> or <b>port-bw-weight</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **port-bw-weight** *number*

Synopsis	Port bandwidth weight to be allocated
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-port-pool-policy</a> <i>string</i> <a href="#">std-port-class-pools</a> <a href="#">class-pool</a> <i>number</i> <a href="#">allocation</a> <a href="#">port-bw-weight</a> <i>number</i>
Tree	<a href="#">port-bw-weight</a>
Range	1 to 100
Default	1
Notes	The following elements are part of a choice: <b>explicit-percent</b> or <b>port-bw-weight</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **parent-mid-pool**

Synopsis	Enter the <b>parent-mid-pool</b> context
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-port-pool-policy</a> <i>string</i> <a href="#">std-port-class-pools</a> <a href="#">class-pool</a> <i>number</i> <a href="#">parent-mid-pool</a>
Tree	<a href="#">parent-mid-pool</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **none**

Synopsis	Deactivate the port-class pool; pool size is zero
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-port-pool-policy</a> <i>string</i> <a href="#">std-port-class-pools</a> <a href="#">class-pool</a> <i>number</i> <a href="#">parent-mid-pool</a> <b>none</b>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e



**pool-id** *number*

Synopsis	Mid-pool ID associated with the port-class pool
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> parent-mid-pool pool-id <i>number</i>
Tree	pool-id
Range	1 to 16
Notes	The following elements are part of a choice: <b>none</b> or <b>pool-id</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**slope-policy** *reference*

Synopsis	Slope policy to define high, low, and exceed slopes
Context	<b>configure</b> qos hs-port-pool-policy <i>string</i> std-port-class-pools class-pool <i>number</i> slope-policy <i>reference</i>
Tree	slope-policy
Reference	<b>configure</b> qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-scheduler-policy** [*name*] *string*

Synopsis	Enter the <b>hs-scheduler-policy</b> list instance
Context	<b>configure</b> qos hs-scheduler-policy <i>string</i>
Tree	hs-scheduler-policy
Max. Instances	127
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[name]** *string*

Synopsis	HS scheduler policy name
Context	<b>configure</b> qos hs-scheduler-policy <i>string</i>
Tree	hs-scheduler-policy
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **description** *string*

Synopsis	Text description
Context	<b>configure qos hs-scheduler-policy</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **group** [[group-id](#)] *number*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure qos hs-scheduler-policy</b> <i>string group number</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[group-id]** *number*

Synopsis	Group ID for the HS scheduler policy
Context	<b>configure qos hs-scheduler-policy</b> <i>string group number</i>
Tree	<a href="#">group</a>
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis	Group maximum rate
Context	<b>configure qos hs-scheduler-policy</b> <i>string group number rate (number   keyword)</i>

Tree	<a href="#">rate</a>
Range	1 to 100000
Units	megabps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit for the policy
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-scheduler-policy</a> <i>string</i> <a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 100000
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **scheduling-class** [[class-id](#)] *number*

Synopsis	Enter the <b>scheduling-class</b> list instance
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-scheduler-policy</a> <i>string</i> <a href="#">scheduling-class</a> <i>number</i>
Tree	<a href="#">scheduling-class</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[class-id]** *number*

Synopsis	Scheduling class for the HS scheduler policy
Context	<b>configure</b> <a href="#">qos</a> <a href="#">hs-scheduler-policy</a> <i>string</i> <a href="#">scheduling-class</a> <i>number</i>
Tree	<a href="#">scheduling-class</a>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

## group

Synopsis Enable the **group** context

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group

Tree [group](#)

Notes The following elements are part of a choice: **group** or **rate**.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## group-id *number*

Synopsis Associated group associated with this scheduling class

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group group-id *number*

Tree [group-id](#)

Range 1

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## weight *number*

Synopsis Weight associated with this scheduling class

Context **configure** qos hs-scheduler-policy *string* scheduling-class *number* group weight *number*

Tree [weight](#)

Range 1 to 127

Default 1

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context	<b>configure qos hs-scheduler-policy</b> <i>string scheduling-class number rate (number   keyword)</i>
Tree	<a href="#">rate</a>
Range	1 to 100000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>group</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hw-agg-shaper-scheduler-policy** [[name](#)] *string*

Synopsis	Enter the <b>hw-agg-shaper-scheduler-policy</b> list instance
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i>
Tree	<a href="#">hw-agg-shaper-scheduler-policy</a>
Description	Commands in this context configure the attributes of a hardware aggregate shaper scheduler policy.
Max. Instances	127
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **[name]** *string*

Synopsis	Name of the hardware aggregate shaper scheduler policy
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i>
Tree	<a href="#">hw-agg-shaper-scheduler-policy</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **congestion-threshold** *number*

Synopsis	Congestion threshold of the scheduler
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Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i> <b>congestion-threshold</b> <i>number</i>
Tree	<b>congestion-threshold</b>
Description	This command configures the congestion threshold for the hardware aggregate shaper scheduler policy, which, if exceeded, triggers the hardware aggregate scheduler algorithm. The value is expressed as a percentage of the scheduler rate.
Range	0 to 100
Default	90
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **description** *string*

Synopsis	Text description
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **group** [*group-name*] *string*

Synopsis	Add a list entry for <b>group</b>
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i> <b>group</b> <i>string</i>
Tree	<b>group</b>
Max. Instances	6
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **[group-name]** *string*

Synopsis	Name of the HW aggregate shaper scheduler policy group
Context	<b>configure qos hw-agg-shaper-scheduler-policy</b> <i>string</i> <b>group</b> <i>string</i>
Tree	<b>group</b>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **max-percent-rate** *decimal-number*

Synopsis	Maximum frame-based bandwidth percentage
Context	<b>configure qos hw-aggr-shaper-scheduler-policy</b> <i>string</i> <b>max-percent-rate</b> <i>decimal-number</i>
Tree	<b>max-percent-rate</b>
Description	This command configures the rate of the hardware aggregate shaper scheduler expressed as a percentage of the port rate.
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure qos hw-aggr-shaper-scheduler-policy</b> <i>string</i> <b>max-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-rate</b>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **monitor-threshold** *number*

Synopsis	Monitor threshold for the scheduler
Context	<b>configure qos hw-aggr-shaper-scheduler-policy</b> <i>string</i> <b>monitor-threshold</b> <i>number</i>
Tree	<b>monitor-threshold</b>
Description	This command configures the monitor threshold for the hardware aggregate shaper scheduler policy, which is used for egress scheduler monitoring. The value is expressed

as a percentage of the scheduler rate, which is considered as a limit for determining congestion.

Range	0 to 100
Default	0
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **sched-class** [[class-id](#)] *number*

Synopsis	Enter the <b>sched-class</b> list instance
Context	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i> <a href="#">sched-class</a> <i>number</i>
Tree	<a href="#">sched-class</a>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **[class-id]** *number*

Synopsis	Scheduling class ID for the scheduler policy
Context	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i> <a href="#">sched-class</a> <i>number</i>
Tree	<a href="#">sched-class</a>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **group** *reference*

Synopsis	Group associated with the scheduling class
Context	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i> <a href="#">sched-class</a> <i>number</i> <a href="#">group</a> <i>reference</i>
Tree	<a href="#">group</a>
Description	This command assigns the specified scheduling class to a group within a hardware aggregate shaper scheduler policy.
Reference	<b>configure</b> qos hw-aggr-shaper-scheduler-policy <i>string</i> <a href="#">group</a> <i>string</i>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s



**weight** *number*

Synopsis	Weight associated with the scheduling class
Context	<b>configure</b> qos hw-agg-shaper-scheduler-policy <i>string</i> sched-class <i>number</i> weight <i>number</i>
Tree	weight
Description	This command configures the weight for a scheduling class within the specified group.
Range	1 to 8
Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**match-list**

Synopsis	Enter the <b>match-list</b> context
Context	<b>configure</b> qos match-list
Tree	match-list
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** [*prefix-list-name*] *string*

Synopsis	Enter the <b>ip-prefix-list</b> list instance
Context	<b>configure</b> qos match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
Max. Instances	512
Introduced	16.0.R1
Platforms	All

**[*prefix-list-name*]** *string*

Synopsis	IP prefix list name
Context	<b>configure</b> qos match-list ip-prefix-list <i>string</i>
Tree	ip-prefix-list
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure qos match-list ip-prefix-list</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **prefix** [[ip-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix</b>
Context	<b>configure qos match-list ip-prefix-list</b> <i>string prefix string</i>
Tree	<a href="#">prefix</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	All

### **[ip-prefix]** *string*

Synopsis	IPv4 address prefix
Context	<b>configure qos match-list ip-prefix-list</b> <i>string prefix string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R3
Platforms	All

### **ipv6-prefix-list** [[prefix-list-name](#)] *string*

Synopsis	Enter the <b>ipv6-prefix-list</b> list instance
----------	---

Context	<b>configure qos match-list ipv6-prefix-list</b> <i>string</i>
Tree	<a href="#">ipv6-prefix-list</a>
Max. Instances	128
Introduced	16.0.R4
Platforms	All

**[prefix-list-name]** *string*

Synopsis	IP prefix list name
Context	<b>configure qos match-list ipv6-prefix-list</b> <i>string</i>
Tree	<a href="#">ipv6-prefix-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure qos match-list ipv6-prefix-list</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

**prefix** [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for <b>prefix</b>
Context	<b>configure qos match-list ipv6-prefix-list</b> <i>string</i> <b>prefix</b> <i>string</i>
Tree	<a href="#">prefix</a>
Max. Instances	128
Introduced	16.0.R4
Platforms	All

**[ipv6-prefix]** *string*

Synopsis	Ipv6 address prefix
Context	<b>configure qos match-list ipv6-prefix-list</b> <i>string prefix string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**port-list** [[port-list-name](#)] *string*

Synopsis	Enter the <b>port-list</b> list instance
Context	<b>configure qos match-list port-list</b> <i>string</i>
Tree	<a href="#">port-list</a>
Max. Instances	16
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[port-list-name]** *string*

Synopsis	Port list name
Context	<b>configure qos match-list port-list</b> <i>string</i>
Tree	<a href="#">port-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure qos match-list port-list</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port** [*value*] *number*

Synopsis Add a list entry for **port**  
 Context **configure qos match-list port-list** *string port number*  
 Tree [port](#)  
 Description Commands in this context specify ports for a port match list.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[value]** *number*

Synopsis Port number  
 Context **configure qos match-list port-list** *string port number*  
 Tree [port](#)  
 Range 0 to 65535  
 Notes This element is part of a list key.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range** [*start*] *number end number*

Synopsis Add a list entry for **range**  
 Context **configure qos match-list port-list** *string range number end number*  
 Tree [range](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[start]** *number*

Synopsis Lower bound for the port range  
 Context **configure qos match-list port-list** *string range number end number*  
 Tree [range](#)

---

Range	0 to 65534
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **end number**

Synopsis	Upper bound for the port range
Context	<b>configure</b> qos match-list port-list <i>string range number end number</i>
Tree	<a href="#">range</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-auto-id**

Synopsis	Enter the <b>md-auto-id</b> context
Context	<b>configure</b> qos md-auto-id
Tree	<a href="#">md-auto-id</a>
Introduced	16.0.R1
Platforms	All

### **qos-policy-id-range**

Synopsis	Enable the <b>qos-policy-id-range</b> context
Context	<b>configure</b> qos md-auto-id qos-policy-id-range
Tree	<a href="#">qos-policy-id-range</a>
Introduced	16.0.R1
Platforms	All

**end number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	<b>configure qos md-auto-id qos-policy-id-range end number</b>
Tree	<a href="#">end</a>
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	<b>configure qos md-auto-id qos-policy-id-range start number</b>
Tree	<a href="#">start</a>
Range	2 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**network [network-policy-name] string**

Synopsis	Enter the <b>network</b> list instance
Context	<b>configure qos network string</b>
Tree	<a href="#">network</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

**[network-policy-name] string**

Synopsis	QoS network policy name
Context	<b>configure qos network string</b>
Tree	<b>network</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure qos network string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure qos network string egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	All

**dscp [dscp-name] keyword**

Synopsis	Enter the <b>dscp</b> list instance
Context	<b>configure qos network string egress dscp keyword</b>
Tree	<b>dscp</b>
Introduced	16.0.R1
Platforms	All



**[dscp-name]** *keyword*

Synopsis	DSCP name to perform reclassification actions
Context	<b>configure qos network</b> <i>string egress dscp keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string egress dscp keyword fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	<b>configure qos network</b> <i>string egress dscp keyword profile keyword</i>
Tree	<b>profile</b>
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**fc** [*fc-name*] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure qos network</b> <i>string egress fc keyword</i>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class name
Context	<b>configure qos network</b> <i>string egress fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**de-mark**

Synopsis	Enable the <b>de-mark</b> context
Context	<b>configure qos network</b> <i>string egress fc keyword de-mark</i>
Tree	<b>de-mark</b>
Introduced	16.0.R1
Platforms	All

**force** *number*

Synopsis	DE value
Context	<b>configure qos network</b> <i>string egress fc keyword de-mark force number</i>
Tree	<b>force</b>
Range	0 to 1
Introduced	16.0.R1
Platforms	All

**dot1p-in-profile** *number*

Synopsis	Dot1p marking for in-profile marking
Context	<b>configure qos network</b> <i>string egress fc keyword dot1p-in-profile number</i>
Tree	<a href="#">dot1p-in-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

**dot1p-out-profile** *number*

Synopsis	Dot1p marking for out-of-profile marking
Context	<b>configure qos network</b> <i>string egress fc keyword dot1p-out-profile number</i>
Tree	<a href="#">dot1p-out-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

**dscp-in-profile** *keyword*

Synopsis	DSCP marking for in-profile marking
Context	<b>configure qos network</b> <i>string egress fc keyword dscp-in-profile keyword</i>
Tree	<a href="#">dscp-in-profile</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dscp-out-profile** *keyword*

Synopsis	DSCP marking for out-of-profile marking
Context	<b>configure qos network</b> <i>string egress fc keyword dscp-out-profile keyword</i>
Tree	<a href="#">dscp-out-profile</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1  
Platforms All

### **lsp-exp-in-profile** *number*

Synopsis LSP-EXP marking for in-profile marking  
Context **configure qos network** *string* **egress fc** *keyword* **lsp-exp-in-profile** *number*  
Tree [lsp-exp-in-profile](#)  
Range 0 to 7  
Introduced 16.0.R1  
Platforms All

### **lsp-exp-out-profile** *number*

Synopsis LSP-EXP marking for out-of-profile marking  
Context **configure qos network** *string* **egress fc** *keyword* **lsp-exp-out-profile** *number*  
Tree [lsp-exp-out-profile](#)  
Range 0 to 7  
Introduced 16.0.R1  
Platforms All

### **port-redirect-group**

Synopsis Enter the **port-redirect-group** context  
Context **configure qos network** *string* **egress fc** *keyword* **port-redirect-group**  
Tree [port-redirect-group](#)  
Introduced 16.0.R1  
Platforms All

### **policer** *number*

Synopsis Policer to be used  
Context **configure qos network** *string* **egress fc** *keyword* **port-redirect-group** **policer** *number*

Tree	<a href="#">policer</a>
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **queue** *number*

Synopsis	Queue to be used
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress fc keyword</a> <a href="#">port-redirect-group</a> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

### **ip-criteria**

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria</a>
Tree	<a href="#">ip-criteria</a>
Introduced	16.0.R1
Platforms	All

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### [[entry-id](#)] *number*

Synopsis	Entry ID for match criterion and corresponding action
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>

Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### action

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action</b>
Tree	<b>action</b>
Introduced	16.0.R1
Platforms	All

### fc keyword

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

### port-redirect-group

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action port-redirect-group</b>
Tree	<b>port-redirect-group</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policer number**

Synopsis	Policer ID to be used for the matched traffic
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action port-redirect-group</b> <b>policer number</b>
Tree	<b>policer</b>
Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue number**

Synopsis	Queue to be used for post-policed traffic
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action port-redirect-group</b> <b>queue number</b>
Tree	<b>queue</b>
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile keyword**

Synopsis	Profile reclassification action
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action profile</b> <i>keyword</i>
Tree	<b>profile</b>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Action for criteria entry
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number action type</b> <i>keyword</i>
Tree	<b>type</b>
Options	ignore-match, accept
Default	ignore-match

Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number match</b>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

### **dscp** *keyword*

Synopsis	DSCP value to match in the packet
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number match dscp</b> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

### **dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry number match dst-ip</b>



Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	All

### **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Destination IPv4 address to match
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match dst-ip</a> <a href="#">address</a> ( <i>ipv4-prefix-with-host-bits</i>   <i>ipv4-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **ip-prefix-list** *reference*

Synopsis	IP prefix list as the match criterion
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match dst-ip</a> <a href="#">ip-prefix-list</a> <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Description	This command specifies an IP prefix list used as a match criterion for an IP address.
Reference	<b>configure</b> <a href="#">qos match-list</a> <a href="#">ip-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *string*

Synopsis	Subnet mask
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match dst-ip</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## dst-port

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos network string egress ip-criteria entry number match dst-port</b>
Tree	<b>dst-port</b>
Introduced	16.0.R1
Platforms	All

## eq number

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos network string egress ip-criteria entry number match dst-port eq number</b>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

## gt number

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos network string egress ip-criteria entry number match dst-port gt number</b>
Tree	<b>gt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

## lt number

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos network string egress ip-criteria entry number match dst-port lt number</b>
Tree	<b>lt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>

Introduced 16.0.R1  
 Platforms All

### **port-list** *reference*

Synopsis Name of the port list as the match criterion  
 Context **configure** qos network *string* egress ip-criteria entry *number* match dst-port port-list *reference*  
 Tree [port-list](#)  
 Reference **configure** qos match-list port-list *string*  
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis Enter the **range** context  
 Context **configure** qos network *string* egress ip-criteria entry *number* match dst-port range  
 Tree [range](#)  
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, **port-list**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### **end** *number*

Synopsis Upper bound of port range to match  
 Context **configure** qos network *string* egress ip-criteria entry *number* match dst-port range end *number*  
 Tree [end](#)  
 Range 0 to 65535  
 Introduced 16.0.R1  
 Platforms All

### **start** *number*

Synopsis Lower bound of port range to match

Context	<b>configure qos network</b> <i>string</i> <i>egress ip-criteria entry number match dst-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **fragment** *keyword*

Synopsis	Fragmentation state as the match criterion
Context	<b>configure qos network</b> <i>string</i> <i>egress ip-criteria entry number match fragment keyword</i>
Tree	<a href="#">fragment</a>
Description	This command configures fragmented or non-fragmented IP packets as a network QoS policy match criterion. When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true
Introduced	16.0.R1
Platforms	All

### **icmp-type** *number*

Synopsis	ICMP type in the ICMP header of IPv4 packet to match
Context	<b>configure qos network</b> <i>string</i> <i>egress ip-criteria entry number match icmp-type number</i>
Tree	<a href="#">icmp-type</a>
Description	This command configures matching on the ICMP type field in the ICMP header of an IPv4 packet as a network QoS match criterion. An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

**protocol** (*number | keyword*)

Synopsis	IP protocol to match
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry</b> <i>number</i> <b>match protocol</b> ( <i>number   keyword</i> )
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry</b> <i>number</i> <b>match src-ip</b>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	Source IPv4 address to match
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry</b> <i>number</i> <b>match src-ip address</b> ( <i>ipv4-prefix-with-host-bits   ipv4-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** *reference*

Synopsis	IP prefix list as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry</b> <i>number</i> <b>match src-ip ip-prefix-list reference</b>
Tree	<a href="#">ip-prefix-list</a>

Description	This command specifies an IP prefix list used as a match criterion for an IP address.
Reference	<b>configure qos match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *string*

Synopsis	Subnet mask
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry</b> <i>number</i> <b>match src-ip mask</b> <i>string</i>
Tree	<b>mask</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry</b> <i>number</i> <b>match src-port</b>
Tree	<b>src-port</b>
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos network</b> <i>string</i> <b>egress ip-criteria entry</b> <i>number</i> <b>match src-port eq</b> <i>number</i>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos network string egress ip-criteria entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos network string egress ip-criteria entry number match src-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure qos network string egress ip-criteria entry number match src-port port-list reference</b>
Tree	<a href="#">port-list</a>
Reference	<b>configure qos match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network string egress ip-criteria entry number match src-port range</b>
Tree	<a href="#">range</a>

Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of port range to match
Context	<b>configure qos network string egress ip-criteria entry number match src-port range end number</b>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of port range to match
Context	<b>configure qos network string egress ip-criteria entry number match src-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**ipv6-criteria**

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure qos network string egress ipv6-criteria</b>
Tree	<a href="#">ipv6-criteria</a>
Introduced	16.0.R1
Platforms	All

**entry [entry-id] number**

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos network string egress ipv6-criteria entry number</b>



Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[entry-id] number**

Synopsis	Entry ID for match criterion and corresponding action
Context	<b>configure qos network</b> <i>string</i> <a href="#">egress</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	This command uniquely identifies a match criterion and the corresponding action. Nokia recommends that multiple entries be given entry IDs in staggered increments. This allows users to insert a new entry in an existing policy without requiring renumbering all of the existing entries.
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos network</b> <i>string</i> <a href="#">egress</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <a href="#">egress</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <b>port-redirect-group</b>
Tree	<b>port-redirect-group</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policer number**

Synopsis	Policer ID to be used for the matched traffic
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <b>port-redirect-group</b> <i>policer</i> <i>number</i>
Tree	<b>policer</b>
Range	1 to 16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue number**

Synopsis	Queue to be used for post-policed traffic
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <b>port-redirect-group</b> <i>queue</i> <i>number</i>
Tree	<b>queue</b>
Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile keyword**

Synopsis	Profile reclassification action
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>action</i> <b>profile</b> <i>keyword</i>
Tree	<b>profile</b>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Action for criteria entry
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria entry number action type keyword</i>
Tree	<i>type</i>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria entry number description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria entry number match</i>
Tree	<i>match</i>
Introduced	16.0.R1
Platforms	All

**dscp keyword**

Synopsis	DSCP value to match in the packet
Context	<b>configure qos network</b> <i>string</i> <i>egress</i> <i>ipv6-criteria entry number match dscp keyword</i>
Tree	<i>dscp</i>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,

	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

## dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-ip</b>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	All

## address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address to match
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-ip address</b> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as the match criterion
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-ip ipv6-prefix-list reference</b>
Tree	<a href="#">ipv6-prefix-list</a>
Description	This command specifies an IPv6 prefix list used as a match criterion for an IP address.
Reference	<b>configure qos match-list ipv6-prefix-list string</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask string**

Synopsis	Address mask
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-ip mask string</b>
Tree	<b>mask</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-port</b>
Tree	<b>dst-port</b>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-port eq number</b>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos network string egress ipv6-criteria entry number match dst-port gt number</b>
Tree	<b>gt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .

Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry number match dst-port lt number</b>
Tree	<b>lt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Name of the port list as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry number match dst-port port-list reference</b>
Tree	<b>port-list</b>
Reference	<b>configure qos match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry number match dst-port range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <i>egress ipv6-criteria entry number match dst-port range end number</i>
Tree	<i>end</i>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <i>egress ipv6-criteria entry number match dst-port range start number</i>
Tree	<i>start</i>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**fragment keyword**

Synopsis	Fragmentation state as the match criterion
Context	<b>configure qos network</b> <i>string</i> <i>egress ipv6-criteria entry number match fragment keyword</i>
Tree	<i>fragment</i>
Description	This command configures fragmented or non-fragmented IPv6 packets as a network QoS policy match criterion.  When unconfigured, all packets match regardless of whether they are fragmented.
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

**icmp-type number**

Synopsis	ICMPv6 type in ICMPv6 header of IPv6 packet to match
Context	<b>configure qos network</b> <i>string</i> <i>egress ipv6-criteria entry number match icmp-type number</i>
Tree	<i>icmp-type</i>

Description	This command configures matching on the ICMPv6 type field in the ICMPv6 header of an IPv6 packet as a network QoS match criterion.  An entry containing Layer 4 non-zero match criteria does not match non-initial (second, third, and so on) fragments of a fragmented packet because only the first fragment contains the Layer 4 information. Similarly, an entry containing a match criteria of zero may not match non-initial fragments when the Layer 4 header is not present in a packet fragment and other match criteria are also met.
Range	0 to 255
Introduced	16.0.R1
Platforms	All

### **next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry</b> <i>number</i> <b>match next-header</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry</b> <i>number</i> <b>match src-ip</b>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

### **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address to match
Context	<b>configure qos network</b> <i>string</i> <b>egress ipv6-criteria entry</b> <i>number</i> <b>match src-ip address</b> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>



Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list as the match criterion
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match src-ip</a> <b>ipv6-prefix-list</b> <i>reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Description	This command specifies an IPv6 prefix list used as a match criterion for an IP address.
Reference	<b>configure</b> <a href="#">qos match-list</a> <b>ipv6-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *string*

Synopsis	Address mask
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match src-ip</a> <b>mask</b> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">egress ipv6-criteria entry number match</a> <b>src-port</b>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos network string egress ipv6-criteria entry number match src-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos network string egress ipv6-criteria entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos network string egress ipv6-criteria entry number match src-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Name of the port list as the match criterion
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Context	<b>configure qos network</b> <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port port-list <i>reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure qos match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network</b> <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port range
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of port range to match
Context	<b>configure qos network</b> <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port range <i>end number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of port range to match
Context	<b>configure qos network</b> <i>string</i> egress ipv6-criteria entry <i>number</i> match src-port range <i>start number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1

Platforms All

### **prec** [*prec-value*] *number*

Synopsis Enter the **prec** list instance  
 Context **configure qos network** *string* **egress prec** *number*  
 Tree **prec**  
 Introduced 16.0.R1  
 Platforms All

### **[prec-value]** *number*

Synopsis Precedence value for which mapping is performed  
 Context **configure qos network** *string* **egress prec** *number*  
 Tree **prec**  
 Range 0 to 7  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **fc** *keyword*

Synopsis Forwarding class  
 Context **configure qos network** *string* **egress prec** *number* **fc** *keyword*  
 Tree **fc**  
 Options be, l2, af, l1, h2, ef, h1, nc  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **profile** *keyword*

Synopsis Default profile to use for the ingressing traffic  
 Context **configure qos network** *string* **egress prec** *number* **profile** *keyword*  
 Tree **profile**

Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## remark-trusted

Synopsis	Enable the <b>remark-trusted</b> context
Context	<b>configure qos network</b> <i>string</i> egress remark-trusted
Tree	<a href="#">remark-trusted</a>
Introduced	16.0.R1
Platforms	All

## force-egress-marking *boolean*

Synopsis	Remark DSCP bits in the internal IP header
Context	<b>configure qos network</b> <i>string</i> egress remark-trusted force-egress-marking <i>boolean</i>
Tree	<a href="#">force-egress-marking</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure qos network</b> <i>string</i> ingress
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## default-action

Synopsis	Enter the <b>default-action</b> context
Context	<b>configure qos network</b> <i>string</i> ingress default-action
Tree	<a href="#">default-action</a>

Introduced	16.0.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class used when classifying ingress traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress default-action fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	16.0.R1
Platforms	All

**profile keyword**

Synopsis	Default profile for the ingressing traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress default-action profile keyword</b>
Tree	<b>profile</b>
Options	in, out, exceed, inplus
Default	out
Introduced	16.0.R1
Platforms	All

**dot1p [dot1p-value] number**

Synopsis	Enter the <b>dot1p</b> list instance
Context	<b>configure qos network</b> <i>string</i> <b>ingress dot1p number</b>
Tree	<b>dot1p</b>
Introduced	16.0.R1
Platforms	All

**[dot1p-value] number**

Synopsis	Dot1p value to match in the packet
Context	<b>configure qos network</b> <i>string</i> <b>ingress dot1p number</b>

Tree	<a href="#">dot1p</a>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress dot1p</a> <i>number</i> <b>fc</b> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **profile** *keyword*

Synopsis	Default profile to be used for the ingressing traffic
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress dot1p</a> <i>number</i> <a href="#">profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, de, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **dscp** [[dscp-name](#)] *keyword*

Synopsis	Enter the <b>dscp</b> list instance
Context	<b>configure</b> <a href="#">qos network</a> <i>string</i> <a href="#">ingress dscp</a> <i>keyword</i>
Tree	<a href="#">dscp</a>
Introduced	16.0.R1
Platforms	All

**[dscp-name]** *keyword*

Synopsis	DSCP associated with the forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>ingress dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>ingress dscp</b> <i>keyword</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile to use for the ingressing traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress dscp</b> <i>keyword</i> <b>profile</b> <i>keyword</i>
Tree	<b>profile</b>
Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**fc** [**fc-name**] *keyword*

Synopsis	Enter the <b>fc</b> list instance
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Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[fc-name]** *keyword*

Synopsis	Forwarding class name
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **fp-redirect-group**

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group</b>
Tree	<b>fp-redirect-group</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **broadcast-policer** *number*

Synopsis	Policer to be used for broadcast traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group broadcast-policer</b> <i>number</i>
Tree	<b>broadcast-policer</b>
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**multicast-policer** *number*

Synopsis	Policer to be used for multicast traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group multicast-policer</b> <i>number</i>
Tree	<b>multicast-policer</b>
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policer** *number*

Synopsis	Policer to be used for unicast traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group policer</b> <i>number</i>
Tree	<b>policer</b>
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**unknown-policer** *number*

Synopsis	Policer to be used for unknown traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress fc</b> <i>keyword</i> <b>fp-redirect-group unknown-policer</b> <i>number</i>
Tree	<b>unknown-policer</b>
Range	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**ip-criteria**

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria</b>
Tree	<b>ip-criteria</b>
Introduced	16.0.R1
Platforms	All

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ip-criteria entry number</a>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[entry-id]** *number*

Synopsis	Network Ingress IP Criteria Entry Index
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ip-criteria entry number</a>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ip-criteria entry number action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <a href="#">ingress ip-criteria entry number action fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile for the matching traffic
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number action profile</b> <i>keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number action type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match</b>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

**dscp keyword**

Synopsis	DSCP to be used as network QoS policy match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match dscp keyword</b>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos network string ingress ip-criteria entry number match dst-ip</b>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	All

**address (ipv4-prefix-with-host-bits | ipv4-address)**

Synopsis	Destination IPv4 address for network QoS policy match
Context	<b>configure qos network string ingress ip-criteria entry number match dst-ip address (ipv4-prefix-with-host-bits   ipv4-address)</b>
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ip-prefix-list reference**

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	<b>configure qos network string ingress ip-criteria entry number match dst-ip ip-prefix-list reference</b>
Tree	<a href="#">ip-prefix-list</a>

Reference	<b>configure qos match-list ip-prefix-list string</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

### **mask string**

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos network string ingress ip-criteria entry number match dst-ip mask string</b>
Tree	<b>mask</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos network string ingress ip-criteria entry number match dst-port</b>
Tree	<b>dst-port</b>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Exact destination port as the match criterion
Context	<b>configure qos network string ingress ip-criteria entry number match dst-port eq number</b>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Greater than destination port value as match criterion
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Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Less than destination port value as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Port list used as match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match dst-port port-list reference</b>
Tree	<a href="#">port-list</a>
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	<b>configure qos match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match dst-port range</b>

Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of port range to match
Context	<b>configure</b> <a href="#">qos network string</a> <a href="#">ingress ip-criteria entry number match dst-port range end number</a>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of port range to match
Context	<b>configure</b> <a href="#">qos network string</a> <a href="#">ingress ip-criteria entry number match dst-port range start number</a>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**fragment keyword**

Synopsis	Fragmentation state as the match criterion
Context	<b>configure</b> <a href="#">qos network string</a> <a href="#">ingress ip-criteria entry number match fragment keyword</a>
Tree	<a href="#">fragment</a>
Options	false, true
Introduced	16.0.R1
Platforms	All



**protocol** (*number | keyword*)

Synopsis	IP protocol to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>match protocol</b> ( <i>number   keyword</i> )
Tree	<b>protocol</b>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>match src-ip</b>
Tree	<b>src-ip</b>
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	Source IPv4 address for network QoS policy match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>match src-ip address</b> ( <i>ipv4-prefix-with-host-bits   ipv4-address</i> )
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** *reference*

Synopsis	IPv4 prefix list containing IPv4 prefixes to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>match src-ip ip-prefix-list reference</b>
Tree	<b>ip-prefix-list</b>

Reference	<b>configure qos match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

### **mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>match src-ip mask</b> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>match src-port</b>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Exact source port as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry</b> <i>number</i> <b>match src-port eq</b> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Greater than source port value as match criterion
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Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Less than destination port value as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match src-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Port list used as match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match src-port port-list reference</b>
Tree	<a href="#">port-list</a>
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	<b>configure qos match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match src-port range</b>

Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match src-port range end number</b>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **start number**

Synopsis	Lower bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ip-criteria entry number match src-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **ipv6-criteria**

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria</b>
Tree	<a href="#">ipv6-criteria</a>
Introduced	16.0.R1
Platforms	All

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
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Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number</b>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	All

### **[entry-id]** *number*

Synopsis	Network Ingress IPv6 Criteria Entry Index
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number</b>
Tree	<b>entry</b>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number action</b>
Tree	<b>action</b>
Introduced	16.0.R1
Platforms	All

### **fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number action fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

### **profile** *keyword*

Synopsis	Default profile for the matching traffic
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Context	<b>configure qos network</b> <i>string ingress ipv6-criteria entry number action profile keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure qos network</b> <i>string ingress ipv6-criteria entry number action type keyword</i>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure qos network</b> <i>string ingress ipv6-criteria entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos network</b> <i>string ingress ipv6-criteria entry number match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

**dscp keyword**

Synopsis	DSCP value to match in the packet
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dscp keyword</b>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-ip</b>
Tree	<b>dst-ip</b>
Introduced	16.0.R1
Platforms	All

**address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address for network QoS policy match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-ip address</b> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<b>address</b>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ipv6-prefix-list reference**

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-ip ipv6-prefix-list reference</b>
Tree	<b>ipv6-prefix-list</b>
Reference	<b>configure qos match-list ipv6-prefix-list</b> <i>string</i>

Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

### **mask string**

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-ip mask string</b>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-port</b>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Exact destination port as the match criterion
Context	<b>configure qos network string ingress ipv6-criteria entry number match dst-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Greater than destination port value as match criterion
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Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Less than destination port value as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

### **port-list reference**

Synopsis	Port list used as match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-port port-list reference</b>
Tree	<a href="#">port-list</a>
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	<b>configure qos match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enter the <b>range</b> context
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Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-port range</b> <a href="#">end number</a>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match dst-port range</b> <a href="#">start number</a>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**fragment keyword**

Synopsis	Fragmentation state as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match fragment</b> <a href="#">keyword</a>
Tree	<a href="#">fragment</a>
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

**next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match next-header</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-ip</b>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

**address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address for network QoS policy match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-ip address</b> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list containing IPv6 prefixes to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-ip ipv6-prefix-list</b> <i>reference</i>
Tree	<a href="#">ipv6-prefix-list</a>

Reference	<b>configure qos match-list ipv6-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

### **mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-ip mask</b> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-port</b>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Exact source port as the match criterion
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry</b> <i>number</i> <b>match src-port eq</b> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**gt number**

Synopsis	Greater than source port value as match criterion
Context	<b>configure qos network string ingress ipv6-criteria entry number match src-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Less than destination port value as the match criterion
Context	<b>configure qos network string ingress ipv6-criteria entry number match src-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	16.0.R1
Platforms	All

**port-list reference**

Synopsis	Port list used as match criterion
Context	<b>configure qos network string ingress ipv6-criteria entry number match src-port port-list reference</b>
Tree	<a href="#">port-list</a>
Description	This command assigns a port list to a matching criteria entry in the network QoS policy. Each entry can use only a single port list. Port lists and prefix lists are mutually exclusive.
Reference	<b>configure qos match-list port-list string</b>
Notes	The following elements are part of a choice: <b>eq, gt, lt, port-list, or range.</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match src-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match src-port range</b> <a href="#">end number</a>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of port range to match
Context	<b>configure qos network</b> <i>string</i> <b>ingress ipv6-criteria entry number match src-port range</b> <a href="#">start number</a>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## ler-use-dscp boolean

Synopsis	Honor the DSCP markings instead of the LSP-EXP bits
Context	<b>configure qos network</b> <i>string</i> <b>ingress ler-use-dscp</b> <i>boolean</i>
Tree	<a href="#">ler-use-dscp</a>
Default	false
Introduced	16.0.R1

Platforms All

### **lsp-exp** [**lsp-exp-value**] *number*

Synopsis Enter the **lsp-exp** list instance  
 Context **configure qos network** *string ingress lsp-exp number*  
 Tree **lsp-exp**  
 Introduced 16.0.R1  
 Platforms All

### **[lsp-exp-value]** *number*

Synopsis LSP EXP value to associate with the forwarding class  
 Context **configure qos network** *string ingress lsp-exp number*  
 Tree **lsp-exp**  
 Range 0 to 7  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **fc** *keyword*

Synopsis Forwarding class  
 Context **configure qos network** *string ingress lsp-exp number fc keyword*  
 Tree **fc**  
 Options be, l2, af, l1, h2, ef, h1, nc  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **profile** *keyword*

Synopsis Default profile to use for the ingress traffic  
 Context **configure qos network** *string ingress lsp-exp number profile keyword*  
 Tree **profile**

Options	in, out, exceed, inplus
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## **policy-id** *number*



### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	QoS network policy ID
Context	<b>configure qos network</b> <i>string policy-id number</i>
Tree	<i>policy-id</i>
Description	<p>This command specifies the QoS network policy ID and uniquely identifies the policy on the router.</p> <p>Network <b>policy-id 1</b> exists as the default policy that is applied to all network interfaces by default. The network policy-id 1 cannot be modified or deleted. It defines the default DSCP-to-FC mapping and MPLS EXP-to-FC mapping for the ingress. For the egress, it defines forwarding classes that represent individual queues and the packet marking criteria.</p> <p>Network <b>policy-id 1</b> exists as the default policy that is applied to all network ports by default. This default policy cannot be modified or deleted. It defines the default DSCP-to-FC mapping and default unicast meters for ingress IP traffic. For the egress, it defines the forwarding class to dot1p and DSCP values and the packet marking criteria.</p> <p>If a new network policy is created (for instance, <b>policy-id 3</b>), only the default action and egress forwarding class parameters are identical to the default policy. A new network policy does not contain the default DSCP-to-FC and MPLS-EXP-to-FC mapping for network QoS policy of type <b>ip-interface</b> or the DSCP-to-FC mapping (for network QoS policy of type <b>port</b>). The default network policy can be copied to create a new network policy that includes the default ingress DSCP-to-FC and MPLS EXP-to-FC mapping (as appropriate).</p>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## **scope** *keyword*

Synopsis	Scope of the policy
Context	<b>configure qos network</b> <i>string scope keyword</i>



Tree	<a href="#">scope</a>
Options	exclusive, template
Default	template
Introduced	16.0.R1
Platforms	All

### **network-queue** [[network-queue-policy](#)] *string*

Synopsis	Enter the <b>network-queue</b> list instance
Context	<b>configure qos network-queue</b> <a href="#">string</a>
Tree	<a href="#">network-queue</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

### **[network-queue-policy]** *string*

Synopsis	Name for network queue policy
Context	<b>configure qos network-queue</b> <a href="#">string</a>
Tree	<a href="#">network-queue</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure qos network-queue</b> <a href="#">string</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**fc** [**fc-name**] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure qos network-queue</b> <i>string fc keyword</i>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class name
Context	<b>configure qos network-queue</b> <i>string fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**multicast-queue** *reference*

Synopsis	Multicast queue for packets in this forwarding class
Context	<b>configure qos network-queue</b> <i>string fc keyword multicast-queue reference</i>
Tree	<b>multicast-queue</b>
Reference	<b>configure qos network-queue</b> <i>string queue number</i>
Introduced	16.0.R1
Platforms	All

**queue** *reference*

Synopsis	Queue for packets in this forwarding class
Context	<b>configure qos network-queue</b> <i>string fc keyword queue reference</i>
Tree	<b>queue</b>
Reference	<b>configure qos network-queue</b> <i>string queue number</i>
Introduced	16.0.R1
Platforms	All

### **hs-attachment-policy** *reference*

Synopsis	HS attachment policy applied
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-attachment-policy</b> <i>reference</i>
Tree	<a href="#">hs-attachment-policy</a>
Reference	<b>configure qos</b> <b>hs-attachment-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wrr-group** [[group-id](#)] *number*

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i>
Tree	<a href="#">hs-wrr-group</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[group-id]** *number*

Synopsis	HS WRR group identifier
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i>
Tree	<a href="#">hs-wrr-group</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>adaptation-rule</b>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>adaptation-rule</b> <b>pir</b> <i>keyword</i>
Tree	<b>pir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-class-weight number**

Synopsis	Weight of scheduling class
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>hs-class-weight</b> <i>number</i>
Tree	<b>hs-class-weight</b>
Range	1   2   4   8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**rate number**

Synopsis	PIR rate
Context	<b>configure qos network-queue</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>rate</b> <i>number</i>
Tree	<b>rate</b>
Range	1 to 100
Units	kilobps
Default	100
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**queue [queue-id] number**

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure qos network-queue</b> <i>string</i> <b>queue</b> <i>number</i>

Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id] number**

Synopsis	Queue identifier
Context	<b>configure</b> <a href="#">qos network-queue</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">qos network-queue</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">qos network-queue</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**fir keyword**

Synopsis	Constraint used when deriving the operational FIR value
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Context	<b>configure qos network-queue</b> <i>string queue number adaptation-rule fir keyword</i>
Tree	<a href="#">fir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos network-queue</b> <i>string queue number adaptation-rule pir keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**avg-frame-overhead decimal-number**

Synopsis	Average packet-to-frame encapsulation overhead
Context	<b>configure qos network-queue</b> <i>string queue number avg-frame-overhead decimal-number</i>
Tree	<a href="#">avg-frame-overhead</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

**cbs decimal-number**

Synopsis	Reserved buffer space for the queue
Context	<b>configure qos network-queue</b> <i>string queue number cbs decimal-number</i>
Tree	<a href="#">cbs</a>
Range	0.00 to 100.00
Units	centipercen

Introduced 16.0.R1  
Platforms All

## drop-tail

Synopsis Enter the **drop-tail** context  
Context **configure qos network-queue** *string queue number drop-tail*  
Tree [drop-tail](#)  
Introduced 16.0.R1  
Platforms All

## low

Synopsis Enter the **low** context  
Context **configure qos network-queue** *string queue number drop-tail low*  
Tree [low](#)  
Introduced 16.0.R1  
Platforms All

## percent-reduction-from-mbs (*number | keyword*)

Synopsis Low drop-tail percent from MBS that is reduced  
Context **configure qos network-queue** *string queue number drop-tail low percent-reduction-from-mbs* (*number | keyword*)  
Tree [percent-reduction-from-mbs](#)  
Range 0 to 100  
Options auto  
Default auto  
Introduced 16.0.R1  
Platforms All

## hs-alt-port-class-pool *boolean*

Synopsis Use HS alternate class port pool buffer for traffic  
Context **configure qos network-queue** *string queue number hs-alt-port-class-pool boolean*  
Tree [hs-alt-port-class-pool](#)

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Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis	Scheduling class weight
Context	<b>configure qos network-queue</b> <i>string queue number hs-class-weight number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-mbs** *decimal-number*

Synopsis	Percentage of buffer space allowed for the HS queue
Context	<b>configure qos network-queue</b> <i>string queue number hs-mbs decimal-number</i>
Tree	<a href="#">hs-mbs</a>
Range	0.00 to 100.00
Default	100.00
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis	Enter the <b>hs-wred-queue</b> context
Context	<b>configure qos network-queue</b> <i>string queue number hs-wred-queue</i>
Tree	<a href="#">hs-wred-queue</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **policy reference**

Synopsis	Slope policy name
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Context	<b>configure qos network-queue</b> <i>string queue number hs-wred-queue policy reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure qos slope-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wrr-weight** *number*

Synopsis	WRR weight with which queue parents into the scheduler
Context	<b>configure qos network-queue</b> <i>string queue number hs-wrr-weight number</i>
Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **mbs** *decimal-number*

Synopsis	Percentage of buffer space allowed for the queue
Context	<b>configure qos network-queue</b> <i>string queue number mbs decimal-number</i>
Tree	<a href="#">mbs</a>
Range	0.00 to 100.00
Units	centipercen
Introduced	16.0.R1
Platforms	All

### **multipoint** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	<b>configure qos network-queue</b> <i>string queue number multipoint boolean</i>
Tree	<a href="#">multipoint</a>
Introduced	16.0.R1

Platforms All

### port-parent

Synopsis Enable the **port-parent** context  
Context **configure qos network-queue** *string queue number* **port-parent**  
Tree [port-parent](#)  
Introduced 16.0.R1  
Platforms All

### cir-level *number*

Synopsis Port priority to receive bandwidth for within-CIR pass  
Context **configure qos network-queue** *string queue number* **port-parent cir-level** *number*  
Tree [cir-level](#)  
Range 0 to 8  
Default 0  
Introduced 16.0.R1  
Platforms All

### cir-weight *number*

Synopsis Weight to receive bandwidth at the within-CIR level  
Context **configure qos network-queue** *string queue number* **port-parent cir-weight** *number*  
Tree [cir-weight](#)  
Range 0 to 100  
Default 0  
Introduced 16.0.R1  
Platforms All

### level *number*

Synopsis Port priority level for above-CIR behavior  
Context **configure qos network-queue** *string queue number* **port-parent level** *number*  
Tree [level](#)

Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure qos network-queue</b> <i>string queue number port-parent weight number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

### **queue-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	<b>configure qos network-queue</b> <i>string queue number queue-type keyword</i>
Tree	<a href="#">queue-type</a>
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos network-queue</b> <i>string queue number rate</i>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	All

### ***cir number***

Synopsis	CIR percentage rate
Context	<b>configure qos network-queue</b> <i>string queue number rate cir number</i>
Tree	<b>cir</b>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### ***fir number***

Synopsis	FIR percentage
Context	<b>configure qos network-queue</b> <i>string queue number rate fir number</i>
Tree	<b>fir</b>
Description	This command defines an additional percentage at which the system prioritizes the queue over other queues competing for the same bandwidth above that used by the CIR percentage.
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### ***pir number***

Synopsis	PIR percentage rate
Context	<b>configure qos network-queue</b> <i>string queue number rate pir number</i>
Tree	<b>pir</b>
Range	1 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

**policer-control-policy** [**policer-control-policy-name**] *string*

Synopsis	Enter the <b>policer-control-policy</b> list instance
Context	<b>configure qos policer-control-policy</b> <i>string</i>
Tree	<a href="#">policer-control-policy</a>
Max. Instances	2047
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-control-policy-name]** *string*

Synopsis	Policer control policy name
Context	<b>configure qos policer-control-policy</b> <i>string</i>
Tree	<a href="#">policer-control-policy</a>
Description	This command specifies the policer control policy name. Each policer control policy must be created with a unique policy name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure qos policer-control-policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**root**

Synopsis	Enter the <b>root</b> context
Context	<b>configure qos policer-control-policy</b> <i>string</i> <b>root</b>
Tree	<a href="#">root</a>

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **max-percent-rate** *decimal-number*

Synopsis Maximum rate of the arbiter  
Context **configure** qos policer-control-policy *string* root max-percent-rate *decimal-number*  
Tree [max-percent-rate](#)  
Range 0.01 to 100.00  
Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **max-rate** (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit of the arbiter  
Context **configure** qos policer-control-policy *string* root max-rate (*number* | *keyword*)  
Tree [max-rate](#)  
Range 1 to 6400000000  
Options max  
Default max  
Notes The following elements are part of a choice: **max-percent-rate** or **max-rate**.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority-mbs-thresholds**

Synopsis Enter the **priority-mbs-thresholds** context  
Context **configure** qos policer-control-policy *string* root priority-mbs-thresholds  
Tree [priority-mbs-thresholds](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum separation between policer discard thresholds
Context	<b>configure</b> qos policer-control-policy <i>string</i> root priority-mbs-thresholds min-thresh-separation ( <i>number</i>   <i>keyword</i> )
Tree	min-thresh-separation
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority** [*priority-level*] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i>
Tree	priority
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**fixed-mbs** *boolean*

Synopsis	Consider cumulative buffer space to be fixed
Context	<b>configure</b> qos policer-control-policy <i>string</i> root priority-mbs-thresholds priority <i>number</i> fixed-mbs <i>boolean</i>

Tree	<a href="#">fixed-mbs</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space
Context	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **profile-preferred** *boolean*

Synopsis	Provide a preference to consume PIR bucket tokens
Context	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i> <a href="#">root</a> <a href="#">profile-preferred</a> <i>boolean</i>
Tree	<a href="#">profile-preferred</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **tier** [[tier-id](#)] *number*

Synopsis	Enter the <b>tier</b> list instance
Context	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i> <a href="#">tier</a> <i>number</i>
Tree	<a href="#">tier</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR



**[tier-id] number**

Synopsis	Tier for policer control policer arbiter
Context	<b>configure qos policer-control-policy string tier number</b>
Tree	<a href="#">tier</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**arbiter [arbiter-name] string**

Synopsis	Enter the <b>arbiter</b> list instance
Context	<b>configure qos policer-control-policy string tier number arbiter string</b>
Tree	<a href="#">arbiter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[arbiter-name] string**

Synopsis	Arbiter name
Context	<b>configure qos policer-control-policy string tier number arbiter string</b>
Tree	<a href="#">arbiter</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**arbiter-parent**

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure qos policer-control-policy string tier number arbiter string arbiter-parent</b>
Tree	<a href="#">arbiter-parent</a>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**arbiter-name** *string*

Synopsis	Arbiter name
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> arbiter-parent <i>arbiter-name</i> <i>string</i>
Tree	<i>arbiter-name</i>
Description	This command specifies the arbiter name. In tier 1, the arbiter name is not allowed and only the system reversed name "root" is accepted. The specified arbiter name must exist within the policer control policy at tier 1 or the parent command fails. When a tiered arbiter is acting as a parent for another tiered arbiter, the parent arbiter cannot be removed from the policy. The child arbiter receives all bandwidth directly from its parent arbiter (that receives bandwidth from the root arbiter).
String Length	1 to 32
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**level** *number*

Synopsis	Level the child arbiter uses on its parent
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> arbiter-parent <i>level</i> <i>number</i>
Tree	<i>level</i>
Range	1 to 8
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**weight** *number*

Synopsis	Weight attribute at parent level applied to children
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> arbiter-parent <i>weight</i> <i>number</i>
Tree	<i>weight</i>
Description	This command defines how multiple children at the same parent strict level compete when insufficient bandwidth exists on the parent for that level. Each child's weight is divided by the sum of the active children's weights and the result is multiplied by the available bandwidth. If a child cannot receive its entire weighted fair share of bandwidth due to a defined child rate limit, the remainder of its bandwidth is distributed between the other children based on their weights.

Range	1 to 100
Default	1
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate** *decimal-number*

Synopsis	Maximum rate of the arbiter
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> percent-rate <i>decimal-number</i>
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: ( <b>percent-rate</b> and <b>reference-rate</b> ) or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: ( <b>percent-rate</b> and <b>reference-rate</b> ) or <b>rate</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos policer-control-policy <i>string</i> tier <i>number</i> arbiter <i>string</i> <b>reference-rate</b> <i>keyword</i>
Tree	<a href="#">reference-rate</a>
Options	local-limit, reference-port-limit
Default	local-limit
Notes	The following elements are part of a choice: ( <b>percent-rate</b> and <b>reference-rate</b> ) or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **port-scheduler-policy** [[name](#)] *string*

Synopsis	Enter the <b>port-scheduler-policy</b> list instance
Context	<b>configure</b> qos port-scheduler-policy <i>string</i>
Tree	<a href="#">port-scheduler-policy</a>
Max.	1023
Instances	
Introduced	16.0.R1
Platforms	All

### **[name]** *string*

Synopsis	Port scheduler policy name
Context	<b>configure</b> qos port-scheduler-policy <i>string</i>
Tree	<a href="#">port-scheduler-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> <i>description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dist-lag-rate-shared** *boolean*

Synopsis	Share rates when port is part of LAG in distribute mode
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> <i>dist-lag-rate-shared</i> <i>boolean</i>
Tree	<a href="#">dist-lag-rate-shared</a>
Default	false
Introduced	16.0.R1
Platforms	All

**group** [*group-name*] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> <i>group</i> <i>string</i>
Tree	<a href="#">group</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[group-name]** *string*

Synopsis	Weighted scheduler group name
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> <i>group</i> <i>string</i>
Tree	<a href="#">group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **monitor-threshold** *number*

Synopsis Congestion monitoring threshold

Context **configure** qos port-scheduler-policy *string* group *string* monitor-threshold *number*

Tree [monitor-threshold](#)

Description This command defines the congestion monitoring threshold for the desired monitoring entity under the port scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.

The congestion threshold is specified as a percentage of the configured PIR for the entity for which congestion monitoring is desired. For example, if the configured PIR for level 1 is 100000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is greater than 90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** qos port-scheduler-policy *string* group *string* percent-rate

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

### **cir** *decimal-number*

Synopsis Administrative CIR percent

Context **configure** qos port-scheduler-policy *string* group *string* percent-rate cir *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Default 100.00

Introduced	16.0.R1
Platforms	All

**pir** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> group <i>string</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> group <i>string</i> rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> group <i>string</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos port-scheduler-policy</b> <i>string group string rate</i> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**hqos-algorithm** *keyword*

Synopsis	Port scheduler H-QoS algorithm
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> <b>hqos-algorithm</b> <i>keyword</i>
Tree	<a href="#">hqos-algorithm</a>
Description	This command configures the port scheduler H-QoS algorithm used to calculate the operational rates for the children connected to the port scheduler.
Options	default, above-offered-allowance-control
Default	default
Introduced	19.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure qos port-scheduler-policy</b> <i>string level</i> <i>number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All

**[level-id]** *number*

Synopsis	Priority level this port scheduler policy
Context	<b>configure qos port-scheduler-policy</b> <i>string level</i> <i>number</i>



Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **group reference**

Synopsis	Associated group
Context	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i> <a href="#">level</a> <i>number</i> <a href="#">group reference</a>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i> <a href="#">group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **monitor-threshold** *number*

Synopsis	Monitoring threshold of the configured rate
Context	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i> <a href="#">level</a> <i>number</i> <a href="#">monitor-threshold</a> <i>number</i>
Tree	<a href="#">monitor-threshold</a>
Description	This command specifies the configured rate as a percentage. If the offered rate exceeds the configured threshold, a counter monitoring the threshold is increased.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i> <a href="#">level</a> <i>number</i> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** *decimal-number*

Synopsis	Administrative CIR percent
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	100.00
Introduced	16.0.R1
Platforms	All

**pir** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> rate
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000

Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	pir
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight of the level in the weighted scheduler group
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> level <i>number</i> weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**max-percent-rate** *decimal-number*

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> qos port-scheduler-policy <i>string</i> max-percent-rate <i>decimal-number</i>
Tree	max-percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .

Introduced	16.0.R1
Platforms	All

### **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> <b>max-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 6400000000
Options	max
Default	max
Notes	The following elements are part of a choice: <b>max-percent-rate</b> or <b>max-rate</b> .
Introduced	16.0.R1
Platforms	All

### **monitor-threshold** *number*

Synopsis	Congestion monitoring threshold
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> <b>monitor-threshold</b> <i>number</i>
Tree	<a href="#">monitor-threshold</a>
Description	<p>This command defines the congestion monitoring threshold for the desired monitoring entity under the port-scheduler for per aggregate port scheduler rate, per individual level, and per group that is aggregating multiple levels.</p> <p>The congestion threshold is specified as a percentage of the configured PIR rate for the entity for which congestion monitoring is desired. For example, if the configured PIR rate for level 1 is 1000,000 kb/s, and the monitoring threshold is set to 90%, an event where the offered rate is &gt;90,000 kb/s is recorded. This event is shown as part of the cumulative count of congestion threshold exceeds since the last clearing of the counters.</p>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

### **orphan-overrides**

Synopsis	Enter the <b>orphan-overrides</b> context
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Context	<b>configure qos port-scheduler-policy</b> <i>string</i> orphan-overrides
Tree	<a href="#">orphan-overrides</a>
Introduced	16.0.R1
Platforms	All

### **cir-level** *number*

Synopsis	Port priority level for within-CIR orphan behavior
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> orphan-overrides <b>cir-level</b> <i>number</i>
Tree	<a href="#">cir-level</a>
Description	This command defines the port priority that the orphan queues and schedulers use to receive bandwidth for their within-CIR offered-load. If the <b>cir-weight</b> command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and this command setting is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> orphan-overrides <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Description	This command defines the weight the orphan queues and schedulers will use in the within-CIR port priority level. When this command is set to the default value, the orphan queues and schedulers do not receive bandwidth during the port scheduler's within-CIR pass and the <b>cir-level</b> command is ignored.
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

### **level** *number*

Synopsis	Port priority level for above-CIR orphan behavior
Context	<b>configure qos port-scheduler-policy</b> <i>string</i> orphan-overrides <b>level</b> <i>number</i>

Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Weight to use in the above-CIR port priority level
Context	<b>configure</b> <a href="#">qos port-scheduler-policy</a> <i>string</i> <a href="#">orphan-overrides</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**post-policer-mapping [name] string**

Synopsis	Enter the <b>post-policer-mapping</b> list instance
Context	<b>configure</b> <a href="#">qos post-policer-mapping</a> <i>string</i>
Tree	<a href="#">post-policer-mapping</a>
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[name] string**

Synopsis	Post-policer mapping policy name
Context	<b>configure</b> <a href="#">qos post-policer-mapping</a> <i>string</i>
Tree	<a href="#">post-policer-mapping</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos post-policer-mapping <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**fc** [**fc-name**] *keyword* **profile** *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> qos post-policer-mapping <i>string</i> <b>fc</b> <i>keyword</i> <b>profile</b> <i>keyword</i>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[fc-name]** *keyword*

Synopsis	Forwarding class remapping
Context	<b>configure</b> qos post-policer-mapping <i>string</i> <b>fc</b> <i>keyword</i> <b>profile</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile** *keyword*

Synopsis	Egress packet profile remapping
Context	<b>configure</b> qos post-policer-mapping <i>string</i> <b>fc</b> <i>keyword</i> <b>profile</b> <i>keyword</i>
Tree	<b>fc</b>
Options	in, out, exceed, inplus
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## maps-to

Synopsis Enter the **maps-to** context

Context **configure qos post-policer-mapping string fc keyword profile keyword maps-to**

Tree [maps-to](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## fc keyword

Synopsis Forwarding class remapping

Context **configure qos post-policer-mapping string fc keyword profile keyword maps-to fc keyword**

Tree [fc](#)

Options be, l2, af, l1, h2, ef, h1, nc

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## profile keyword

Synopsis Egress packet profile remapping

Context **configure qos post-policer-mapping string fc keyword profile keyword maps-to profile keyword**

Tree [profile](#)

Options in, out, exceed, inplus

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## queue-group-redirect-list [name] string

Synopsis Enter the **queue-group-redirect-list** list instance

Context **configure qos queue-group-redirect-list string**

Tree [queue-group-redirect-list](#)



Max. Instances	2047
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Queue group redirect list name
Context	<b>configure</b> qos queue-group-redirect-list <i>string</i>
Tree	queue-group-redirect-list
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**match** [*field-value*] *number*

Synopsis	Enter the <b>match</b> list instance
Context	<b>configure</b> qos queue-group-redirect-list <i>string match number</i>
Tree	match
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[field-value]** *number*

Synopsis	Field value in the ingress or egress packet to match
Context	<b>configure</b> qos queue-group-redirect-list <i>string match number</i>
Tree	match
Description	This command specifies the value of the field in the ingress or egress packet. When there is a match, the packet is redirected to the specified queue group instance. The field must be a valid VXLAN VNI.
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **instance** *number*

Synopsis Queue group instance for traffic redirection  
Context **configure qos queue-group-redirect-list** *string match number instance number*  
Tree [instance](#)  
Range 1 to 65535  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

### **type** *keyword*

Synopsis Type for queue-group redirect list  
Context **configure qos queue-group-redirect-list** *string type keyword*  
Tree [type](#)  
Options vxlan-vni  
Default vxlan-vni  
Introduced 16.0.R1  
Platforms All

### **queue-group-templates**

Synopsis Enter the **queue-group-templates** context  
Context **configure qos queue-group-templates**  
Tree [queue-group-templates](#)  
Introduced 16.0.R1  
Platforms All

### **egress**

Synopsis Enter the **egress** context  
Context **configure qos queue-group-templates egress**  
Tree [egress](#)

Introduced 16.0.R1  
 Platforms All

### **queue-group** [[egress-queue-group-name](#)] *string*

Synopsis Enter the **queue-group** list instance  
 Context **configure** [qos queue-group-templates egress queue-group](#) *string*  
 Tree [queue-group](#)  
 Introduced 16.0.R1  
 Platforms All

### **[egress-queue-group-name]** *string*

Synopsis Egress queue group template name  
 Context **configure** [qos queue-group-templates egress queue-group](#) *string*  
 Tree [queue-group](#)  
 Description This command specifies the name of the egress queue group template. Each ingress queue group template must be uniquely named within the system. Multiple ingress queue group templates may not share the same name. An ingress and egress queue group template may share the same name.  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [qos queue-group-templates egress queue-group](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 0 to 80  
 Introduced 16.0.R1  
 Platforms All

**fc** [**fc-name**] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[fc-name]** *keyword*

Synopsis	Forwarding class name
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue**

Synopsis	Enter the <b>queue</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <b>fc</b> <i>keyword</i> <b>queue</b>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**none**

Synopsis	No mid-pool is associated with this parent-pool
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> <b>fc</b> <i>keyword</i> <b>queue</b> <b>none</b>
Tree	<b>none</b>
Notes	The following elements are part of a choice: <b>none</b> or <b>queue-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue-id** *reference*

Synopsis	Queue defined in forwarding class mapping
Context	<b>configure</b> qos queue-group-templates egress queue-group string fc keyword queue queue-id <i>reference</i>
Tree	queue-id
Reference	<b>configure</b> qos queue-group-templates egress queue-group string queue number
Notes	The following elements are part of a choice: <b>none</b> or <b>queue-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**hs-attachment-policy** *reference*

Synopsis	HS attachment policy applied
Context	<b>configure</b> qos queue-group-templates egress queue-group string hs-attachment-policy <i>reference</i>
Tree	hs-attachment-policy
Reference	<b>configure</b> qos hs-attachment-policy string
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-wrr-group** [group-id] *number*

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure</b> qos queue-group-templates egress queue-group string hs-wrr-group number
Tree	hs-wrr-group
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[group-id]** *number*

Synopsis	HS WRR group identifier
Context	<b>configure</b> qos queue-group-templates egress queue-group string hs-wrr-group number
Tree	hs-wrr-group
Range	1 to 2

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## hs-class-weight *number*

Synopsis	Weight of scheduling class
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> hs-wrr-group <i>number</i> hs-class-weight <i>number</i>
Tree	hs-class-weight
Range	1   2   4   8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**percent-rate** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">hs-wrr-group</a> <i>number</i> <a href="#">percent-rate</a> <i>decimal-number</i>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**rate** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">hs-wrr-group</a> <i>number</i> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**policer** [[policer-id](#)] *number*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Description	Commands in this context configure a QoS egress queue-group policer.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id] number**

Synopsis	Egress queue-group policer ID
Context	<b>configure</b> qos queue-group-templates egress queue-group string policer number
Tree	policer
Description	This command specifies the queue-group policer that will either be created or edited within the queue group template. For VSR, the queue group template may only have up to eight policers (numbered 1 through 8).
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group string policer number adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> qos queue-group-templates egress queue-group string policer number adaptation-rule cir keyword
Tree	cir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
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Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **adv-config-policy** *reference*

Synopsis	Advanced QoS policy name
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> adv-config-policy <i>reference</i>
Tree	adv-config-policy
Reference	<b>configure</b> qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **arbiter-parent**

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent
Tree	arbiter-parent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **arbiter-name** *string*

Synopsis	Arbiter name
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> arbiter-parent arbiter-name <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**level number**

Synopsis	Priority level
Context	<b>configure</b> qos queue-group-templates egress queue-group string policer number arbiter-parent level number
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**weight number**

Synopsis	Weight in the priority level
Context	<b>configure</b> qos queue-group-templates egress queue-group string policer number arbiter-parent weight number
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs (number | keyword)**

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> qos queue-group-templates egress queue-group string policer number cbs (number   keyword)
Tree	cbs
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**exceed-pir** *boolean*

Synopsis	Forward packets exceeding the PIR as exceed-profile
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>exceed-pir</i> <i>boolean</i>
Tree	<a href="#">exceed-pir</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**high-prio-only** (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>high-prio-only</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">high-prio-only</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs** (*number* | *keyword*)

Synopsis	Maximum buffer size for the template queue
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <i>mbs</i> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">policer number</a> <a href="#">packet-byte-offset number</a>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">policer number</a> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** *decimal-number*

Synopsis	Administrative CIR
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i> <a href="#">policer number</a> <a href="#">percent-rate cir</a> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00

Default	0.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** *decimal-number*

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	local-limit, reference-port-limit
Default	local-limit
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile-capped** *boolean*

Synopsis	Enforce a limit on the profile
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> profile-capped <i>boolean</i>
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <b>rate</b>
Tree	<b>rate</b>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## pir (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> policer <i>number</i> <b>stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue** [*queue-id*] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	All

**[queue-id]** *number*

Synopsis	Egress Queue-Group queue identifier
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i>
Tree	<b>queue</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> <b>adaptation-rule</b>
Tree	<b>adaptation-rule</b>

Introduced	16.0.R1
Platforms	All

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule cir <i>keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**adv-config-policy reference**

Synopsis	Name of the advanced configuration policy
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> adv-config-policy <i>reference</i>
Tree	<a href="#">adv-config-policy</a>
Reference	<b>configure</b> qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All



**burst-limit** (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> burst-limit ( <i>number</i>   <i>keyword</i> )
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**cbs** (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> cbs ( <i>number</i>   <i>keyword</i> )
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

## exceed

Synopsis	Enter the <b>exceed</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail <b>exceed</b>
Tree	<a href="#">exceed</a>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail <b>exceed</b> percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## high

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail <b>high</b>
Tree	<a href="#">high</a>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail <b>high</b> percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100

Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## highplus

Synopsis	Enter the <b>highplus</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail highplus
Tree	highplus
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail highplus percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**dynamic-mbs** *boolean*

Synopsis	Allow MBS size modification to maintain maximum latency
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> dynamic-mbs <i>boolean</i>
Tree	dynamic-mbs
Default	false
Introduced	16.0.R1
Platforms	All

**hs-alt-port-class-pool** *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-alt-port-class-pool <i>boolean</i>
Tree	hs-alt-port-class-pool
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-class-weight** *number*

Synopsis	Scheduling class weight
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> hs-class-weight <i>number</i>

Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## hs-wred-queue

Synopsis	Enter the <b>hs-wred-queue</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> <a href="#">hs-wred-queue</a>
Tree	<a href="#">hs-wred-queue</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## policy *reference*

Synopsis	Slope policy name
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> <a href="#">hs-wred-queue</a> <i>policy reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> qos <a href="#">slope-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## hs-wrr-weight *number*

Synopsis	WRR weight with which queue parents into the scheduler
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> <a href="#">hs-wrr-weight</a> <i>number</i>
Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**mbs** (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string queue number mbs</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**packet-byte-offset** *number*

Synopsis	Packet byte offset for addition of policing information
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string queue number</i> <a href="#">packet-byte-offset</a> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string queue number</i> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** *decimal-number*

Synopsis	Administrative CIR percent
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate cir <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

**pir** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

**reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	<a href="#">reference-rate</a>
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	20.10.R1
Platforms	All

**port-parent**

Synopsis	Enable the <b>port-parent</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent

Tree	<a href="#">port-parent</a>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	All

### **cir-level** *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">port-parent</a> <b>cir-level</b> <i>number</i>
Tree	<a href="#">cir-level</a>
Range	0 to 8
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">port-parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **level** *number*

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">port-parent</a> <b>level</b> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All



**weight** *number*

Synopsis	Weight used at above-CIR port priority level
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> port-parent <i>weight</i> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**queue-delay** *number*

Synopsis	Target queue delay for forwarding packets through queue
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> queue-delay <i>number</i>
Tree	<a href="#">queue-delay</a>
Range	1 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

**queue-type** *keyword*

Synopsis	Method used to service queue from hardware perspective
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	<a href="#">queue-type</a>
Options	expedited, best-effort
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> rate
Tree	<a href="#">rate</a>

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **scheduler-parent**

Synopsis	Enable the <b>scheduler-parent</b> context
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">scheduler-parent</a>
Tree	<a href="#">scheduler-parent</a>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .

Introduced 16.0.R1  
Platforms All

### **cir-level** *number*

Synopsis Level of priority while feeding to the parent  
Context **configure** qos queue-group-templates egress queue-group *string* queue *number*  
scheduler-parent cir-level *number*  
Tree [cir-level](#)  
Range 0 to 8  
Default 0  
Introduced 16.0.R1  
Platforms All

### **cir-weight** *number*

Synopsis Weight used at the within-CIR port priority level  
Context **configure** qos queue-group-templates egress queue-group *string* queue *number*  
scheduler-parent cir-weight *number*  
Tree [cir-weight](#)  
Range 0 to 100  
Default 1  
Introduced 16.0.R1  
Platforms All

### **level** *number*

Synopsis Level of priority while feeding to the parent  
Context **configure** qos queue-group-templates egress queue-group *string* queue *number*  
scheduler-parent level *number*  
Tree [level](#)  
Range 1 to 8  
Default 1  
Introduced 16.0.R1  
Platforms All

**scheduler-name** *string*

Synopsis	Parent scheduler name
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent scheduler-name <i>string</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight used by the scheduler for feeding the queue
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> scheduler-parent weight <i>number</i>
Tree	weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**wred-queue**

Synopsis	Enter the <b>wred-queue</b> context
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> wred-queue
Tree	wred-queue
Introduced	16.0.R1
Platforms	All

**mode keyword**

Synopsis	Pool association to allow queue-specific WRED slopes
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> wred-queue <i>mode</i> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	native, pool-per-queue
Introduced	16.0.R1
Platforms	All

**policy reference**

Synopsis	Slope policy name
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> wred-queue <i>policy</i> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> qos slope-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

**usage keyword**

Synopsis	Congestion control type
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queue <i>number</i> wred-queue <i>usage</i> <i>keyword</i>
Tree	<a href="#">usage</a>
Options	auto, exceed-low
Introduced	16.0.R1
Platforms	All

**queues-hqos-manageable boolean**

Synopsis	Manage queues through the Hierarchical QoS process
Context	<b>configure</b> qos queue-group-templates egress queue-group <i>string</i> queues-hqos-manageable <i>boolean</i>
Tree	<a href="#">queues-hqos-manageable</a>
Default	true

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> qos queue-group-templates ingress
Tree	ingress
Introduced	16.0.R1
Platforms	All

## queue-group [[ingress-queue-group-name](#)] *string*

Synopsis	Enter the <b>queue-group</b> list instance
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i>
Tree	queue-group
Introduced	16.0.R1
Platforms	All

## [[ingress-queue-group-name](#)] *string*

Synopsis	Ingress queue group template name
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i>
Tree	queue-group
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> description <i>string</i>
Tree	description

String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **policer** [**policer-id**] *number*

Synopsis Enter the **policer** list instance  
 Context **configure qos queue-group-templates ingress queue-group** *string policer number*  
 Tree **policer**  
 Introduced 16.0.R1  
 Platforms All

### **[policer-id]** *number*

Synopsis Ingress Queue-Group Policer identifier  
 Context **configure qos queue-group-templates ingress queue-group** *string policer number*  
 Tree **policer**  
 Range 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **adaptation-rule**

Synopsis Enter the **adaptation-rule** context  
 Context **configure qos queue-group-templates ingress queue-group** *string policer number adaptation-rule*  
 Tree **adaptation-rule**  
 Introduced 16.0.R1  
 Platforms All

### **cir** *keyword*

Synopsis Constraint used when deriving the operational CIR value  
 Context **configure qos queue-group-templates ingress queue-group** *string policer number adaptation-rule cir keyword*

Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

### **pir** *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">qos queue-group-templates ingress queue-group</a> <i>string</i> <a href="#">policer number</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

### **adv-config-policy** *reference*

Synopsis	Advanced QoS policy name
Context	<b>configure</b> <a href="#">qos queue-group-templates ingress queue-group</a> <i>string</i> <a href="#">policer number</a> <a href="#">adv-config-policy</a> <i>reference</i>
Tree	<a href="#">adv-config-policy</a>
Reference	<b>configure</b> <a href="#">qos adv-config-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **arbiter-parent**

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure</b> <a href="#">qos queue-group-templates ingress queue-group</a> <i>string</i> <a href="#">policer number</a> <a href="#">arbiter-parent</a>
Tree	<a href="#">arbiter-parent</a>
Introduced	16.0.R1
Platforms	All



**arbiter-name** *string*

Synopsis	Arbiter name
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> arbiter-parent arbiter-name <i>string</i>
Tree	arbiter-name
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**level** *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> arbiter-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> arbiter-parent weight <i>number</i>
Tree	weight
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**cbs** (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
----------	---

Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number cbs</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **high-prio-only** (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number</i> <a href="#">high-prio-only</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">high-prio-only</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **mbs** (*number* | *keyword*)

Synopsis	Maximum buffer size for the template queue
----------	--

Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number mbs (number   keyword)</i>
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number packet-byte-offset number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	All

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number percent-rate</i>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.2.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	Administrative CIR
Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string policer number percent-rate cir decimal-number</i>

Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00
Introduced	20.2.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	Administrative PIR
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.2.R1
Platforms	All

### **profile-capped** *boolean*

Synopsis	Enforce a limit on the profile
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">profile-capped</a> <i>boolean</i>
Tree	<a href="#">profile-capped</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i> <a href="#">policer</a> <i>number</i> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> rate <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> rate <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> policer <i>number</i> <b>stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Default	minimal
Introduced	16.0.R1

Platforms All

### **queue** *[queue-id] number*

Synopsis Enter the **queue** list instance

Context **configure** qos queue-group-templates ingress queue-group *string queue number*

Tree [queue](#)

Introduced 16.0.R1

Platforms All

### **[queue-id] number**

Synopsis Ingress Queue-Group Queue identifier

Context **configure** qos queue-group-templates ingress queue-group *string queue number*

Tree [queue](#)

Range 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **adaptation-rule**

Synopsis Enter the **adaptation-rule** context

Context **configure** qos queue-group-templates ingress queue-group *string queue number*  
[adaptation-rule](#)

Tree [adaptation-rule](#)

Introduced 16.0.R1

Platforms All

### **cir** *keyword*

Synopsis Constraint for deriving operational CIR for the queue

Context **configure** qos queue-group-templates ingress queue-group *string queue number*  
[adaptation-rule cir keyword](#)

Tree [cir](#)

Options max, min, closest

Default	closest
Introduced	16.0.R1
Platforms	All

**fir keyword**

Synopsis	Constraint for deriving operational FIR for the queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule fir <i>keyword</i>
Tree	fir
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**pir keyword**

Synopsis	Constraint for deriving operational FIR for the queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adaptation-rule pir <i>keyword</i>
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**adv-config-policy reference**

Synopsis	Advanced QoS policy name
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> adv-config-policy <i>reference</i>
Tree	adv-config-policy
Reference	<b>configure</b> qos adv-config-policy <i>string</i>
Introduced	16.0.R1
Platforms	All

**burst-limit** (*number* | *keyword*)

Synopsis	Explicit shaping burst size of a queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> burst-limit ( <i>number</i>   <i>keyword</i> )
Tree	burst-limit
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**cbs** (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> cbs ( <i>number</i>   <i>keyword</i> )
Tree	cbs
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**cir-non-profiling** *boolean*

Synopsis	Prevent profile modification of CIR dependent packet
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> cir-non-profiling <i>boolean</i>
Tree	cir-non-profiling
Description	<p>When configured to <b>true</b>, the system prevents the modification of the profile of a packet-dependent queue rate compared to its configured CIR. The CIR continues to be used to affect the scheduling priority of a queue.</p> <p>This command is only supported on hardware that is FP4-based and later and is ignored when the related policy is applied to FP3-based hardware.</p>



This command should not be configured under an ingress queue group template queue associated with a LAG which spans FP4-based and later and FP3-based hardware as the resulting operation could be different depending on which hardware type the traffic ingresses.

Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## drop-tail

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> drop-tail
Tree	drop-tail
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**mbs** (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> mbs ( <i>number</i>   <i>keyword</i> )
Tree	mbs
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**multipoint** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create an ingress multipoint queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> multipoint <i>boolean</i>
Tree	multipoint
Default	false
Introduced	16.0.R1
Platforms	All

**packet-byte-offset** *number*

Synopsis	Packet size modification for queue accounting
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> packet-byte-offset <i>number</i>
Tree	packet-byte-offset
Range	-32 to 31
Default	0
Introduced	16.0.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure qos queue-group-templates ingress queue-group** *string queue number*  
**percent-rate**

Tree **percent-rate**

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms All

### **cir decimal-number**

Synopsis Administrative CIR

Context **configure qos queue-group-templates ingress queue-group** *string queue number*  
**percent-rate cir decimal-number**

Tree **cir**

Range 0.00 to 100.00

Default 0.00

Notes The following elements are part of a choice: (**cir** and **fir**) or **police**.

Introduced 20.10.R1

Platforms All

### **fir decimal-number**

Synopsis Administrative FIR

Context **configure qos queue-group-templates ingress queue-group** *string queue number*  
**percent-rate fir decimal-number**

Tree **fir**

Range 0.00 to 100.00

Default 0.00

Notes The following elements are part of a choice: (**cir** and **fir**) or **police**.

Introduced 20.10.R1

Platforms All

**pir** *decimal-number*

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate pir <i>decimal-number</i>
Tree	pir
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

**police**

Synopsis	Drop out-of-profile traffic feeding into physical queue
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate police
Tree	police
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	20.10.R1
Platforms	All

**reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	20.10.R1
Platforms	All

**queue-mode** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Queue operational mode for explicitly profiled packets
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number queue-mode <i>keyword</i>
Tree	queue-mode
Options	priority, profile
Default	priority
Introduced	16.0.R1
Platforms	All

### queue-type *keyword*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority that this queue receives from the hardware level schedulers
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number queue-type <i>keyword</i>
Tree	queue-type
Options	expedited, best-effort
Default	best-effort
Introduced	16.0.R1
Platforms	All

### rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### cir (*number* | *keyword*)

Synopsis	Administrative CIR
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Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number rate <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

### **fir** (*number* | *keyword*)

Synopsis	Administrative FIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number rate <b>fir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>fir</b>
Range	0 to 2000000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue number rate <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 2000000000
Units	kilobps
Options	max
Default	max

Introduced	16.0.R1
Platforms	All

## police

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> rate <b>police</b>
Tree	<b>police</b>
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

## scheduler-parent

Synopsis	Enter the <b>scheduler-parent</b> context
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> <b>scheduler-parent</b>
Tree	<b>scheduler-parent</b>
Introduced	16.0.R1
Platforms	All

## cir-level *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> <b>scheduler-parent</b> cir-level <i>number</i>
Tree	<b>cir-level</b>
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
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Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent cir-weight <i>number</i>
Tree	cir-weight
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**level** *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent level <i>number</i>
Tree	level
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**scheduler-name** *string*

Synopsis	Scheduler name
Context	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i> queue <i>number</i> scheduler-parent scheduler-name <i>string</i>
Tree	scheduler-name
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight used by the scheduler for feeding the queue
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Context	<b>configure qos queue-group-templates ingress queue-group</b> <i>string queue number scheduler-parent weight number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

### **sap-egress** [[sap-egress-policy-name](#)] *string*

Synopsis	Enter the <b>sap-egress</b> list instance
Context	<b>configure qos sap-egress</b> <i>string</i>
Tree	<a href="#">sap-egress</a>
Introduced	16.0.R1
Platforms	All

### **[sap-egress-policy-name]** *string*

Synopsis	Policy name
Context	<b>configure qos sap-egress</b> <i>string</i>
Tree	<a href="#">sap-egress</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure qos sap-egress</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dot1p** [dot1p-value] *number*

Synopsis	Enter the <b>dot1p</b> list instance
Context	<b>configure qos sap-egress</b> <i>string dot1p number</i>
Tree	<b>dot1p</b>
Introduced	16.0.R1
Platforms	All

**[dot1p-value]** *number*

Synopsis	Dot1p value to match in the packet
Context	<b>configure qos sap-egress</b> <i>string dot1p number</i>
Tree	<b>dot1p</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos sap-egress</b> <i>string dot1p number fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile for the ingressing traffic
Context	<b>configure qos sap-egress</b> <i>string dot1p number profile keyword</i>
Tree	<b>profile</b>
Options	in, out, de, exceed, inplus
Introduced	16.0.R1
Platforms	All

**dscp** [*dscp-name*] *keyword*

Synopsis	Enter the <b>dscp</b> list instance
Context	<b>configure qos sap-egress</b> <i>string dscp keyword</i>
Tree	<a href="#">dscp</a>
Introduced	16.0.R1
Platforms	All

**[dscp-name]** *keyword*

Synopsis	DSCP name to perform reclassification actions
Context	<b>configure qos sap-egress</b> <i>string dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos sap-egress</b> <i>string dscp keyword fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile for the ingressing traffic
Context	<b>configure qos sap-egress</b> <i>string dscp keyword profile keyword</i>
Tree	<a href="#">profile</a>

Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

### **ethernet-ctag** *boolean*

Synopsis	Tag value for dot1p and DE (Drop-Eligible) that are used by all dot1-p entries
Context	<b>configure</b> qos sap-egress string ethernet-ctag boolean
Tree	ethernet-ctag
Default	false
Introduced	16.0.R1
Platforms	All

### **fc** [**fc-name**] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> qos sap-egress string fc keyword
Tree	fc
Introduced	16.0.R1
Platforms	All

### **[fc-name]** *keyword*

Synopsis	Forwarding class
Context	<b>configure</b> qos sap-egress string fc keyword
Tree	fc
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **de-mark**

Synopsis	Enable the <b>de-mark</b> context
Context	<b>configure</b> qos sap-egress string fc keyword de-mark

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Tree	<a href="#">de-mark</a>
Introduced	16.0.R1
Platforms	All

### **force number**

Synopsis	DE value
Context	<b>configure qos sap-egress</b> <i>string fc keyword de-mark force number</i>
Tree	<a href="#">force</a>
Range	0 to 1
Introduced	16.0.R1
Platforms	All

### **de-mark-inner**

Synopsis	Enable the <b>de-mark-inner</b> context
Context	<b>configure qos sap-egress</b> <i>string fc keyword de-mark-inner</i>
Tree	<a href="#">de-mark-inner</a>
Introduced	16.0.R1
Platforms	All

### **force number**

Synopsis	DE value to set in inner VLAN tag
Context	<b>configure qos sap-egress</b> <i>string fc keyword de-mark-inner force number</i>
Tree	<a href="#">force</a>
Range	0 to 1
Introduced	16.0.R1
Platforms	All

### **de-mark-outer**

Synopsis	Enable the <b>de-mark-outer</b> context
Context	<b>configure qos sap-egress</b> <i>string fc keyword de-mark-outer</i>
Tree	<a href="#">de-mark-outer</a>

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Introduced	16.0.R1
Platforms	All

### **force number**

Synopsis	DE value to set in outer VLAN tag
Context	<b>configure qos sap-egress</b> <i>string fc keyword de-mark-outer force number</i>
Tree	<a href="#">force</a>
Range	0 to 1
Introduced	16.0.R1
Platforms	All

### **dot1p**

Synopsis	Enter the <b>dot1p</b> context
Context	<b>configure qos sap-egress</b> <i>string fc keyword dot1p</i>
Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

### **exceed-profile number**

Synopsis	Dot1p value for exceed-profile frames
Context	<b>configure qos sap-egress</b> <i>string fc keyword dot1p exceed-profile number</i>
Tree	<a href="#">exceed-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **in-profile number**

Synopsis	Dot1p value for in-profile frames
Context	<b>configure qos sap-egress</b> <i>string fc keyword dot1p in-profile number</i>
Tree	<a href="#">in-profile</a>
Range	0 to 7

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Introduced	16.0.R1
Platforms	All

### **out-profile** *number*

Synopsis	Dot1p value for out-of-profile frames
Context	<b>configure</b> qos sap-egress <i>string</i> fc <i>keyword</i> dot1p out-profile <i>number</i>
Tree	<a href="#">out-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **dot1p-inner**

Synopsis	Enter the <b>dot1p-inner</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> fc <i>keyword</i> dot1p-inner
Tree	<a href="#">dot1p-inner</a>
Introduced	16.0.R1
Platforms	All

### **exceed-profile** *number*

Synopsis	Inner Dot1p value for exceed-profile frames
Context	<b>configure</b> qos sap-egress <i>string</i> fc <i>keyword</i> dot1p-inner exceed-profile <i>number</i>
Tree	<a href="#">exceed-profile</a>
Range	0 to 7
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **in-profile** *number*

Synopsis	Inner Dot1p value for in-profile frames
Context	<b>configure</b> qos sap-egress <i>string</i> fc <i>keyword</i> dot1p-inner in-profile <i>number</i>
Tree	<a href="#">in-profile</a>
Range	0 to 7

Introduced 16.0.R1  
Platforms All

### **out-profile** *number*

Synopsis Inner Dot1p value for out-of-profile frames  
Context **configure qos sap-egress** *string fc keyword dot1p-inner out-profile number*  
Tree [out-profile](#)  
Range 0 to 7  
Introduced 16.0.R1  
Platforms All

### **dot1p-outer**

Synopsis Enter the **dot1p-outer** context  
Context **configure qos sap-egress** *string fc keyword dot1p-outer*  
Tree [dot1p-outer](#)  
Introduced 16.0.R1  
Platforms All

### **exceed-profile** *number*

Synopsis Outer Dot1p value for exceed-profile frames  
Context **configure qos sap-egress** *string fc keyword dot1p-outer exceed-profile number*  
Tree [exceed-profile](#)  
Range 0 to 7  
Introduced 16.0.R1  
Platforms All

### **in-profile** *number*

Synopsis Outer Dot1p value for in-profile frames  
Context **configure qos sap-egress** *string fc keyword dot1p-outer in-profile number*  
Tree [in-profile](#)  
Range 0 to 7



Introduced	16.0.R1
Platforms	All

### **out-profile** *number*

Synopsis	Outer Dot1p value for out-of-profile frames
Context	<b>configure qos sap-egress</b> <i>string fc keyword dot1p-outer out-profile number</i>
Tree	<a href="#">out-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **dscp**

Synopsis	Enter the <b>dscp</b> context
Context	<b>configure qos sap-egress</b> <i>string fc keyword dscp</i>
Tree	<a href="#">dscp</a>
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

### **exceed-profile** *keyword*

Synopsis	DSCP name for exceed-profile frames
Context	<b>configure qos sap-egress</b> <i>string fc keyword dscp exceed-profile keyword</i>
Tree	<a href="#">exceed-profile</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**in-profile keyword**

Synopsis	DSCP name for in-profile frames
Context	<b>configure qos sap-egress</b> <i>string</i> <b>fc keyword dscp in-profile keyword</b>
Tree	<b>in-profile</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**out-profile keyword**

Synopsis	DSCP name for out-of-profile frames
Context	<b>configure qos sap-egress</b> <i>string</i> <b>fc keyword dscp out-profile keyword</b>
Tree	<b>out-profile</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**policer reference**

Synopsis	Policer to forward the traffic
Context	<b>configure qos sap-egress</b> <i>string</i> <b>fc keyword policer reference</b>
Tree	<b>policer</b>
Reference	<b>configure qos sap-egress</b> <i>string</i> <b>policer number</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**port-redirect-group-queue**

Synopsis	Enable the <b>port-redirect-group-queue</b> context
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Context	<b>configure qos sap-egress</b> <i>string fc keyword port-redirect-group-queue</i>
Tree	<a href="#">port-redirect-group-queue</a>
Notes	The following elements are part of a choice: <b>port-redirect-group-queue</b> , <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

### **queue** *number*

Synopsis	Queue to forward the traffic
Context	<b>configure qos sap-egress</b> <i>string fc keyword port-redirect-group-queue queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

### **prec**

Synopsis	Enter the <b>prec</b> context
Context	<b>configure qos sap-egress</b> <i>string fc keyword prec</i>
Tree	<a href="#">prec</a>
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

### **exceed-profile** *number*

Synopsis	Precedence for exceed-profile frames
Context	<b>configure qos sap-egress</b> <i>string fc keyword prec exceed-profile number</i>
Tree	<a href="#">exceed-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **in-profile** *number*

Synopsis	Precedence value for in-profile frames
Context	<b>configure qos sap-egress</b> <i>string fc keyword prec in-profile number</i>
Tree	<a href="#">in-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **out-profile** *number*

Synopsis	Precedence value for out-of-profile frames
Context	<b>configure qos sap-egress</b> <i>string fc keyword prec out-profile number</i>
Tree	<a href="#">out-profile</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **queue** *reference*

Synopsis	Queue to forward the traffic
Context	<b>configure qos sap-egress</b> <i>string fc keyword queue reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure qos sap-egress</b> <i>string queue number</i>
Notes	The following elements are part of a choice: <b>port-redirect-group-queue</b> , <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

### **queue-group-queue**

Synopsis	Enable the <b>queue-group-queue</b> context
Context	<b>configure qos sap-egress</b> <i>string fc keyword queue-group-queue</i>
Tree	<a href="#">queue-group-queue</a>
Notes	The following elements are part of a choice: <b>port-redirect-group-queue</b> , <b>queue</b> , or <b>queue-group-queue</b> .

Introduced 16.0.R1  
 Platforms All

### **instance** *number*

Synopsis Instance ID  
 Context **configure** qos sap-egress *string fc keyword queue-group-queue instance number*  
 Tree [instance](#)  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms All

### **queue** *reference*

Synopsis SAP egress queue ID  
 Context **configure** qos sap-egress *string fc keyword queue-group-queue queue reference*  
 Tree [queue](#)  
 Reference **configure** qos queue-group-templates egress queue-group *string queue number*  
 Introduced 16.0.R1  
 Platforms All

### **queue-group-name** *reference*

Synopsis Queue group to forward traffic  
 Context **configure** qos sap-egress *string fc keyword queue-group-queue queue-group-name reference*  
 Tree [queue-group-name](#)  
 Reference **configure** qos queue-group-templates egress queue-group *string*  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **hs-attachment-policy** *reference*

Synopsis HS attachment policy applied

Context	<b>configure qos sap-egress</b> <i>string</i> <b>hs-attachment-policy</b> <i>reference</i>
Tree	<a href="#">hs-attachment-policy</a>
Reference	<b>configure qos hs-attachment-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wrr-group** [[group-id](#)] *number*

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure qos sap-egress</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i>
Tree	<a href="#">hs-wrr-group</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[group-id]** *number*

Synopsis	HS WRR group identifier
Context	<b>configure qos sap-egress</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i>
Tree	<a href="#">hs-wrr-group</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>adaptation-rule</b>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **pir** *keyword*

Synopsis	Constraint used when deriving the operational PIR value
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Context	<b>configure qos sap-egress</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>adaptation-rule</b> <b>pir</b> <i>keyword</i>
Tree	<b>pir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis	Weight of scheduling class
Context	<b>configure qos sap-egress</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>hs-class-weight</b> <i>number</i>
Tree	<b>hs-class-weight</b>
Range	1   2   4   8
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **percent-rate** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure qos sap-egress</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>percent-rate</b> <i>decimal-number</i>
Tree	<b>percent-rate</b>
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos sap-egress</b> <i>string</i> <b>hs-wrr-group</b> <i>number</i> <b>rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>rate</b>
Range	1 to 2000000000
Units	kilobps
Options	max

Default	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

## hw-agg-shaper-queues

Synopsis	Enter the <b>hw-agg-shaper-queues</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">hw-agg-shaper-queues</a>
Tree	<a href="#">hw-agg-shaper-queues</a>
Description	Commands in this context configure the queue resources from which to draw for a given object (for example, a subscriber host or SAP).
Introduced	23.10.R1
Platforms	7750 SR-1, 7750 SR-s

## queue-set-size (*number* | *keyword*)

Synopsis	Queue resource allocation for the SAP egress policy
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">hw-agg-shaper-queues</a> <a href="#">queue-set-size</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">queue-set-size</a>
Description	This command configures the queue-set size or non-shaper-queue to use for this SAP egress policy.
Range	2 to 8
Options	non-shaper-queues
Introduced	23.10.R1
Platforms	7750 SR-1, 7750 SR-s

## ip-criteria

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a>
Tree	<a href="#">ip-criteria</a>
Introduced	16.0.R1
Platforms	All



**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[entry-id]** *number*

Synopsis	IP Criteria Entry Index
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

### **policer** *reference*

Synopsis	Policer identifier for the matched traffic
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number action policer reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure qos sap-egress</b> <i>string policer number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **port-redirect-group-queue** *boolean*

Synopsis	Use queue specified in egress access port queue group
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number action port-redirect-group-queue boolean</i>
Tree	<a href="#">port-redirect-group-queue</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **profile** *keyword*

Synopsis	Default profile for the matching traffic
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number action profile keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

### **queue** *number*

Synopsis	Queue used for matched traffic policed by local policer
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number action queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Introduced	16.0.R1

Platforms All

### **type** *keyword*

Synopsis Action for criteria entry  
 Context **configure** qos sap-egress *string ip-criteria entry number action type keyword*  
 Tree [type](#)  
 Options ignore-match, accept  
 Default ignore-match  
 Introduced 16.0.R1  
 Platforms All

### **use-fc-mapped-queue** *boolean*

Synopsis Redirect policer output to the configured queues  
 Context **configure** qos sap-egress *string ip-criteria entry number action use-fc-mapped-queue boolean*  
 Tree [use-fc-mapped-queue](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** qos sap-egress *string ip-criteria entry number description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **match**

Synopsis Enter the **match** context  
 Context **configure** qos sap-egress *string ip-criteria entry number match*  
 Tree [match](#)

Introduced	16.0.R1
Platforms	All

### **dscp** *keyword*

Synopsis	DSCP value to match in the packet
Context	<b>configure</b> qos sap-egress string ip-criteria entry number match dscp keyword
Tree	dscp
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

### **dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure</b> qos sap-egress string ip-criteria entry number match dst-ip
Tree	dst-ip
Introduced	16.0.R1
Platforms	All

### **address** (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	<b>configure</b> qos sap-egress string ip-criteria entry number match dst-ip address ( <i>ipv4-prefix-with-host-bits   ipv4-address</i> )
Tree	address
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **ip-prefix-list** *reference*

Synopsis	List of IPv4 prefixes for the match criteria
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Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match dst-ip ip-prefix-list reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure qos match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **mask** *string*

Synopsis	IP address mask to match with source IP of the packet
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match dst-ip mask string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match dst-port</i>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

### **eq** *number*

Synopsis	Value 'equal to' as match condition
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match dst-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt** *number*

Synopsis	Value 'greater than' as match condition
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-port <b>gt</b> <i>number</i>
Tree	<b>gt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt** *number*

Synopsis	Value 'less than' as match condition
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-port <b>lt</b> <i>number</i>
Tree	<b>lt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-port <b>range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of the port range
Context	<b>configure</b> qos sap-egress <i>string</i> ip-criteria entry <i>number</i> match dst-port range end <i>number</i>
Tree	<b>end</b>

Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the port range
Context	<b>configure</b> qos sap-egress string ip-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**fragment keyword**

Synopsis	Fragmented packets as the match criterion
Context	<b>configure</b> qos sap-egress string ip-criteria entry number match fragment keyword
Tree	fragment
Options	false, true
Introduced	16.0.R1
Platforms	All

**protocol (number | keyword)**

Synopsis	IP protocol to match
Context	<b>configure</b> qos sap-egress string ip-criteria entry number match protocol (number   keyword)
Tree	protocol
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match src-ip</i>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-prefix-with-host-bits | ipv4-address*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match src-ip address (ipv4-prefix-with-host-bits   ipv4-address)</i>
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ip-prefix-list** *reference*

Synopsis	List of IPv4 prefixes for the match criteria
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match src-ip ip-prefix-list reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure qos match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**mask** *string*

Synopsis	IP address mask to match with source IP of the packet
Context	<b>configure qos sap-egress</b> <i>string ip-criteria entry number match src-ip mask string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1



Platforms All

### src-port

Synopsis Enter the **src-port** context  
 Context **configure qos sap-egress string ip-criteria entry number match src-port**  
 Tree [src-port](#)  
 Introduced 16.0.R1  
 Platforms All

### eq number

Synopsis Value 'equal to' as match condition  
 Context **configure qos sap-egress string ip-criteria entry number match src-port eq number**  
 Tree [eq](#)  
 Range 0 to 65535  
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### gt number

Synopsis Value 'greater than' as match condition  
 Context **configure qos sap-egress string ip-criteria entry number match src-port gt number**  
 Tree [gt](#)  
 Range 0 to 65535  
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### lt number

Synopsis Value 'less than' as match condition  
 Context **configure qos sap-egress string ip-criteria entry number match src-port lt number**  
 Tree [lt](#)

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Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## **end number**

Synopsis	Upper bound of the port range
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## **start number**

Synopsis	Lower bound of the port range
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ip-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## ipv6-criteria

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure qos sap-egress string ipv6-criteria</b>
Tree	<a href="#">ipv6-criteria</a>
Introduced	16.0.R1
Platforms	All

## entry [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos sap-egress string ipv6-criteria entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

## [[entry-id](#)] *number*

Synopsis	IP Criteria Entry Index
Context	<b>configure qos sap-egress string ipv6-criteria entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## action

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos sap-egress string ipv6-criteria entry number action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure qos sap-egress</b> <i>string ipv6-criteria entry number action fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**policer reference**

Synopsis	Policer identifier for the matched traffic
Context	<b>configure qos sap-egress</b> <i>string ipv6-criteria entry number action policer reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure qos sap-egress</b> <i>string policer number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**port-redirect-group-queue boolean**

Synopsis	Use queue specified in egress access port queue group
Context	<b>configure qos sap-egress</b> <i>string ipv6-criteria entry number action port-redirect-group-queue boolean</i>
Tree	<a href="#">port-redirect-group-queue</a>
Default	false
Introduced	16.0.R1
Platforms	All

**profile keyword**

Synopsis	Default profile for the matching traffic
Context	<b>configure qos sap-egress</b> <i>string ipv6-criteria entry number action profile keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**queue number**

Synopsis	Queue used for matched traffic policed by local policer
Context	<b>configure qos sap-egress string ipv6-criteria entry number action queue number</b>
Tree	<a href="#">queue</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Action for criteria entry
Context	<b>configure qos sap-egress string ipv6-criteria entry number action type keyword</b>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

**use-fc-mapped-queue boolean**

Synopsis	Redirect policer output to the configured queues
Context	<b>configure qos sap-egress string ipv6-criteria entry number action use-fc-mapped-queue boolean</b>
Tree	<a href="#">use-fc-mapped-queue</a>
Default	false
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure qos sap-egress string ipv6-criteria entry number description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure qos sap-egress</b> <i>string ipv6-criteria entry number match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

## dscp keyword

Synopsis	DSCP value to match in the packet
Context	<b>configure qos sap-egress</b> <i>string ipv6-criteria entry number match dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

## dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos sap-egress</b> <i>string ipv6-criteria entry number match dst-ip</i>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	All

## address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Destination IPv6 address for SAP QoS policy match
Context	<b>configure qos sap-egress</b> <i>string ipv6-criteria entry number match dst-ip address (ipv6-prefix-with-host-bits   ipv6-address)</i>

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Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	<b>configure</b> <a href="#">qos sap-egress</a> <a href="#">string</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">ipv6-prefix-list</a> <a href="#">reference</a>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <a href="#">string</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *string*

Synopsis	IP address mask to match with destination IP of packet
Context	<b>configure</b> <a href="#">qos sap-egress</a> <a href="#">string</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">mask</a> <a href="#">string</a>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <a href="#">string</a> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">dst-port</a>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Value 'equal to' as match condition
Context	<b>configure qos sap-egress string ipv6-criteria entry number match dst-port eq number</b>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, or range.</b>
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' as match condition
Context	<b>configure qos sap-egress string ipv6-criteria entry number match dst-port gt number</b>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, or range.</b>
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Value 'less than' as match condition
Context	<b>configure qos sap-egress string ipv6-criteria entry number match dst-port lt number</b>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq, gt, lt, or range.</b>
Introduced	16.0.R1
Platforms	All

### **range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos sap-egress string ipv6-criteria entry number match dst-port range</b>
Tree	<a href="#">range</a>



Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the port range
Context	<b>configure</b> qos sap-egress string ipv6-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the port range
Context	<b>configure</b> qos sap-egress string ipv6-criteria entry number match dst-port range start number
Tree	start
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> qos sap-egress string ipv6-criteria entry number match next-header ( <i>number</i>   <i>keyword</i> )
Tree	next-header
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-ip</a>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

**address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	Source IPv6 address for SAP QoS policy match
Context	<b>configure qos sap-egress</b> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">address</a> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	<b>configure qos sap-egress</b> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ipv6-prefix-list</a> <i>reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure qos match-list</b> <a href="#">ipv6-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mask** *string*

Synopsis	IP address mask to match with source IP of the packet
Context	<b>configure qos sap-egress</b> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .

Introduced	16.0.R1
Platforms	All

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

### **eq number**

Synopsis	Value 'equal to' as match condition
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-port</a> <a href="#">eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **gt number**

Synopsis	Value 'greater than' as match condition
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-port</a> <a href="#">gt number</a>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

### **lt number**

Synopsis	Value 'less than' as match condition
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-port</a> <a href="#">lt number</a>

Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the port range
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the port range
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">ipv6-criteria</a> <i>entry</i> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**parent-location** *keyword*

Synopsis	Location where queues look to find parent scheduler
Context	<b>configure</b> qos sap-egress <i>string</i> parent-location <i>keyword</i>
Tree	parent-location
Options	auto, sla
Default	auto
Introduced	16.0.R1
Platforms	All

**policer** [*policer-id*] *number*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i>
Tree	policer
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id]** *number*

Synopsis	SAP egress policer ID
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i>
Tree	policer
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> adaptation-rule
Tree	adaptation-rule
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>adaptation-rule cir</b> <i>keyword</i>
Tree	<b>cir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>adaptation-rule pir</b> <i>keyword</i>
Tree	<b>pir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**adv-config-policy reference**

Synopsis	Advanced QoS policy name
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>adv-config-policy</b> <i>reference</i>
Tree	<b>adv-config-policy</b>
Reference	<b>configure qos adv-config-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**arbiter-parent**

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>arbiter-parent</b>
Tree	<b>arbiter-parent</b>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **arbiter-name** *string*

Synopsis Arbiter name

Context **configure** qos sap-egress *string* policer *number* arbiter-parent arbiter-name *string*

Tree [arbiter-name](#)

Description This command specifies an arbiter name. The policer is intended to become a child to one of the tiered arbiters with the specified arbiter name where an instance of the policer is created. If the specified arbiter name does not exist, the policer is placed in the orphan state.

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **level** *number*

Synopsis Level of priority while feeding to the parent

Context **configure** qos sap-egress *string* policer *number* arbiter-parent level *number*

Tree [level](#)

Range 1 to 8

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **weight** *number*

Synopsis Weight used by the arbiter for feeding the policer

Context **configure** qos sap-egress *string* policer *number* arbiter-parent weight *number*

Tree [weight](#)

Range 1 to 100

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs** (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**dscp-prec-remarking** *boolean*

Synopsis	Remark DSCP/precedence based on packet profile state
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">dscp-prec-remarking</a> <i>boolean</i>
Tree	<a href="#">dscp-prec-remarking</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**exceed-pir** *boolean*

Synopsis	Forward packets exceeding the PIR as exceed-profile
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">exceed-pir</a> <i>boolean</i>
Tree	<a href="#">exceed-pir</a>
Default	false



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **high-prio-only** (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>high-prio-only</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">high-prio-only</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number* | *keyword*)

Synopsis	Maximum burst tolerance allowed by the policer
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure qos sap-egress string policer number percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## cir decimal-number

Synopsis	Administrative CIR percent
Context	<b>configure qos sap-egress string policer number percent-rate cir decimal-number</b>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## pir decimal-number

Synopsis	Administrative PIR percent
Context	<b>configure qos sap-egress string policer number percent-rate pir decimal-number</b>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## reference-rate keyword

Synopsis	Reference rate
Context	<b>configure qos sap-egress string policer number percent-rate reference-rate keyword</b>
Tree	<a href="#">reference-rate</a>
Options	local-limit, reference-port-limit
Default	local-limit

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## port-parent

Synopsis	Enable the <b>port-parent</b> context
Context	<b>configure qos sap-egress string policer number port-parent</b>
Tree	<a href="#">port-parent</a>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## cir-level number

Synopsis	Port priority level for within-CIR offered load
Context	<b>configure qos sap-egress string policer number port-parent cir-level number</b>
Tree	<a href="#">cir-level</a>
Description	This command defines the port priority that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the port schedulers with-CIR pass and the <b>cir-weight</b> command is ignored.
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## cir-weight number

Synopsis	Weight to use in the within-CIR port priority level
Context	<b>configure qos sap-egress string policer number port-parent cir-weight number</b>
Tree	<a href="#">cir-weight</a>
Description	This command defines the weight that the policer uses at the within-CIR port priority level.  All CIR weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight

is considered active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.

When this command is set to the default value, the policer receives bandwidth only after other children with a non-zero weight at this level have been serviced.

Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **level number**

Synopsis	Port priority level for above-CIR behavior
Context	<b>configure qos sap-egress</b> <i>string policer number port-parent level number</i>
Tree	<b>level</b>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **weight number**

Synopsis	Weight to use in the above-CIR port priority level
Context	<b>configure qos sap-egress</b> <i>string policer number port-parent weight number</i>
Tree	<b>weight</b>
Description	<p>This command defines the weight that the policer uses at the above-CIR port priority level.</p> <p>All weight values from all weighted active policers, queues, and schedulers with a common port parent are added together. Each individual active weight is then divided by the total to determine the percentage of remaining bandwidth provided to the policer, queue, or scheduler after the higher priority level children have been serviced. A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after other children with a non-zero weight at this level.</p>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile-capped** *boolean*

Synopsis	Enforce overall in-profile burst limit to CIR bucket
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> profile-capped <i>boolean</i>
Tree	profile-capped
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**profile-out-preserve** *boolean*

Synopsis	Preserve the color of offered out-of-profile traffic
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> profile-out-preserve <i>boolean</i>
Tree	profile-out-preserve
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> rate
Tree	rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	cir
Range	0 to 6400000000
Units	kilobps
Options	max

Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **scheduler-parent**

Synopsis	Enable the <b>scheduler-parent</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>scheduler-parent</b>
Tree	<b>scheduler-parent</b>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir-level** *number*

Synopsis	Port priority level for within-CIR offered load
Context	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i> <b>scheduler-parent</b> <b>cir-level</b> <i>number</i>
Tree	<b>cir-level</b>
Description	This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the schedulers within-CIR pass and the <b>cir-weight</b> command is ignored.
Range	0 to 8

Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir-weight** *number*

Synopsis	Weight to use in the within-CIR port priority level
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">scheduler-parent</a> <a href="#">cir-weight</a> <i>number</i>
Tree	<a href="#">cir-weight</a>
Description	<p>The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.</p> <p>A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.</p> <p>When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.</p>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **level** *number*

Synopsis	Priority level for bandwidth on the parent scheduler
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">scheduler-parent</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Description	<p>This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler.</p> <p>Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.</p>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**scheduler-name** *string*

Synopsis	Scheduler name
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> scheduler-parent scheduler-name <i>string</i>
Tree	<a href="#">scheduler-name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**weight** *number*

Synopsis	Policer weight at the above-CIR priority level
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> scheduler-parent weight <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> qos sap-egress <i>string</i> policer <i>number</i> stat-mode <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policers-hqos-manageable** *boolean*

Synopsis	Manage policers through the Hierarchical QoS process
Context	<b>configure</b> qos sap-egress <i>string</i> policers-hqos-manageable <i>boolean</i>



Tree	<a href="#">policers-hqos-manageable</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, VSR

### **policy-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Egress SAP QoS policy ID
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">policy-id</a> <i>number</i>
Tree	<a href="#">policy-id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **post-policer-mapping** *reference*

Synopsis	Post policer mapping policy applied to this policy
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">post-policer-mapping</a> <i>reference</i>
Tree	<a href="#">post-policer-mapping</a>
Reference	<b>configure</b> <a href="#">qos post-policer-mapping</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **prec** [[prec-value](#)] *number*

Synopsis	Enter the <b>prec</b> list instance
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">prec</a> <i>number</i>
Tree	<a href="#">prec</a>
Introduced	16.0.R1
Platforms	All

**[prec-value]** *number*

Synopsis	Precedence value for which mapping is performed
Context	<b>configure qos sap-egress</b> <i>string prec number</i>
Tree	<a href="#">prec</a>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *keyword*

Synopsis	Forwarding class
Context	<b>configure qos sap-egress</b> <i>string prec number fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**profile** *keyword*

Synopsis	Default profile for the ingressing traffic
Context	<b>configure qos sap-egress</b> <i>string prec number profile keyword</i>
Tree	<a href="#">profile</a>
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

**queue** [[queue-id](#)] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure qos sap-egress</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id] number**

Synopsis	Egress Queue-Group queue identifier
Context	<b>configure qos sap-egress</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos sap-egress</b> <i>string queue number adaptation-rule</i>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos sap-egress</b> <i>string queue number adaptation-rule cir keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos sap-egress</b> <i>string queue number adaptation-rule pir keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Default	closest

Introduced 16.0.R1  
 Platforms All

### **adv-config-policy** *reference*

Synopsis Name of the advanced configuration policy  
 Context **configure qos sap-egress** *string queue number adv-config-policy reference*  
 Tree [adv-config-policy](#)  
 Reference **configure qos adv-config-policy** *string*  
 Introduced 16.0.R1  
 Platforms All

### **agg-shaper-weight** *number*

Synopsis Aggregate shaper weight of the sap-egress queue  
 Context **configure qos sap-egress** *string queue number agg-shaper-weight number*  
 Tree [agg-shaper-weight](#)  
 Range 1 to 100  
 Default 1  
 Introduced 21.7.R1  
 Platforms 7750 SR-1, 7750 SR-s

### **avg-frame-overhead** *decimal-number*

Synopsis Average packet-to-frame encapsulation overhead  
 Context **configure qos sap-egress** *string queue number avg-frame-overhead decimal-number*  
 Tree [avg-frame-overhead](#)  
 Range 0.00 to 100.00  
 Default 0.00  
 Introduced 16.0.R1  
 Platforms All

### **burst-limit** (*number | keyword*)

Synopsis Explicit shaping burst size of a queue

Context	<b>configure qos sap-egress</b> <i>string queue number burst-limit</i> ( <i>number   keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **cbs** (*number | keyword*)

Synopsis	Reserved buffer space for the queue
Context	<b>configure qos sap-egress</b> <i>string queue number cbs</i> ( <i>number   keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure qos sap-egress</b> <i>string queue number drop-tail</i>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

### **exceed**

Synopsis	Enter the <b>exceed</b> context
Context	<b>configure qos sap-egress</b> <i>string queue number drop-tail exceed</i>
Tree	<a href="#">exceed</a>
Introduced	16.0.R1

Platforms All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis Percentage reduction from the MBS for a queue drop tail

Context **configure** [qos sap-egress](#) *string* [queue](#) *number* [drop-tail](#) [exceed percent-reduction-from-mbs](#) (*number* | *keyword*)

Tree [percent-reduction-from-mbs](#)

Range 0 to 100

Options auto

Default auto

Introduced 16.0.R1

Platforms All

### **high**

Synopsis Enter the **high** context

Context **configure** [qos sap-egress](#) *string* [queue](#) *number* [drop-tail](#) [high](#)

Tree [high](#)

Introduced 16.0.R1

Platforms All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis Percentage reduction from the MBS for a queue drop tail

Context **configure** [qos sap-egress](#) *string* [queue](#) *number* [drop-tail](#) [high](#) [percent-reduction-from-mbs](#) (*number* | *keyword*)

Tree [percent-reduction-from-mbs](#)

Range 0 to 100

Options auto

Default auto

Introduced 16.0.R1

Platforms All

## highplus

Synopsis	Enter the <b>highplus</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> drop-tail highplus
Tree	highplus
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> drop-tail highplus percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> drop-tail low
Tree	low
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> drop-tail low percent-reduction-from-mbs ( <i>number</i>   <i>keyword</i> )
Tree	percent-reduction-from-mbs
Range	0 to 100
Options	auto

Default	auto
Introduced	16.0.R1
Platforms	All

### **fir-burst-limit** (*number* | *keyword*)

Synopsis	Burst limit for FIR
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> fir-burst-limit ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">fir-burst-limit</a>
Description	This command configures a burst limit for the FIR of the specified queue. If the keyword <b>auto</b> is used, the FIR burst limit is based on the PIR. In this case, it is recommended to use the explicit PIR value in the queue configuration.
Range	1 to 102400
Units	bytes
Options	auto
Default	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **hs-alt-port-class-pool** *boolean*

Synopsis	Use HS alternate class port pool buffer for traffic
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> hs-alt-port-class-pool <i>boolean</i>
Tree	<a href="#">hs-alt-port-class-pool</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis	Scheduling class weight
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> hs-class-weight <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Default	1



Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### hs-wred-queue

Synopsis Enter the **hs-wred-queue** context  
 Context **configure qos sap-egress** *string queue number hs-wred-queue*  
 Tree [hs-wred-queue](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### policy reference

Synopsis Slope policy name  
 Context **configure qos sap-egress** *string queue number hs-wred-queue policy reference*  
 Tree [policy](#)  
 Reference **configure qos slope-policy** *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### hs-wrr-weight *number*

Synopsis WRR weight with which queue parents into the scheduler  
 Context **configure qos sap-egress** *string queue number hs-wrr-weight number*  
 Tree [hs-wrr-weight](#)  
 Range 1 to 127  
 Default 1  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### maximum-data-transmission (*number* | *keyword*)

Synopsis Maximum data transmitted at each scheduling opportunity  
 Context **configure qos sap-egress** *string queue number maximum-data-transmission (number | keyword)*

Tree	<a href="#">maximum-data-transmission</a>
Description	This command sets the maximum amount of data transmitted at a single scheduling opportunity. If the frame to be scheduled is longer than the configured amount of data, the entire frame is still transmitted.  This command is applicable only to FP4 and FP5 chipsets.
Range	512 to 32768
Units	bytes
Options	auto
Default	auto
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **mbs** (*number* | *keyword*)

Synopsis	Buffer space allowed for the queue
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **packet-byte-offset** *number*

Synopsis	Packet byte offset for addition of policing information
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 32
Default	0
Introduced	16.0.R1
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> percent-rate
Tree	percent-rate
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir decimal-number**

Synopsis	Administrative CIR percent
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> percent-rate cir decimal-number
Tree	cir
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1
Platforms	All

**pir decimal-number**

Synopsis	Administrative PIR percent
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> percent-rate pir decimal-number
Tree	pir
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

**reference-rate keyword**

Synopsis	Reference rate
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> percent-rate reference-rate keyword
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	16.0.R1

Platforms All

### **port-parent**

Synopsis Enable the **port-parent** context

Context **configure qos sap-egress** *string queue number* **port-parent**

Tree [port-parent](#)

Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.

Introduced 16.0.R1

Platforms All

### **cir-level number**

Synopsis Port priority to receive bandwidth for within-CIR pass

Context **configure qos sap-egress** *string queue number* **port-parent** *cir-level number*

Tree [cir-level](#)

Range 0 to 8

Default 0

Introduced 16.0.R1

Platforms All

### **cir-weight number**

Synopsis Weight used at the within-CIR port priority level

Context **configure qos sap-egress** *string queue number* **port-parent** *cir-weight number*

Tree [cir-weight](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **level number**

Synopsis Port priority for bandwidth for above-CIR offered load

Context **configure qos sap-egress** *string queue number* **port-parent** *level number*

Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used at above-CIR port priority level
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">port-parent</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

### **queue-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Method used to service queue from hardware perspective
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">queue-type</a> <i>keyword</i>
Tree	<a href="#">queue-type</a>
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .

Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos sap-egress</b> <i>string queue number rate cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos sap-egress</b> <i>string queue number rate pir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**sched-class** (*number* | *keyword*)

Synopsis	Scheduler class for the sap-egress queue
Context	<b>configure qos sap-egress</b> <i>string queue number sched-class</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">sched-class</a>
Description	This command configures a scheduling class for the specified queue. If the keyword <b>auto</b> is used, the scheduling class mapping is done automatically.
Range	1 to 6

Options	auto
Default	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

## **scheduler-parent**

Synopsis	Enable the <b>scheduler-parent</b> context
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> scheduler-parent
Tree	<a href="#">scheduler-parent</a>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	All

## **cir-level** *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> scheduler-parent cir-level <i>number</i>
Tree	<a href="#">cir-level</a>
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

## **cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> qos sap-egress <i>string</i> queue <i>number</i> scheduler-parent cir-weight <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**level number**

Synopsis	Level of priority while feeding to the parent
Context	<b>configure qos sap-egress string queue number scheduler-parent level number</b>
Tree	<b>level</b>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**scheduler-name string**

Synopsis	Parent scheduler name
Context	<b>configure qos sap-egress string queue number scheduler-parent scheduler-name string</b>
Tree	<b>scheduler-name</b>
Description	This command associates a scheduler name to a queue. The scheduler name must have previously been defined within an existing scheduler policy and exist on each SAP the queue is created on. There are no checks performed to ensure that the scheduler name exists within an existing scheduler policy. Until the scheduler name exists on the egress SAP, the queue operates in an orphaned state.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Weight used by the scheduler for feeding the queue
Context	<b>configure qos sap-egress string queue number scheduler-parent weight number</b>
Tree	<b>weight</b>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All



## wred-queue

Synopsis	Enter the <b>wred-queue</b> context
Context	<b>configure qos sap-egress</b> <i>string queue number wred-queue</i>
Tree	<a href="#">wred-queue</a>
Introduced	16.0.R1
Platforms	All

## mode keyword

Synopsis	Pool association to allow queue-specific WRED slopes
Context	<b>configure qos sap-egress</b> <i>string queue number wred-queue mode keyword</i>
Tree	<a href="#">mode</a>
Options	native, pool-per-queue
Introduced	16.0.R1
Platforms	All

## policy reference

Synopsis	Slope policy name
Context	<b>configure qos sap-egress</b> <i>string queue number wred-queue policy reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure qos slope-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## usage keyword

Synopsis	Congestion control type
Context	<b>configure qos sap-egress</b> <i>string queue number wred-queue usage keyword</i>
Tree	<a href="#">usage</a>
Options	auto, exceed-low
Introduced	16.0.R1
Platforms	All

**sched-class-elevation**

Synopsis	Enter the <b>sched-class-elevation</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <b>sched-class-elevation</b>
Tree	<b>sched-class-elevation</b>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**sched-class** [**class-id**] *number*

Synopsis	Enter the <b>sched-class</b> list instance
Context	<b>configure qos sap-egress</b> <i>string</i> <b>sched-class-elevation sched-class</b> <i>number</i>
Tree	<b>sched-class</b>
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**[class-id]** *number*

Synopsis	Scheduling class associated with this SAP egress
Context	<b>configure qos sap-egress</b> <i>string</i> <b>sched-class-elevation sched-class</b> <i>number</i>
Tree	<b>sched-class</b>
Range	1 to 6
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

**weight** *number*

Synopsis	Weight of the schedule class
Context	<b>configure qos sap-egress</b> <i>string</i> <b>sched-class-elevation sched-class</b> <i>number</i> <b>weight</b> <i>number</i>
Tree	<b>weight</b>
Range	1 to 8
Default	1
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **scope** *keyword*

Synopsis	Scope of the policy
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">scope</a> <i>keyword</i>
Tree	<a href="#">scope</a>
Options	exclusive, template
Default	template
Introduced	16.0.R1
Platforms	All

### **subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt</a>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dynamic-policer**

Synopsis	Enter the <b>dynamic-policer</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-policer</a>
Tree	<a href="#">dynamic-policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **arbiter-parent**

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-policer</a> <a href="#">arbiter-parent</a>
Tree	<a href="#">arbiter-parent</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**arbiter-name** *string*

Synopsis	Arbiter name
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent arbiter-name <i>string</i>
Tree	<a href="#">arbiter-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**level** *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent level <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**weight** *number*

Synopsis	Weight to be used by the arbiter for feeding this policer
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent weight <i>number</i>
Tree	<a href="#">weight</a>
Range	1 to 100
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cbs** (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-policer cbs ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mbs** (*number* | *keyword*)

Synopsis	High priority 'violate' threshold of PIR leaky bucket of this policer
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer packet-byte-offset</a> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer-id-range**

Synopsis	Enable the <b>policer-id-range</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer policer-id-range</a>

Tree	<a href="#">policer-id-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the dynamic policer ID range
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer policer-id-range end number</a>
Tree	<a href="#">end</a>
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the dynamic policer ID range
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer policer-id-range start number</a>
Tree	<a href="#">start</a>
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**stat-mode keyword**

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt dynamic-policer stat-mode keyword</a>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dynamic-queue

Synopsis	Enter the <b>dynamic-queue</b> context
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-queue</a>
Tree	<a href="#">dynamic-queue</a>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## cbs (*number* | *keyword*)

Synopsis	Committed buffer space reserved for the queue
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-queue</a> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Description	This command configures the committed buffer space (CBS) that is reserved for the queue. The CBS is applied to each dynamic queue and is not shared.
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mbs (*number* | *keyword*)

Synopsis	Maximum buffer space allowed for the queue
Context	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-queue</a> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Description	This command configures the maximum buffer space (MBS) allowed for the queue. The MBS is applied to each dynamic queue and is not shared.
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	23.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **packet-byte-offset** *number*

Synopsis Packet byte offset used to modify the input packet size

Context **configure** qos sap-egress *string* subscriber-mgmt dynamic-queue packet-byte-offset *number*

Tree [packet-byte-offset](#)

Description This command configures the packet-byte offset the system uses to modify the size of the input packets. This also applies to any charging statistics.

Range -64 to 31

Default 0

Introduced 23.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **port-parent**

Synopsis Enable the **port-parent** context

Context **configure** qos sap-egress *string* subscriber-mgmt dynamic-queue port-parent

Tree [port-parent](#)

Description Commands in this context configure the queue treatment by the port parent, that governs the available bandwidth for the queue. They define how this queue contends with the other children for the parent bandwidth.

See the *7750 SR and VSR BNG CUPS User Plane Function Guide*, "PCC rules based QoS" for more information about Dynamic QoS based on PCC rules for FWA sessions.

See the *7450 ESS, 7750 SR, 7950 XRS, and VSR Quality of Service Guide* for general information about configuring QoS.

Notes The following elements are part of a choice: **port-parent** or **scheduler-parent**.

Introduced 23.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cir-level** *number*

Synopsis Port priority for within-CIR passes

Context **configure** qos sap-egress *string* subscriber-mgmt dynamic-queue port-parent cir-level *number*

Tree [cir-level](#)



Range	0 to 8
Default	0
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cir-weight** *number*

Synopsis	Weight used for the within-CIR port-priority level
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-queue port-parent cir-weight <i>number</i>
Tree	<a href="#">cir-weight</a>
Description	This command configures the weight the queue uses to receive bandwidth at the within-CIR port priority level. This also applies to any charging statistics.
Range	0 to 100
Default	0
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **level** *number*

Synopsis	Port priority level for above-CIR offered load
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-queue port-parent level <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **weight** *number*

Synopsis	Weight used for the above-CIR port-priority level
Context	<b>configure</b> qos sap-egress <i>string</i> subscriber-mgmt dynamic-queue port-parent weight <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100

Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## queue-id-range

Synopsis	Enable the <b>queue-id-range</b> context
Context	<b>configure</b> qos sap-egress string subscriber-mgmt dynamic-queue queue-id-range
Tree	queue-id-range
Description	<p>Commands in this context configure the range of IDs from which dynamic queues are allocated. You cannot use these IDs for static queues within the same policy.</p> <p>See the <i>7750 SR and VSR BNG CUPS User Plane Function Guide</i>, "PCC rules based QoS" for more information about Dynamic QoS based on PCC rules for FWA sessions.</p> <p>See the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Quality of Service Guide</i> for general information about configuring QoS.</p>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of the dynamic queue range
Context	<b>configure</b> qos sap-egress string subscriber-mgmt dynamic-queue queue-id-range end number
Tree	end
Range	1 to 8
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of dynamic queue range
Context	<b>configure</b> qos sap-egress string subscriber-mgmt dynamic-queue queue-id-range start number
Tree	start
Range	1 to 8

Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **scheduler-parent**

Synopsis	Enable the <b>scheduler-parent</b> context
Context	<b>configure</b> qos sap-egress string subscriber-mgmt dynamic-queue scheduler-parent
Tree	<a href="#">scheduler-parent</a>
Description	<p>Commands in this context configure the queue treatment by the parent scheduler that governs the available bandwidth for the queue. They define how this queue contends with the other children for the parent bandwidth.</p> <p>See the <i>7750 SR and VSR BNG CUPS User Plane Function Guide</i>, "PCC rules based QoS" for more information about Dynamic QoS based on PCC rules for FWA sessions.</p> <p>See the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Quality of Service Guide</i> for general information about configuring QoS.</p>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **cir-level number**

Synopsis	Priority for feeding the parent for within-CIR passes
Context	<b>configure</b> qos sap-egress string subscriber-mgmt dynamic-queue scheduler-parent <a href="#">cir-level number</a>
Tree	<a href="#">cir-level</a>
Description	This command configures the priority level the system uses to feed to the parent for within-CIR passes.
Range	0 to 8
Default	0
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **cir-weight number**

Synopsis	Weight used for the within-CIR port-priority level
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Context	<b>configure qos sap-egress string subscriber-mgmt dynamic-queue scheduler-parent cir-weight number</b>
Tree	<b>cir-weight</b>
Range	0 to 100
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **level number**

Synopsis	Priority level for the above-CIR offered load
Context	<b>configure qos sap-egress string subscriber-mgmt dynamic-queue scheduler-parent level number</b>
Tree	<b>level</b>
Description	This command configures the priority level of the queue (as compared to other competing schedulers and queues) for the above-CIR offered load bandwidth, when feeding the parent scheduler.
Range	1 to 8
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scheduler-name string**

Synopsis	Name of the parent scheduler
Context	<b>configure qos sap-egress string subscriber-mgmt dynamic-queue scheduler-parent scheduler-name string</b>
Tree	<b>scheduler-name</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **weight number**

Synopsis	Weight used for the above-CIR port priority level
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Context	<b>configure qos sap-egress</b> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-queue</a> <a href="#">scheduler-parent</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pcc-rule-entry**

Synopsis	Enter the <b>pcc-rule-entry</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">pcc-rule-entry</a>
Tree	<a href="#">pcc-rule-entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure qos sap-egress</b> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">pcc-rule-entry</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the filter and QoS policy entries range
Context	<b>configure qos sap-egress</b> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">pcc-rule-entry</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the filter and QoS policy entries range
Context	<b>configure</b> qos sap-egress string subscriber-mgmt pcc-rule-entry range start number
Tree	start
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**use-policer-result-marking-dot1p-inner boolean**

Synopsis	Enable using egress policer for Dot1p inner marking
Context	<b>configure</b> qos sap-egress string use-policer-result-marking-dot1p-inner boolean
Tree	use-policer-result-marking-dot1p-inner
Description	When configured, this command enables using the egress policer profile result to mark dot1p-inner bits.
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**sap-ingress [sap-ingress-policy-name] string**

Synopsis	Enter the <b>sap-ingress</b> list instance
Context	<b>configure</b> qos sap-ingress string
Tree	sap-ingress
Introduced	16.0.R1
Platforms	All

**[sap-ingress-policy-name] string**

Synopsis	Policy name
Context	<b>configure</b> qos sap-ingress string
Tree	sap-ingress
String Length	1 to 64
Notes	This element is part of a list key.

Introduced 16.0.R1  
Platforms All

### **default-fc** *string*

Synopsis Default forwarding class for non-matching traffic  
Context **configure** qos sap-ingress *string default-fc string*  
Tree [default-fc](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms All

### **default-priority** *keyword*

Synopsis Priority for packets received on an ingress SAP  
Context **configure** qos sap-ingress *string default-priority keyword*  
Tree [default-priority](#)  
Options low, high  
Default low  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** qos sap-ingress *string description string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **dot1p** [[dot1p-value](#)] *number*

Synopsis Enter the **dot1p** list instance  
Context **configure** qos sap-ingress *string dot1p number*

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Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

**[dot1p-value]** *number*

Synopsis	Dot1p value to match in the packet
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">dot1p</a> <i>number</i>
Tree	<a href="#">dot1p</a>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *string*

Synopsis	Forwarding class for traffic matching specified dot1p
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">dot1p</a> <i>number</i> <b>fc</b> <i>string</i>
Tree	<a href="#">fc</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**priority** *keyword*

Synopsis	Priority for packets that match the Dot1p value
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">dot1p</a> <i>number</i> <b>priority</b> <i>keyword</i>
Tree	<a href="#">priority</a>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All



**dscp** [*dscp-name*] *keyword*

Synopsis	Enter the <b>dscp</b> list instance
Context	<b>configure qos sap-ingress</b> <i>string dscp keyword</i>
Tree	<i>dscp</i>
Introduced	16.0.R1
Platforms	All

**[dscp-name]** *keyword*

Synopsis	Name for the Differentiated Services Code Point (DSCP)
Context	<b>configure qos sap-ingress</b> <i>string dscp keyword</i>
Tree	<i>dscp</i>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *string*

Synopsis	Forwarding class for traffic matching specified DSCP
Context	<b>configure qos sap-ingress</b> <i>string dscp keyword fc string</i>
Tree	<i>fc</i>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**priority** *keyword*

Synopsis	Priority for the packet
Context	<b>configure qos sap-ingress</b> <i>string dscp keyword priority keyword</i>
Tree	<i>priority</i>
Options	low, high, auto

Default	auto
Introduced	16.0.R1
Platforms	All

**fc** [**fc-name**] *string*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure qos sap-ingress string fc string</b>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	All

**[fc-name]** *string*

Synopsis	Forwarding class (and optional subclass) name
Context	<b>configure qos sap-ingress string fc string</b>
Tree	<b>fc</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**broadcast-policer** *number*

Synopsis	Policer ID for multicast traffic in forwarding class
Context	<b>configure qos sap-ingress string fc string broadcast-policer number</b>
Tree	<b>broadcast-policer</b>
Range	1 to 63
Notes	The following elements are part of a choice: ( <b>broadcast-policer</b> and <b>fp-redirect-group-broadcast-policer</b> ), <b>broadcast-queue</b> , or <b>broadcast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**broadcast-queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure</b> qos sap-ingress string fc string broadcast-queue reference
Tree	<a href="#">broadcast-queue</a>
Reference	<b>configure</b> qos sap-ingress string queue number
Notes	The following elements are part of a choice: ( <b>broadcast-policer</b> and <b>fp-redirect-group-broadcast-policer</b> ), <b>broadcast-queue</b> , or <b>broadcast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**broadcast-queue-group-queue**

Synopsis	Enable the <b>broadcast-queue-group-queue</b> context
Context	<b>configure</b> qos sap-ingress string fc string broadcast-queue-group-queue
Tree	<a href="#">broadcast-queue-group-queue</a>
Notes	The following elements are part of a choice: ( <b>broadcast-policer</b> and <b>fp-redirect-group-broadcast-policer</b> ), <b>broadcast-queue</b> , or <b>broadcast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure</b> qos sap-ingress string fc string broadcast-queue-group-queue queue reference
Tree	<a href="#">queue</a>
Reference	<b>configure</b> qos queue-group-templates ingress queue-group string queue number
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**queue-group-name** *reference*

Synopsis	Queue group name to forward traffic
Context	<b>configure</b> qos sap-ingress string fc string broadcast-queue-group-queue queue-group-name reference

Tree	<a href="#">queue-group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **de-1-out-profile** *boolean*

Synopsis	Frames with DE value to be assigned as out of profile
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">fc</a> <i>string</i> <a href="#">de-1-out-profile</a> <i>boolean</i>
Tree	<a href="#">de-1-out-profile</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **egress-fc** *keyword*

Synopsis	Forwarding class for egress QoS processing
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">fc</a> <i>string</i> <a href="#">egress-fc</a> <i>keyword</i>
Tree	<a href="#">egress-fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

### **fp-redirect-group-broadcast-policer**

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">fc</a> <i>string</i> <a href="#">fp-redirect-group-broadcast-policer</a>
Tree	<a href="#">fp-redirect-group-broadcast-policer</a>
Notes	The following elements are part of a choice: ( <b>broadcast-policer</b> and <b>fp-redirect-group-broadcast-policer</b> ), <b>broadcast-queue</b> , or <b>broadcast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## fp-redirect-group-multicast-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	<b>configure qos sap-ingress string fc string fp-redirect-group-multicast-policer</b>
Tree	<a href="#">fp-redirect-group-multicast-policer</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-multicast-policer</b> and <b>multicast-policer</b> ), <b>multicast-queue</b> , or <b>multicast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## fp-redirect-group-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	<b>configure qos sap-ingress string fc string fp-redirect-group-policer</b>
Tree	<a href="#">fp-redirect-group-policer</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-policer</b> and <b>policer</b> ), <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## fp-redirect-group-unknown-policer

Synopsis	Use policer as defined in FP queue-group for the SAP
Context	<b>configure qos sap-ingress string fc string fp-redirect-group-unknown-policer</b>
Tree	<a href="#">fp-redirect-group-unknown-policer</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-unknown-policer</b> and <b>unknown-policer</b> ), <b>unknown-queue</b> , or <b>unknown-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## in-remark

Synopsis	Enter the <b>in-remark</b> context
Context	<b>configure qos sap-ingress string fc string in-remark</b>
Tree	<a href="#">in-remark</a>
Introduced	16.0.R1

Platforms All

### **dscp** *keyword*

Synopsis DSCP to override DSCP bits of the matching packet

Context **configure qos sap-ingress** *string fc string in-remark dscp keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Notes The following elements are part of a choice: **dscp** or **prec**.

Introduced 16.0.R1

Platforms All

### **prec** *number*

Synopsis Value to override precedence bits of matching packet

Context **configure qos sap-ingress** *string fc string in-remark prec number*

Tree [prec](#)

Range 0 to 7

Notes The following elements are part of a choice: **dscp** or **prec**.

Introduced 16.0.R1

Platforms All

### **multicast-policer** *number*

Synopsis Policer ID for multicast traffic in forwarding class

Context **configure qos sap-ingress** *string fc string multicast-policer number*

Tree [multicast-policer](#)

Range 1 to 63

Notes The following elements are part of a choice: (**fp-redirect-group-multicast-policer** and **multicast-policer**), **multicast-queue**, or **multicast-queue-group-queue**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**multicast-queue** *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string multicast-queue reference</i>
Tree	<a href="#">multicast-queue</a>
Reference	<b>configure qos sap-ingress</b> <i>string queue number</i>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-multicast-policer</b> and <b>multicast-policer</b> ), <b>multicast-queue</b> , or <b>multicast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**multicast-queue-group-queue**

Synopsis	Enable the <b>multicast-queue-group-queue</b> context
Context	<b>configure qos sap-ingress</b> <i>string fc string multicast-queue-group-queue</i>
Tree	<a href="#">multicast-queue-group-queue</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-multicast-policer</b> and <b>multicast-policer</b> ), <b>multicast-queue</b> , or <b>multicast-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

**queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string multicast-queue-group-queue queue reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string queue number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**queue-group-name** *reference*

Synopsis	Queue group name to forward traffic
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Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>multicast-queue-group-queue</b> <b>queue-group-name</b> <i>reference</i>
Tree	<a href="#">queue-group-name</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### out-remark

Synopsis	Enter the <b>out-remark</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>out-remark</b>
Tree	<a href="#">out-remark</a>
Introduced	16.0.R1
Platforms	All

### dscp keyword

Synopsis	DSCP to override DSCP bits of the matching packet
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>out-remark dscp</b> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

### prec number

Synopsis	Value to override precedence bits of matching packet
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>fc</b> <i>string</i> <b>out-remark prec</b> <i>number</i>
Tree	<a href="#">prec</a>
Range	0 to 7



Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

### **policer** *number*

Synopsis	Policer ID for unicast traffic in the forwarding class
Context	<b>configure</b> qos sap-ingress string fc string policer number
Tree	policer
Range	1 to 63
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-policer</b> and <b>policer</b> ), <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **profile** *keyword*

Synopsis	Packets profile associated with the forwarding class
Context	<b>configure</b> qos sap-ingress string fc string profile keyword
Tree	profile
Options	in, out, exceed, inplus
Introduced	16.0.R1
Platforms	All

### **queue** *reference*

Synopsis	Queue to assign for packets in this forwarding class
Context	<b>configure</b> qos sap-ingress string fc string queue reference
Tree	queue
Reference	<b>configure</b> qos sap-ingress string queue number
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-policer</b> and <b>policer</b> ), <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

## queue-group-queue

Synopsis	Enable the <b>queue-group-queue</b> context
Context	<b>configure</b> qos sap-ingress string fc string queue-group-queue
Tree	queue-group-queue
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-policer</b> and <b>policer</b> ), <b>queue</b> , or <b>queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

## queue reference

Synopsis	Queue to assign for packets in this forwarding class
Context	<b>configure</b> qos sap-ingress string fc string queue-group-queue queue reference
Tree	queue
Reference	<b>configure</b> qos queue-group-templates ingress queue-group string queue number
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## queue-group-name reference

Synopsis	Queue group to forward traffic
Context	<b>configure</b> qos sap-ingress string fc string queue-group-queue queue-group-name reference
Tree	queue-group-name
Reference	<b>configure</b> qos queue-group-templates ingress queue-group string
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## unknown-policer number

Synopsis	Policer ID for multicast traffic in forwarding class
Context	<b>configure</b> qos sap-ingress string fc string unknown-policer number
Tree	unknown-policer

Range	1 to 63
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-unknown-policer</b> and <b>unknown-policer</b> ), <b>unknown-queue</b> , or <b>unknown-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **unknown-queue** *reference*

Synopsis	Broadcast queue to assign for packets in this forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string unknown-queue reference</i>
Tree	<a href="#">unknown-queue</a>
Reference	<b>configure qos sap-ingress</b> <i>string queue number</i>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-unknown-policer</b> and <b>unknown-policer</b> ), <b>unknown-queue</b> , or <b>unknown-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

### **unknown-queue-group-queue**

Synopsis	Enable the <b>unknown-queue-group-queue</b> context
Context	<b>configure qos sap-ingress</b> <i>string fc string unknown-queue-group-queue</i>
Tree	<a href="#">unknown-queue-group-queue</a>
Notes	The following elements are part of a choice: ( <b>fp-redirect-group-unknown-policer</b> and <b>unknown-policer</b> ), <b>unknown-queue</b> , or <b>unknown-queue-group-queue</b> .
Introduced	16.0.R1
Platforms	All

### **queue** *reference*

Synopsis	Broadcast queue for packets in the forwarding class
Context	<b>configure qos sap-ingress</b> <i>string fc string unknown-queue-group-queue queue reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string queue number</i>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **queue-group-name** *reference*

Synopsis Queue group name to forward traffic

Context **configure qos sap-ingress** *string* **fc** *string* **unknown-queue-group-queue** **queue-group-name** *reference*

Tree [queue-group-name](#)

Reference **configure qos queue-group-templates ingress queue-group** *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **ip-criteria**

Synopsis Enter the **ip-criteria** context

Context **configure qos sap-ingress** *string* **ip-criteria**

Tree [ip-criteria](#)

Introduced 16.0.R1

Platforms All

### **entry** [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance

Context **configure qos sap-ingress** *string* **ip-criteria** **entry** *number*

Tree [entry](#)

Introduced 16.0.R1

Platforms All

### **[entry-id]** *number*

Synopsis IP criteria entry to create or edit for the policy

Context **configure qos sap-ingress** *string* **ip-criteria** **entry** *number*

Tree [entry](#)

Range 1 to 65535

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos sap-ingress string ip-criteria entry number action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All

### **fc string**

Synopsis	Forwarding class for traffic matching the criteria
Context	<b>configure qos sap-ingress string ip-criteria entry number action fc string</b>
Tree	<a href="#">fc</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **policer reference**

Synopsis	Policer ID for traffic matching the criteria
Context	<b>configure qos sap-ingress string ip-criteria entry number action policer reference</b>
Tree	<a href="#">policer</a>
Reference	<b>configure qos sap-ingress string policer number</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority keyword**

Synopsis	Priority for the packet
Context	<b>configure qos sap-ingress string ip-criteria entry number action priority keyword</b>
Tree	<a href="#">priority</a>

Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure</b> qos sap-ingress <i>string</i> ip-criteria entry number action type <i>keyword</i>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> qos sap-ingress <i>string</i> ip-criteria entry number description <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> ip-criteria entry number match
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

### **dscp** *keyword*

Synopsis	DSCP value to match in the packet
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Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

### dst-ip

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match dst-ip</i>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	All

### address (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Destination IPv4 address for SAP QoS policy match
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match dst-ip address (ipv4-prefix-with-host-bits   ipv4-address)</i>
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### ip-prefix-list *reference*

Synopsis	IP-prefix list as match criterion
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match dst-ip ip-prefix-list reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure qos match-list ip-prefix-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1

Platforms All

### **mask string**

Synopsis IP address to match with source IP of the packet  
 Context **configure qos sap-ingress string ip-criteria entry number match dst-ip mask string**  
 Tree [mask](#)  
 Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.  
 Introduced 16.0.R1  
 Platforms All

### **dst-port**

Synopsis Enter the **dst-port** context  
 Context **configure qos sap-ingress string ip-criteria entry number match dst-port**  
 Tree [dst-port](#)  
 Introduced 16.0.R1  
 Platforms All

### **eq number**

Synopsis Value 'equal to' assigned as match condition  
 Context **configure qos sap-ingress string ip-criteria entry number match dst-port eq number**  
 Tree [eq](#)  
 Range 0 to 65535  
 Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.  
 Introduced 16.0.R1  
 Platforms All

### **gt number**

Synopsis Value 'greater than' assigned as match condition  
 Context **configure qos sap-ingress string ip-criteria entry number match dst-port gt number**  
 Tree [gt](#)  
 Range 0 to 65535



Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**lt number**

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure</b> qos sap-ingress string ip-criteria entry number match dst-port lt number
Tree	lt
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> qos sap-ingress string ip-criteria entry number match dst-port range
Tree	range
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the port range
Context	<b>configure</b> qos sap-ingress string ip-criteria entry number match dst-port range end number
Tree	end
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the port range
Context	<b>configure qos sap-ingress string ip-criteria entry number match dst-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**fragment keyword**

Synopsis	Fragmented packets as the match criterion
Context	<b>configure qos sap-ingress string ip-criteria entry number match fragment keyword</b>
Tree	<a href="#">fragment</a>
Options	false, true
Introduced	16.0.R1
Platforms	All

**protocol (number | keyword)**

Synopsis	IP protocol to match
Context	<b>configure qos sap-ingress string ip-criteria entry number match protocol (number   keyword)</b>
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

**src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure qos sap-ingress string ip-criteria entry number match src-ip</b>
Tree	<a href="#">src-ip</a>

Introduced	16.0.R1
Platforms	All

### **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	Source IPv4 address for SAP QoS policy match criterion
Context	<b>configure</b> qos sap-ingress string ip-criteria entry number match src-ip address ( <i>ipv4-prefix-with-host-bits</i>   <i>ipv4-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **ip-prefix-list** *reference*

Synopsis	IP-prefix list as match criterion
Context	<b>configure</b> qos sap-ingress string ip-criteria entry number match src-ip ip-prefix-list <i>reference</i>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> qos match-list ip-prefix-list string
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure</b> qos sap-ingress string ip-criteria entry number match src-ip mask string
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## src-port

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match src-port</i>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

## eq number

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match src-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## gt number

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match src-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## lt number

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string ip-criteria entry number match src-port lt number</i>
Tree	<a href="#">lt</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .

Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos sap-ingress string ip-criteria entry number match src-port range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the port range
Context	<b>configure qos sap-ingress string ip-criteria entry number match src-port range end number</b>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the port range
Context	<b>configure qos sap-ingress string ip-criteria entry number match src-port range start number</b>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## vxlan-vni

Synopsis	Enter the <b>vxlan-vni</b> context
Context	<b>configure qos sap-ingress string ip-criteria entry number match vxlan-vni</b>

Tree	<a href="#">vxlan-vni</a>
Introduced	16.0.R1
Platforms	All

**eq number**

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match vxlan-vni</a> <i>eq</i> <i>number</i>
Tree	<a href="#">eq</a>
Range	1 to 16777215
Notes	The following elements are part of a choice: <b>eq</b> or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match vxlan-vni</a> <i>range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the VNI range
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ip-criteria</a> <i>entry</i> <i>number</i> <a href="#">match vxlan-vni</a> <i>range</i> <i>end</i> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the VNI range
Context	<b>configure qos sap-ingress string ip-criteria entry number match vxlan-vni range start number</b>
Tree	<b>start</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**tag number**

Synopsis	Tag ID associated with the criteria entry
Context	<b>configure qos sap-ingress string ip-criteria entry number tag number</b>
Tree	<b>tag</b>
Description	This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range	0 to 255
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv4 criteria entry type
Context	<b>configure qos sap-ingress string ip-criteria type keyword</b>
Tree	<b>type</b>
Description	This command specifies the type of entries that can be configured for IPv4 match criteria.
Options	normal, vxlan-vni, tagged-entries
Default	normal
Introduced	16.0.R1
Platforms	All

## ipv6-criteria

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure qos sap-ingress string ipv6-criteria</b>
Tree	<a href="#">ipv6-criteria</a>
Introduced	16.0.R1
Platforms	All

## entry [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure qos sap-ingress string ipv6-criteria entry number</b>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

## [[entry-id](#)] *number*

Synopsis	IPv6 criteria entry to create or edit for the policy
Context	<b>configure qos sap-ingress string ipv6-criteria entry number</b>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## action

Synopsis	Enter the <b>action</b> context
Context	<b>configure qos sap-ingress string ipv6-criteria entry number action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	All



**fc string**

Synopsis	Forwarding class for traffic matching the criteria
Context	<b>configure qos sap-ingress string ipv6-criteria entry number action fc string</b>
Tree	<b>fc</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**policer reference**

Synopsis	Policer ID for traffic matching the criteria
Context	<b>configure qos sap-ingress string ipv6-criteria entry number action policer reference</b>
Tree	<b>policer</b>
Reference	<b>configure qos sap-ingress string policer number</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority keyword**

Synopsis	Priority for the packet
Context	<b>configure qos sap-ingress string ipv6-criteria entry number action priority keyword</b>
Tree	<b>priority</b>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Action for criteria entry
Context	<b>configure qos sap-ingress string ipv6-criteria entry number action type keyword</b>
Tree	<b>type</b>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **match**

Synopsis Enter the **match** context

Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* **match**

Tree [match](#)

Introduced 16.0.R1

Platforms All

### **dscp** *keyword*

Synopsis DSCP value to match in the packet

Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* **match** **dscp** *keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms All

### **dst-ip**

Synopsis Enter the **dst-ip** context

Context **configure** qos sap-ingress *string* ipv6-criteria entry *number* **match** **dst-ip**

Tree [dst-ip](#)

Introduced	16.0.R1
Platforms	All

### **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv6 address to match destination IP of the packet
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-ip</i> <i>address</i> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

### **ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-ip</i> <i>ipv6-prefix-list</i> <i>reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure qos match-list</b> <i>ipv6-prefix-list</i> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-ip</i> <i>mask</i> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

## dst-port

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <b>dst-port</b>
Tree	<b>dst-port</b>
Introduced	16.0.R1
Platforms	All

## eq number

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <b>dst-port eq</b> <i>number</i>
Tree	<b>eq</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## gt number

Synopsis	Value 'greater than' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <b>dst-port gt</b> <i>number</i>
Tree	<b>gt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## lt number

Synopsis	Value 'less than' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <b>dst-port lt</b> <i>number</i>
Tree	<b>lt</b>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .

Introduced	16.0.R1
Platforms	All

## range

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-port</i> <i>range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	All

## end number

Synopsis	Upper bound of the port range
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-port</i> <i>range</i> <i>end</i> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the port range
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>dst-port</i> <i>range</i> <i>start</i> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

## fragment keyword

Synopsis	Fragmented packets as the match criterion
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>fragment</i> <i>keyword</i>

Tree	<a href="#">fragment</a>
Options	false, true, first-only, non-first-only
Introduced	16.0.R1
Platforms	All

### **next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">next-header</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	All

### **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis	IPv4 address to match
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">address</a> ( <i>ipv6-prefix-with-host-bits</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**ipv6-prefix-list** *reference*

Synopsis	IPv6 prefix list as match criterion for IPv6 addresses
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-ip</a> <a href="#">ipv6-prefix-list reference</a>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure</b> <a href="#">qos match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mask** *string*

Synopsis	IP address to match with source IP of the packet
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-ip</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	All

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	All

**eq** *number*

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">ipv6-criteria entry</a> <i>number</i> <a href="#">match src-port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1

Platforms All

### **gt number**

Synopsis Value 'greater than' assigned as match condition

Context **configure qos sap-ingress string ipv6-criteria entry number match src-port gt number**

Tree [gt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **lt number**

Synopsis Value 'less than' assigned as match condition

Context **configure qos sap-ingress string ipv6-criteria entry number match src-port lt number**

Tree [lt](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **range**

Synopsis Enter the **range** context

Context **configure qos sap-ingress string ipv6-criteria entry number match src-port range**

Tree [range](#)

Notes The following elements are part of a choice: **eq, gt, lt, or range**.

Introduced 16.0.R1

Platforms All

### **end number**

Synopsis Upper bound of the port range



Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>src-port</i> <i>range</i> <i>end</i> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the port range
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>src-port</i> <i>range</i> <i>start</i> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

**vxlan-vni**

Synopsis	Enter the <b>vxlan-vni</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>vxlan-vni</i>
Tree	<a href="#">vxlan-vni</a>
Introduced	16.0.R1
Platforms	All

**eq number**

Synopsis	Value 'equal to' assigned as match condition
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match</i> <i>vxlan-vni</i> <i>eq</i> <i>number</i>
Tree	<a href="#">eq</a>
Range	1 to 16777215
Notes	The following elements are part of a choice: <b>eq</b> or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match vxlan-vni</i> <b>range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> or <b>range</b> .
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the VNI range
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match vxlan-vni</i> <b>range end number</b>
Tree	<b>end</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the VNI range
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <i>match vxlan-vni</i> <b>range start number</b>
Tree	<b>start</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**tag number**

Synopsis	Tag ID associated with the criteria entry
Context	<b>configure qos sap-ingress</b> <i>string</i> <i>ipv6-criteria</i> <i>entry</i> <i>number</i> <b>tag number</b>
Tree	<b>tag</b>
Description	This command associates a tag with the criteria entry. Tag identifiers are not supported in SAP ingress QoS policies, MAC criteria statements, or in SAP egress QoS policies.
Range	0 to 255

Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IPv6 criteria entry type
Context	<b>configure</b> qos sap-ingress <i>string</i> ipv6-criteria <i>type</i> <i>keyword</i>
Tree	<i>type</i>
Description	This command specifies the type of entries that can be configured for IPv6 match criteria.
Options	normal, vxlan-vni, tagged-entries
Default	normal
Introduced	16.0.R1
Platforms	All

**lsp-exp** [*lsp-exp-value*] *number*

Synopsis	Enter the <b>lsp-exp</b> list instance
Context	<b>configure</b> qos sap-ingress <i>string</i> lsp-exp <i>number</i>
Tree	<i>lsp-exp</i>
Introduced	16.0.R1
Platforms	All

**[lsp-exp-value]** *number*

Synopsis	LSP EXP value to match the LSP EXP rule
Context	<b>configure</b> qos sap-ingress <i>string</i> lsp-exp <i>number</i>
Tree	<i>lsp-exp</i>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **fc string**

Synopsis Forwarding class for traffic matching the LSP EXP value  
 Context **configure qos sap-ingress string lsp-exp number fc string**  
 Tree **fc**  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms All

### **priority keyword**

Synopsis Priority for the matching traffic  
 Context **configure qos sap-ingress string lsp-exp number priority keyword**  
 Tree **priority**  
 Options low, high, auto  
 Default auto  
 Introduced 16.0.R1  
 Platforms All

### **mac-criteria**

Synopsis Enter the **mac-criteria** context  
 Context **configure qos sap-ingress string mac-criteria**  
 Tree **mac-criteria**  
 Introduced 16.0.R1  
 Platforms All

### **entry [entry-id] number**

Synopsis Enter the **entry** list instance  
 Context **configure qos sap-ingress string mac-criteria entry number**  
 Tree **entry**  
 Introduced 16.0.R1

Platforms All

### **[entry-id] number**

Synopsis Entry ID  
 Context **configure qos sap-ingress string mac-criteria entry number**  
 Tree **entry**  
 Range 1 to 65535  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **action**

Synopsis Enter the **action** context  
 Context **configure qos sap-ingress string mac-criteria entry number action**  
 Tree **action**  
 Introduced 16.0.R1  
 Platforms All

### **fc string**

Synopsis Forwarding class for traffic matching the criteria  
 Context **configure qos sap-ingress string mac-criteria entry number action fc string**  
 Tree **fc**  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms All

### **policer reference**

Synopsis Policer ID for traffic matching the criteria  
 Context **configure qos sap-ingress string mac-criteria entry number action policer reference**  
 Tree **policer**  
 Reference **configure qos sap-ingress string policer number**

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority** *keyword*

Synopsis	Priority for the packet
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">mac-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">action</a> <a href="#">priority</a> <i>keyword</i>
Tree	<a href="#">priority</a>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Action for criteria entry
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">mac-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">action</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	ignore-match, accept
Default	ignore-match
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">mac-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
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Context	<b>configure qos sap-ingress</b> <i>string mac-criteria entry number match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	All

## dot1p

Synopsis	Enable the <b>dot1p</b> context
Context	<b>configure qos sap-ingress</b> <i>string mac-criteria entry number match dot1p</i>
Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

## mask *number*

Synopsis	3-bit mask for the 802.1p value
Context	<b>configure qos sap-ingress</b> <i>string mac-criteria entry number match dot1p mask number</i>
Tree	<a href="#">mask</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

## priority *number*

Synopsis	802.1P priority value to use as the match criterion
Context	<b>configure qos sap-ingress</b> <i>string mac-criteria entry number match dot1p priority number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## dst-mac

Synopsis	Enable the <b>dst-mac</b> context
Context	<b>configure qos sap-ingress string mac-criteria entry number match dst-mac</b>
Tree	<a href="#">dst-mac</a>
Introduced	16.0.R1
Platforms	All

## address string

Synopsis	Destination MAC address as QoS policy match criterion
Context	<b>configure qos sap-ingress string mac-criteria entry number match dst-mac address string</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## mask string

Synopsis	Mask for destination MAC address
Context	<b>configure qos sap-ingress string mac-criteria entry number match dst-mac mask string</b>
Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

## etype string

Synopsis	Ethernet type
Context	<b>configure qos sap-ingress string mac-criteria entry number match etype string</b>
Tree	<a href="#">etype</a>
String Length	5 to 6
Introduced	16.0.R1
Platforms	All



### **frame-type** *keyword*

Synopsis	Match MAC criteria for ingress SAP QoS policy
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match frame-type <i>keyword</i>
Tree	<a href="#">frame-type</a>
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii
Introduced	16.0.R1
Platforms	All

### **inner-tag**

Synopsis	Enable the <b>inner-tag</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match inner-tag
Tree	<a href="#">inner-tag</a>
Introduced	16.0.R1
Platforms	All

### **mask** *number*

Synopsis	Mask to VID of the inner VLAN tag before comparing it with the inner-tag or outer-tag value
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match inner-tag mask <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	All

### **vlan** *number*

Synopsis	Value to match against the VID of the second VLAN tag
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match inner-tag vlan <i>number</i>
Tree	<a href="#">vlan</a>
Range	0 to 4095

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## llc-dsap

Synopsis	Enable the <b>llc-dsap</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match llc-dsap
Tree	llc-dsap
Introduced	16.0.R1
Platforms	All

## dsap number

Synopsis	DSAP value
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match llc-dsap dsap <i>number</i>
Tree	dsap
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## mask number

Synopsis	DSAP mask
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria entry <i>number</i> match llc-dsap mask <i>number</i>
Tree	mask
Range	0 to 255
Default	255
Introduced	16.0.R1
Platforms	All

## llc-ssap

Synopsis	Enable the <b>llc-ssap</b> context
Context	<b>configure qos sap-ingress string mac-criteria entry number match llc-ssap</b>
Tree	<a href="#">llc-ssap</a>
Introduced	16.0.R1
Platforms	All

## mask number

Synopsis	Source SAP mask
Context	<b>configure qos sap-ingress string mac-criteria entry number match llc-ssap mask number</b>
Tree	<a href="#">mask</a>
Range	0 to 255
Default	255
Introduced	16.0.R1
Platforms	All

## ssap number

Synopsis	SSAP value
Context	<b>configure qos sap-ingress string mac-criteria entry number match llc-ssap ssap number</b>
Tree	<a href="#">ssap</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## outer-tag

Synopsis	Enable the <b>outer-tag</b> context
Context	<b>configure qos sap-ingress string mac-criteria entry number match outer-tag</b>
Tree	<a href="#">outer-tag</a>
Introduced	16.0.R1
Platforms	All

**mask number**

Synopsis	First tag carried transparently through the service
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match outer-tag mask number
Tree	mask
Range	1 to 4095
Default	4095
Introduced	16.0.R1
Platforms	All

**vlan number**

Synopsis	Match against VID of the first VLAN tag in the packet carried transparently through service
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match outer-tag vlan number
Tree	vlan
Range	0 to 4095
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**snap-oui keyword**

Synopsis	Parameter snap-oui as MAC filter match criteria
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match snap-oui keyword
Tree	snap-oui
Options	zero, non-zero
Introduced	16.0.R1
Platforms	All

**snap-pid number**

Synopsis	Parameter snap-pid as MAC filter match criteria
Context	<b>configure</b> qos sap-ingress string mac-criteria entry number match snap-pid number

Tree	<a href="#">snap-pid</a>
Range	0 to 65535
Introduced	16.0.R1
Platforms	All

### **src-mac**

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure qos sap-ingress</b> <a href="#">string</a> <a href="#">mac-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-mac</a>
Tree	<a href="#">src-mac</a>
Introduced	16.0.R1
Platforms	All

### **address string**

Synopsis	Source MAC address as QoS policy match criterion
Context	<b>configure qos sap-ingress</b> <a href="#">string</a> <a href="#">mac-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">address</a> <a href="#">string</a>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **mask string**

Synopsis	Mask for source MAC address
Context	<b>configure qos sap-ingress</b> <a href="#">string</a> <a href="#">mac-criteria</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <a href="#">src-mac</a> <a href="#">mask</a> <a href="#">string</a>
Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	All

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MAC criteria filter type
Context	<b>configure</b> qos sap-ingress <i>string</i> mac-criteria <i>type</i> <i>keyword</i>
Tree	<i>type</i>
Options	normal, vid
Default	normal
Introduced	16.0.R1
Platforms	All

**policer** [*policer-id*] *number*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i>
Tree	<i>policer</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id]** *number*

Synopsis	SAP-ingress policer identifier
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i>
Tree	<i>policer</i>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i> adaptation-rule
Tree	adaptation-rule

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>adaptation-rule cir</b> <i>keyword</i>
Tree	<b>cir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>adaptation-rule pir</b> <i>keyword</i>
Tree	<b>pir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**adv-config-policy reference**

Synopsis	Advanced QoS policy name
Context	<b>configure qos sap-ingress</b> <i>string</i> <b>policer</b> <i>number</i> <b>adv-config-policy</b> <i>reference</i>
Tree	<b>adv-config-policy</b>
Reference	<b>configure qos adv-config-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**arbiter-parent**

Synopsis	Enter the <b>arbiter-parent</b> context
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Context        **configure qos sap-ingress string policer number arbiter-parent**  
Tree            **arbiter-parent**  
Introduced     16.0.R1  
Platforms      7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **arbiter-name string**

Synopsis        Arbiter name  
Context        **configure qos sap-ingress string policer number arbiter-parent arbiter-name string**  
Tree            **arbiter-name**  
String Length  1 to 32  
Introduced     16.0.R1  
Platforms      7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **level number**

Synopsis        Level of priority while feeding to the parent  
Context        **configure qos sap-ingress string policer number arbiter-parent level number**  
Tree            **level**  
Range          1 to 8  
Default        1  
Introduced     16.0.R1  
Platforms      7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **weight number**

Synopsis        Weight used by the arbiter for feeding the policer  
Context        **configure qos sap-ingress string policer number arbiter-parent weight number**  
Tree            **weight**  
Range          1 to 100  
Default        1  
Introduced     16.0.R1  
Platforms      7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR



**cbs** (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**high-prio-only** (*number* | *keyword*)

Synopsis	Percentage of MBS reserved for high priority traffic
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">high-prio-only</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">high-prio-only</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs** (*number* | *keyword*)

Synopsis	High priority violate threshold of PIR leaky bucket
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">packet-byte-offset</a> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** *decimal-number*

Synopsis	Administrative CIR percent
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Default	0.00
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** *decimal-number*

Synopsis Administrative PIR percent  
 Context **configure qos sap-ingress** *string* **policer** *number* **percent-rate** **pir** *decimal-number*  
 Tree [pir](#)  
 Range 0.01 to 100.00  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **reference-rate** *keyword*

Synopsis Reference rate  
 Context **configure qos sap-ingress** *string* **policer** *number* **percent-rate** **reference-rate** *keyword*  
 Tree [reference-rate](#)  
 Options local-limit, reference-port-limit  
 Default local-limit  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **profile-capped** *boolean*

Synopsis Enforce overall in-profile burst limit to CIR bucket  
 Context **configure qos sap-ingress** *string* **policer** *number* **profile-capped** *boolean*  
 Tree [profile-capped](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate**

Synopsis Enter the **rate** context  
 Context **configure qos sap-ingress** *string* **policer** *number* **rate**  
 Tree [rate](#)

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i> rate cir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i> rate pir ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **scheduler-parent**

Synopsis	Enter the <b>scheduler-parent</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i> scheduler-parent
Tree	<a href="#">scheduler-parent</a>
Introduced	22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

### **cir-level** *number*

Synopsis Port priority level for within-CIR offered load

Context **configure** qos sap-ingress *string* policer *number* scheduler-parent **cir-level** *number*

Tree **cir-level**

Description This command defines the hierarchy priority level when compared with other policers, queues, and schedulers that the policer uses to receive bandwidth for its within-CIR offered load. If this command is set to the default value, the policer does not receive bandwidth during the within-CIR pass of the scheduler and the **cir-weight** command is ignored.

Range 0 to 8

Default 0

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

### **cir-weight** *number*

Synopsis Weight to use in the within-CIR port priority level

Context **configure** qos sap-ingress *string* policer *number* scheduler-parent **cir-weight** *number*

Tree **cir-weight**

Description The command defines the relative weight of the policer in comparison with other child policers, queues, or schedulers competing for bandwidth on the parent scheduler name at the within-CIR priority level.

A weight is considered to be active when the applicable policer, queue, or scheduler has not reached its maximum rate and still has packets to transmit.

When this command is set to a value of 0, the policer receives bandwidth only after the other children with a non-zero weight at this level have been serviced.

Range 0 to 100

Default 1

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**level number**

Synopsis	Priority level for bandwidth on the parent scheduler
Context	<b>configure qos sap-ingress string policer number scheduler-parent level number</b>
Tree	<a href="#">level</a>
Description	This command defines the priority level when compared with other policers, queues, and schedulers when competing for bandwidth on the parent scheduler.  Children of the parent scheduler with a lower priority do not receive bandwidth until all children with a higher priority have either reached their maximum bandwidth or are idle. Children with the same level are serviced in relation to their relative weights.
Range	1 to 8
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**scheduler-name string**

Synopsis	Scheduler name
Context	<b>configure qos sap-ingress string policer number scheduler-parent scheduler-name string</b>
Tree	<a href="#">scheduler-name</a>
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**weight number**

Synopsis	Policer weight at the above-CIR priority level
Context	<b>configure qos sap-ingress string policer number scheduler-parent weight number</b>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> qos sap-ingress <i>string</i> policer <i>number</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, offered-profile-with-discards
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policers-hqos-manageable** *boolean*

Synopsis	Manage policers through the hierarchical QoS process
Context	<b>configure</b> qos sap-ingress <i>string</i> <b>policers-hqos-manageable</b> <i>boolean</i>
Tree	<a href="#">policers-hqos-manageable</a>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-1s, 7750 SR-1se, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s

**policy-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ingress SAP QoS policy ID
Context	<b>configure</b> qos sap-ingress <i>string</i> <b>policy-id</b> <i>number</i>
Tree	<a href="#">policy-id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**prec** [*prec-value*] *number*

Synopsis	Enter the <b>prec</b> list instance
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Context	<b>configure qos sap-ingress string prec number</b>
Tree	<b>prec</b>
Introduced	16.0.R1
Platforms	All

**[prec-value]** *number*

Synopsis	Precedence value for which mapping is performed
Context	<b>configure qos sap-ingress string prec number</b>
Tree	<b>prec</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fc** *string*

Synopsis	Forwarding class for traffic matching precedence value
Context	<b>configure qos sap-ingress string prec number fc string</b>
Tree	<b>fc</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**priority** *keyword*

Synopsis	Priority for the matching traffic
Context	<b>configure qos sap-ingress string prec number priority keyword</b>
Tree	<b>priority</b>
Options	low, high, auto
Default	auto
Introduced	16.0.R1
Platforms	All



**queue** [*queue-id*] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure qos sap-ingress</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id]** *number*

Synopsis	SAP-ingress policer identifier
Context	<b>configure qos sap-ingress</b> <i>string queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure qos sap-ingress</b> <i>string queue number adaptation-rule</i>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

**cir** *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure qos sap-ingress</b> <i>string queue number adaptation-rule cir keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**fir keyword**

Synopsis	Constraint used when deriving the operational FIR value
Context	<b>configure</b> qos sap-ingress string queue number adaptation-rule fir keyword
Tree	fir
Options	max, min, closest
Default	closest
Introduced	16.0.R2
Platforms	All

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> qos sap-ingress string queue number adaptation-rule pir keyword
Tree	pir
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	All

**adv-config-policy reference**

Synopsis	Advanced QoS policy name
Context	<b>configure</b> qos sap-ingress string queue number adv-config-policy reference
Tree	adv-config-policy
Reference	<b>configure</b> qos adv-config-policy string
Introduced	16.0.R1
Platforms	All

**burst-limit (number | keyword)**

Synopsis	Explicit shaping burst size of a queue
Context	<b>configure</b> qos sap-ingress string queue number burst-limit (number   keyword)
Tree	burst-limit
Range	1 to 14000000

Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	Reserved buffer space for the queue
Context	<b>configure qos sap-ingress</b> <i>string queue number cbs</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

### **cir-non-profiling** *boolean*

Synopsis	Prevent profile modification of CIR dependent packets
Context	<b>configure qos sap-ingress</b> <i>string queue number cir-non-profiling</i> <i>boolean</i>
Tree	<a href="#">cir-non-profiling</a>
Default	false
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure qos sap-ingress</b> <i>string queue number drop-tail</i>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure qos sap-ingress string queue number drop-tail low</b>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure qos sap-ingress string queue number drop-tail low percent-reduction-from-mbs (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## mbs (*number* | *keyword*)

Synopsis	Maximum buffer space that is allowed for queue
Context	<b>configure qos sap-ingress string queue number mbs (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

**multipoint *boolean*****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Apply as a multicast queue
Context	<b>configure qos sap-ingress</b> <i>string queue number multipoint boolean</i>
Tree	<a href="#">multipoint</a>
Introduced	16.0.R1
Platforms	All

**packet-byte-offset *number***

Synopsis	Packet size modification for queue accounting
Context	<b>configure qos sap-ingress</b> <i>string queue number packet-byte-offset number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 30
Default	0
Introduced	16.0.R1
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure qos sap-ingress</b> <i>string queue number percent-rate</i>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir *decimal-number***

Synopsis	Administrative CIR percent
Context	<b>configure qos sap-ingress</b> <i>string queue number percent-rate cir decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00

Default	0.00
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

### **fir** *decimal-number*

Synopsis	Administrative FIR percent
Context	<b>configure</b> <a href="#">qos sap-ingress string queue number percent-rate fir decimal-number</a>
Tree	<a href="#">fir</a>
Range	0.00 to 100.00
Default	0.00
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R2
Platforms	All

### **pir** *decimal-number*

Synopsis	Administrative PIR percent
Context	<b>configure</b> <a href="#">qos sap-ingress string queue number percent-rate pir decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

### **police**

Synopsis	Drop out-of-profile traffic feeding into queue instance
Context	<b>configure</b> <a href="#">qos sap-ingress string queue number percent-rate police</a>
Tree	<a href="#">police</a>
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

**reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> qos sap-ingress <i>string</i> queue <i>number</i> percent-rate reference-rate <i>keyword</i>
Tree	reference-rate
Options	port-limit, local-limit, reference-port-limit
Default	port-limit
Introduced	16.0.R1
Platforms	All

**queue-mode** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Operating mode for this queue
Context	<b>configure</b> qos sap-ingress <i>string</i> queue <i>number</i> queue-mode <i>keyword</i>
Tree	queue-mode
Options	priority, profile
Default	priority
Introduced	16.0.R1
Platforms	All

**queue-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Method used to service queue from hardware perspective
Context	<b>configure</b> qos sap-ingress <i>string</i> queue <i>number</i> queue-type <i>keyword</i>
Tree	queue-type
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos sap-ingress string queue number rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

## cir (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos sap-ingress string queue number rate cir (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

## fir (*number* | *keyword*)

Synopsis	Administrative FIR
Context	<b>configure qos sap-ingress string queue number rate fir (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">fir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Default	0
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R2
Platforms	All



**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos sap-ingress</b> <i>string queue number rate</i> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

**police**

Synopsis	Drop the traffic feeding into queue above the PIR rate
Context	<b>configure qos sap-ingress</b> <i>string queue number rate</i> <b>police</b>
Tree	<a href="#">police</a>
Notes	The following elements are part of a choice: ( <b>cir</b> and <b>fir</b> ) or <b>police</b> .
Introduced	16.0.R1
Platforms	All

**scheduler-parent**

Synopsis	Enter the <b>scheduler-parent</b> context
Context	<b>configure qos sap-ingress</b> <i>string queue number</i> <b>scheduler-parent</b>
Tree	<a href="#">scheduler-parent</a>
Introduced	16.0.R1
Platforms	All

**cir-level** *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure qos sap-ingress</b> <i>string queue number scheduler-parent</i> <b>cir-level</b> <i>number</i>
Tree	<a href="#">cir-level</a>
Range	0 to 8

Default	0
Introduced	16.0.R1
Platforms	All

**cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">scheduler-parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**level** *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">scheduler-parent</a> <b>level</b> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**scheduler-name** *string*

Synopsis	Scheduler name
Context	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i> <a href="#">scheduler-parent</a> <b>scheduler-name</b> <i>string</i>
Tree	<a href="#">scheduler-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> qos sap-ingress <i>string</i> queue <i>number</i> scheduler-parent <i>weight</i> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

### **scope** *keyword*

Synopsis	Scope of the policy
Context	<b>configure</b> qos sap-ingress <i>string</i> scope <i>keyword</i>
Tree	<a href="#">scope</a>
Options	exclusive, template
Default	template
Introduced	16.0.R1
Platforms	All

### **subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dynamic-policer**

Synopsis	Enter the <b>dynamic-policer</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer
Tree	<a href="#">dynamic-policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arbiter-parent

Synopsis	Enter the <b>arbiter-parent</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent
Tree	<a href="#">arbiter-parent</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arbiter-name *string*

Synopsis	Arbiter name
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent <a href="#">arbiter-name</a> <i>string</i>
Tree	<a href="#">arbiter-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## level *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent level <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## weight *number*

Synopsis	Weight used by the arbiter for feeding the policer
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer arbiter-parent weight <i>number</i>
Tree	<a href="#">weight</a>
Range	1 to 100

Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cbs** (*number* | *keyword*)

Synopsis	Exceed threshold of the CIR leaky bucket of the policer
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mbs** (*number* | *keyword*)

Synopsis	High priority violate threshold of PIR leaky bucket of this policer
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>

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Range	-32 to 31
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer-id-range**

Synopsis	Enable the <b>policer-id-range</b> context
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-policer</a> <a href="#">policer-id-range</a>
Tree	<a href="#">policer-id-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the dynamic policer ID range
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-policer</a> <a href="#">policer-id-range</a> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	Lower bound of the dynamic policer ID range
Context	<b>configure qos sap-ingress</b> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dynamic-policer</a> <a href="#">policer-id-range</a> <b>start</b> <i>number</i>
Tree	<a href="#">start</a>
Range	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt dynamic-policer stat-mode <i>keyword</i>
Tree	stat-mode
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Default	minimal
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pcc-rule-entry**

Synopsis	Enter the <b>pcc-rule-entry</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt pcc-rule-entry
Tree	pcc-rule-entry
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt pcc-rule-entry range
Tree	range
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end** *number*

Synopsis	Upper bound of the filter and QoS policy entries range
Context	<b>configure</b> qos sap-ingress <i>string</i> subscriber-mgmt pcc-rule-entry range end <i>number</i>
Tree	end
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis Lower bound of the filter and QoS policy entries range  
 Context **configure qos sap-ingress** *string* **subscriber-mgmt pcc-rule-entry range** *start number*  
 Tree [start](#)  
 Range 1 to 65535  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scheduler-policy** [[scheduler-policy-name](#)] *string*

Synopsis Enter the **scheduler-policy** list instance  
 Context **configure qos scheduler-policy** *string*  
 Tree [scheduler-policy](#)  
 Max. 2047  
 Instances  
 Introduced 16.0.R1  
 Platforms All

### **[scheduler-policy-name]** *string*

Synopsis Scheduler policy name  
 Context **configure qos scheduler-policy** *string*  
 Tree [scheduler-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description



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Context	<b>configure qos scheduler-policy</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **frame-based-accounting** *boolean*

Synopsis	Use frame-based accounting for queues and schedulers
Context	<b>configure qos scheduler-policy</b> <i>string frame-based-accounting boolean</i>
Tree	<a href="#">frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **tier** [[tier-id](#)] *number*

Synopsis	Enter the <b>tier</b> list instance
Context	<b>configure qos scheduler-policy</b> <i>string tier number</i>
Tree	<a href="#">tier</a>
Introduced	16.0.R1
Platforms	All

### **[tier-id]** *number*

Synopsis	Tier for scheduler-policy scheduler
Context	<b>configure qos scheduler-policy</b> <i>string tier number</i>
Tree	<a href="#">tier</a>
Range	1 to 3
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**parent-location** *keyword*

Synopsis	Expected location of parent schedulers
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> parent-location <i>keyword</i>
Tree	parent-location
Options	auto, sub, vport
Default	auto
Introduced	16.0.R1
Platforms	All

**scheduler** [*scheduler-name*] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i>
Tree	scheduler
Introduced	16.0.R1
Platforms	All

**[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i>
Tree	scheduler
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** qos scheduler-policy *string tier number scheduler string description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **limit-unused-bandwidth** *boolean*

Synopsis Enable aggregate rate overrun protection

Context **configure** qos scheduler-policy *string tier number scheduler string limit-unused-bandwidth boolean*

Tree [limit-unused-bandwidth](#)

Default false

Introduced 16.0.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** qos scheduler-policy *string tier number scheduler string percent-rate*

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms All

### **cir** (*keyword* | *decimal-number*)

Synopsis Scheduler CIR

Context **configure** qos scheduler-policy *string tier number scheduler string percent-rate cir (keyword | decimal-number)*

Tree [cir](#)

Range	0.00 to 100.00
Options	sum
Default	sum
Introduced	20.10.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	Scheduler PIR
Context	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i> <a href="#">tier</a> <i>number</i> <a href="#">scheduler</a> <i>string</i> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

### **reference-rate** *keyword*

Synopsis	Reference rate
Context	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i> <a href="#">tier</a> <i>number</i> <a href="#">scheduler</a> <i>string</i> <a href="#">percent-rate</a> <a href="#">reference-rate</a> <i>keyword</i>
Tree	<a href="#">reference-rate</a>
Options	local-limit, reference-port-limit
Default	reference-port-limit
Introduced	20.10.R1
Platforms	All

### **port-parent**

Synopsis	Enable the <b>port-parent</b> context
Context	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i> <a href="#">tier</a> <i>number</i> <a href="#">scheduler</a> <i>string</i> <a href="#">port-parent</a>
Tree	<a href="#">port-parent</a>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	All

**cir-level** *number*

Synopsis	Port priority to receive bandwidth for within-CIR pass
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> port-parent cir-level <i>number</i>
Tree	<a href="#">cir-level</a>
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

**cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> port-parent cir-weight <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**level** *number*

Synopsis	Port priority for bandwidth for above-CIR offered load
Context	<b>configure</b> qos scheduler-policy <i>string</i> tier <i>number</i> scheduler <i>string</i> port-parent level <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight used at the above-CIR port priority level
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Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string port-parent weight number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Default	1
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string rate</i>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string rate cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Default	sum
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string rate pir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>

Range	1 to 6400000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **scheduler-parent**

Synopsis	Enable the <b>scheduler-parent</b> context
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string scheduler-parent</i>
Tree	<a href="#">scheduler-parent</a>
Notes	The following elements are part of a choice: <b>port-parent</b> or <b>scheduler-parent</b> .
Introduced	16.0.R1
Platforms	All

### **cir-level** *number*

Synopsis	Level of priority while feeding to the parent
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string scheduler-parent cir-level number</i>
Tree	<a href="#">cir-level</a>
Range	0 to 8
Default	0
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure qos scheduler-policy</b> <i>string tier number scheduler string scheduler-parent cir-weight number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Default	1

Introduced 16.0.R1  
 Platforms All

### **level** *number*

Synopsis Level of priority while feeding to the parent  
 Context **configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent **level** *number*  
 Tree **level**  
 Range 1 to 8  
 Default 1  
 Introduced 16.0.R1  
 Platforms All

### **scheduler-name** *string*

Synopsis Scheduler name  
 Context **configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent **scheduler-name** *string*  
 Tree **scheduler-name**  
 String Length 1 to 32  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **weight** *number*

Synopsis Relative weight of the scheduler to feed the queue  
 Context **configure** qos scheduler-policy *string* tier *number* scheduler *string* scheduler-parent **weight** *number*  
 Tree **weight**  
 Range 0 to 100  
 Default 1  
 Introduced 16.0.R1  
 Platforms All



**shared-queue** [[shared-queue-policy-name](#)] *string*

Synopsis	Enter the <b>shared-queue</b> list instance
Context	<b>configure qos shared-queue</b> <i>string</i>
Tree	<a href="#">shared-queue</a>
Introduced	16.0.R1
Platforms	All

**[shared-queue-policy-name]** *string*

Synopsis	Name of the default shared queue policy
Context	<b>configure qos shared-queue</b> <i>string</i>
Tree	<a href="#">shared-queue</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure qos shared-queue</b> <i>string description</i> <i>string</i>
Tree	<a href="#">description</a>
String Length	0 to 80
Introduced	16.0.R1
Platforms	All

**fc** [[fc-name](#)] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure qos shared-queue</b> <i>string fc</i> <i>keyword</i>
Tree	<a href="#">fc</a>
Introduced	16.0.R1
Platforms	All

**[fc-name] keyword**

Synopsis	Forwarding class mapping to queue mapping
Context	<b>configure qos shared-queue</b> <i>string fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**broadcast-queue number**

Synopsis	ID of queue to forward all broadcast traffic
Context	<b>configure qos shared-queue</b> <i>string fc keyword broadcast-queue number</i>
Tree	<b>broadcast-queue</b>
Range	9 to 32
Introduced	16.0.R1
Platforms	All

**multicast-queue number**

Synopsis	ID of queue to forward multicast traffic
Context	<b>configure qos shared-queue</b> <i>string fc keyword multicast-queue number</i>
Tree	<b>multicast-queue</b>
Range	9 to 32
Introduced	16.0.R1
Platforms	All

**queue number**

Synopsis	ID of queue to forward all traffic
Context	<b>configure qos shared-queue</b> <i>string fc keyword queue number</i>
Tree	<b>queue</b>
Range	1 to 8
Introduced	16.0.R1

Platforms All

### **unknown-queue** *number*

Synopsis ID of queue to forward unknown unicast traffic  
 Context **configure qos shared-queue** *string fc keyword unknown-queue number*  
 Tree [unknown-queue](#)  
 Range 9 to 32  
 Introduced 16.0.R1  
 Platforms All

### **queue** [[queue-id](#)] *number*

Synopsis Enter the **queue** list instance  
 Context **configure qos shared-queue** *string queue number*  
 Tree [queue](#)  
 Introduced 16.0.R1  
 Platforms All

### **[queue-id]** *number*

Synopsis Shared queue identifier  
 Context **configure qos shared-queue** *string queue number*  
 Tree [queue](#)  
 Range 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **cbs** *number*

Synopsis Committed burst size as a percentage of the MBS  
 Context **configure qos shared-queue** *string queue number cbs number*  
 Tree [cbs](#)  
 Range 0 to 100

Units	percent
Introduced	16.0.R1
Platforms	All

## drop-tail

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure qos shared-queue</b> <i>string</i> <i>queue number</i> <b>drop-tail</b>
Tree	<b>drop-tail</b>
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure qos shared-queue</b> <i>string</i> <i>queue number</i> <b>drop-tail low</b>
Tree	<b>low</b>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Low drop-tail percent from MBS that is reduced
Context	<b>configure qos shared-queue</b> <i>string</i> <i>queue number</i> <b>drop-tail low percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>percent-reduction-from-mbs</b>
Range	0 to 100
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	All

## mbs *number*

Synopsis	Maximum buffers for the ingress shared queue
Context	<b>configure qos shared-queue</b> <i>string</i> <i>queue number</i> <b>mbs</b> <i>number</i>

Tree	<a href="#">mbs</a>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **multipoint** *boolean*

Synopsis	Apply as a multicast queue
Context	<b>configure</b> <a href="#">qos shared-queue</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>multipoint</b> <i>boolean</i>
Tree	<a href="#">multipoint</a>
Introduced	16.0.R1
Platforms	All

### **queue-type** *keyword*

Synopsis	Method used to service queue from hardware perspective
Context	<b>configure</b> <a href="#">qos shared-queue</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>queue-type</b> <i>keyword</i>
Tree	<a href="#">queue-type</a>
Options	expedited, auto-expedited, best-effort
Default	auto-expedited
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">qos shared-queue</a> <i>string</i> <a href="#">queue</a> <i>number</i> <b>rate</b>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	All

### **cir** *number*

Synopsis	CIR percentage rate
----------	---------------------

Context	<b>configure qos shared-queue</b> <i>string queue number rate cir number</i>
Tree	<a href="#">cir</a>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**fir number**

Synopsis	FIR percentage rate
Context	<b>configure qos shared-queue</b> <i>string queue number rate fir number</i>
Tree	<a href="#">fir</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R2
Platforms	All

**pir number**

Synopsis	PIR percentage rate
Context	<b>configure qos shared-queue</b> <i>string queue number rate pir number</i>
Tree	<a href="#">pir</a>
Range	1 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

**slope-policy** [[slope-policy-name](#)] *string*

Synopsis	Enter the <b>slope-policy</b> list instance
Context	<b>configure qos slope-policy</b> <i>string</i>
Tree	<a href="#">slope-policy</a>

---

Max. Instances	511
Introduced	16.0.R1
Platforms	All

**[slope-policy-name]** *string*

Synopsis	Slope policy name
Context	<b>configure qos slope-policy</b> <i>string</i>
Tree	<a href="#">slope-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure qos slope-policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**exceed-slope**

Synopsis	Enter the <b>exceed-slope</b> context
Context	<b>configure qos slope-policy</b> <i>string</i> <b>exceed-slope</b>
Tree	<a href="#">exceed-slope</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the exceed-priority RED slope
----------	---

---

Context	<b>configure qos slope-policy</b> <i>string exceed-slope admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **max-avg** *number*

Synopsis	Buffer percentage after which drop probability is one
Context	<b>configure qos slope-policy</b> <i>string exceed-slope max-avg number</i>
Tree	<a href="#">max-avg</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **max-prob** *number*

Synopsis	Drop probability to increase at exceed start-average
Context	<b>configure qos slope-policy</b> <i>string exceed-slope max-prob number</i>
Tree	<a href="#">max-prob</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **start-avg** *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	<b>configure qos slope-policy</b> <i>string exceed-slope start-avg number</i>
Tree	<a href="#">start-avg</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All



## high-slope

Synopsis	Enter the <b>high-slope</b> context
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope
Tree	high-slope
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the high priority RED slope
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Introduced	16.0.R1
Platforms	All

## max-avg *number*

Synopsis	Buffer percentage after which drop probability is one
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## max-prob *number*

Synopsis	Drop probability to increase at high start-average
Context	<b>configure</b> qos slope-policy <i>string</i> high-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**start-avg** *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <a href="#">high-slope</a> <b>start-avg</b> <i>number</i>
Tree	<a href="#">start-avg</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**highplus-slope**

Synopsis	Enter the <b>highplus-slope</b> context
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <a href="#">highplus-slope</a>
Tree	<a href="#">highplus-slope</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the highplus priority RED slope
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <a href="#">highplus-slope</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**max-avg** *number*

Synopsis	Buffer percentage after which drop probability is one
Context	<b>configure</b> <a href="#">qos slope-policy</a> <i>string</i> <a href="#">highplus-slope</a> <b>max-avg</b> <i>number</i>
Tree	<a href="#">max-avg</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**max-prob** *number*

Synopsis	Drop probability increase at highplus start-average
Context	<b>configure qos slope-policy</b> <i>string</i> <a href="#">highplus-slope</a> <b>max-prob</b> <i>number</i>
Tree	<a href="#">max-prob</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**start-avg** *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	<b>configure qos slope-policy</b> <i>string</i> <a href="#">highplus-slope</a> <b>start-avg</b> <i>number</i>
Tree	<a href="#">start-avg</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**low-slope**

Synopsis	Enter the <b>low-slope</b> context
Context	<b>configure qos slope-policy</b> <i>string</i> <a href="#">low-slope</a>
Tree	<a href="#">low-slope</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the low priority RED slope
Context	<b>configure qos slope-policy</b> <i>string</i> <a href="#">low-slope</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**max-avg** *number*

Synopsis	Buffer percentage after which drop probability is one
Context	<b>configure</b> qos slope-policy <i>string</i> low-slope max-avg <i>number</i>
Tree	max-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**max-prob** *number*

Synopsis	Drop probability to increase at low start-average
Context	<b>configure</b> qos slope-policy <i>string</i> low-slope max-prob <i>number</i>
Tree	max-prob
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**start-avg** *number*

Synopsis	Buffer percentage after which drop probability starts to rise above zero
Context	<b>configure</b> qos slope-policy <i>string</i> low-slope start-avg <i>number</i>
Tree	start-avg
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**time-average-factor** *number*

Synopsis	Weighting factor to calculate shared buffer utilization
Context	<b>configure</b> qos slope-policy <i>string</i> time-average-factor <i>number</i>
Tree	time-average-factor
Range	0 to 15
Default	7
Introduced	16.0.R1
Platforms	All

### 3.38 redundancy commands

```

configure
- redundancy
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp-evpn
    - ethernet-segment
      - activation-timer number
      - apply-groups reference
      - apply-groups-exclude reference
      - boot-timer number
    - bgp-mh
      - apply-groups reference
      - apply-groups-exclude reference
      - site
        - activation-timer number
        - boot-timer number
        - min-down-timer number
  - cert-sync boolean
  - mgmt-ethernet
    - revert number
  - multi-chassis
    - ipsec-domain number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - designated-role keyword
      - priority number
      - revertive boolean
      - tunnel-group reference
    - options
      - sub-mgmt
        - apply-groups reference
        - apply-groups-exclude reference
        - dhcp-lease-time-threshold number
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - description string
    - mc-endpoint
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd boolean
      - boot-timer number
      - hold-on-neighbor-failure number
      - keep-alive-interval number
      - passive-mode boolean
      - system-priority number
  - mc-ipsec
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - discovery-interval
      - boot number
      - interval-secs number
    - domain reference
      - admin-state keyword

```

configure redundancy multi-chassis peer mc-ipsec domain apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- hold-on-neighbor-failure number
- keep-alive-interval number
- tunnel-group reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - peer-group number
  - priority number
- mc-lag
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - hold-on-neighbor-failure number
  - keep-alive-interval number
  - lag reference
    - apply-groups reference
    - apply-groups-exclude reference
    - lacp-key number
    - remote-lag string
    - source-bmac-lsb (keyword | bmac-lsb)
    - system-id string
    - system-priority number
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - in-band-control-path
      - debounce boolean
      - dst-ip string
      - interface string
      - max-debounce-time number
      - service-name string
    - path-b
      - apply-groups reference
      - apply-groups-exclude reference
      - range start number end number
      - wildcard-saps boolean
    - path-excl
      - apply-groups reference
      - apply-groups-exclude reference
      - range start number end number
      - wildcard-saps boolean
    - ring-node string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - dst-ip string
      - interval number
      - service-name string
      - src-ip string
      - src-mac (keyword | ring-node-mac-address)
      - vlan string
      - srrp-instance number
      - type keyword
  - peer-name string
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- sync
  - admin-state keyword
  - apply-groups reference

```

## configure redundancy multi-chassis peer sync apply-groups-exclude

```

- apply-groups-exclude reference
- diameter-node
  - node reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
- igmp boolean
- igmp-snooping boolean
- ipsec boolean
- l2tp boolean
- local-dhcp-server boolean
- mc-ring boolean
- mld boolean
- mld-snooping boolean
- nat
  - nat-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
- pim-snooping
  - saps boolean
  - spoke-sdps boolean
- python boolean
- srrp boolean
- sub-host-trk boolean
- sub-mgmt
  - ipoe boolean
  - pppoe boolean
  - wlan-gw boolean
- tags
  - lag reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - port reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - pw-port reference
    - apply-groups reference
    - apply-groups-exclude reference
    - range start string end string
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
  - sdp number
    - apply-groups reference
    - apply-groups-exclude reference
    - range start number end number
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - sync-tag string
- track-srrp number
  - apply-groups reference

```

---

configure redundancy multi-chassis peer sync track-srrp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **l2tp-tunnel-id-range**
  - **end** *number*
  - **start** *number*
- **transport-encryption**
  - **application** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **keychain** *reference*
- **tunnel-group** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **sync-tag** *string*
- **rollback-sync** *keyword*
- **srrp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auto-srrp-id-range**
    - **end** *number*
    - **start** *number*
- **switchover-exec** *string*
- **synchronize** *keyword*



### 3.38.1 redundancy command descriptions

#### redundancy

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">redundancy</a>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	All

#### bgp-evpn

Synopsis	Enter the <b>bgp-evpn</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-evpn</a>
Tree	<a href="#">bgp-evpn</a>
Introduced	16.0.R1
Platforms	All

#### ethernet-segment

Synopsis	Enter the <b>ethernet-segment</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-evpn</a> <a href="#">ethernet-segment</a>
Tree	<a href="#">ethernet-segment</a>
Introduced	16.0.R1
Platforms	All

#### activation-timer *number*

Synopsis	Time before Ethernet segment activated on DF-elected PE
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-evpn</a> <a href="#">ethernet-segment</a> <a href="#">activation-timer</a> <i>number</i>
Tree	<a href="#">activation-timer</a>
Range	0 to 100
Units	seconds
Default	3
Introduced	16.0.R1

Platforms All

### **boot-timer** *number*

Synopsis	Time before BGP EVPN multi-homing DF election algorithm
Context	<b>configure</b> <b>redundancy</b> <b>bgp-evpn</b> <b>ethernet-segment</b> <b>boot-timer</b> <i>number</i>
Tree	<b>boot-timer</b>
Description	<p>This command allows the necessary time for the control plane protocols to come up upon PE boot-up before bringing up the ESs and running the DF algorithm.</p> <p>The following considerations apply to this command:</p> <ul style="list-style-type: none"> <li>• The <b>boot-timer</b> command must provide enough time to allow the IOMs and BGP sessions to come up before exchanging ES routes and running the DF election for each EVI or ISID.</li> <li>• The boot-timer is synchronized across CPMs and is relative to the system up time; it is not changed or reset upon CPM switchover.</li> <li>• The boot-timer is never interrupted (the <b>es-activation-timer</b>, however, can be interrupted if there is a new event triggering the DF election).</li> <li>• The boot-timer runs per EVI or ISID on the ESs in the system. If the system up time (time the system has been up since the last reboot) is less than the <b>boot-timer</b> value, the system does not run the DF election for any EVI or ISID. When the <b>boot-timer</b> value expires, the DF election runs, and if the system is elected DF for the EVI or ISID, the <b>es-activation-timer</b> is triggered.</li> <li>• The system does not advertise ES routes until the boot timer expires, which guarantees that the peer ES PEs only run the DF election when the PE is ready to become the DF, if required.</li> </ul>
Range	0 to 1800
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **bgp-mh**

Synopsis	Enter the <b>bgp-mh</b> context
Context	<b>configure</b> <b>redundancy</b> <b>bgp-mh</b>
Tree	<b>bgp-mh</b>
Introduced	16.0.R1
Platforms	All

## site

Synopsis	Enter the <b>site</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-mh</a> <a href="#">site</a>
Tree	<a href="#">site</a>
Introduced	16.0.R1
Platforms	All

## activation-timer *number*

Synopsis	Time to wait for BGP updates from remote PEs
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-mh</a> <a href="#">site</a> <a href="#">activation-timer</a> <i>number</i>
Tree	<a href="#">activation-timer</a>
Range	0 to 100
Units	seconds
Default	2
Introduced	16.0.R1
Platforms	All

## boot-timer *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-mh</a> <a href="#">site</a> <a href="#">boot-timer</a> <i>number</i>
Tree	<a href="#">boot-timer</a>
Range	0 to 600
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

## min-down-timer *number*

Synopsis	Min downtime for BGP multi-homing site after transition
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">bgp-mh</a> <a href="#">site</a> <a href="#">min-down-timer</a> <i>number</i>
Tree	<a href="#">min-down-timer</a>

Description	<p>This command configures the BGP multi-homing site minimum down time. When this value is set and the site goes operationally down, it remains operationally down for at least the length of time configured by this timer, regardless of whether other state changes might cause the site to go operationally up. This timer is restarted every time the site transitions from operationally up to down.</p> <p>This timer is optimized in the following circumstances:</p> <ul style="list-style-type: none"> <li>• If the site goes down on the DF but there are no BGP multi-homing peers with the same site in an up state, this timer is not used.</li> <li>• If the site goes down on the DF but there are no active BGP multi-homing peers, this timer is not used.</li> <li>• If this timer is active and a BGP multihoming update is received from the DF indicating its site is down, this timer is immediately terminated and the BGP multihoming algorithm is triggered to determine whether this PE should become the DF.</li> </ul>
Range	1 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

### **cert-sync** *boolean*

Synopsis	Automatically synchronize certificate files
Context	<b>configure</b> <a href="#">redundancy</a> <b>cert-sync</b> <i>boolean</i>
Tree	<a href="#">cert-sync</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **mgmt-ethernet**

Synopsis	Enable the <b>mgmt-ethernet</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <b>mgmt-ethernet</b>
Tree	<a href="#">mgmt-ethernet</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**revert number**

Synopsis	Time before reverting the management CPM Ethernet port
Context	<b>configure</b> <a href="#">redundancy mgmt-ethernet revert number</a>
Tree	<a href="#">revert</a>
Description	This command allows the administrator to control when to revert to the management Ethernet port of the primary CPM after it comes up again.
Range	1 to 300
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**multi-chassis**

Synopsis	Enter the <b>multi-chassis</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis</a>
Tree	<a href="#">multi-chassis</a>
Description	Commands in this context configure the attributes of multi-chassis redundancy.
Introduced	16.0.R1
Platforms	All

**ipsec-domain [id] number**

Synopsis	Enter the <b>ipsec-domain</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis ipsec-domain number</a>
Tree	<a href="#">ipsec-domain</a>
Description	Commands in this context configure an IPsec domain used for N:M IPsec redundancy.
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	IPsec domain ID
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Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i>
Tree	<a href="#">ipsec-domain</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **designated-role** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designated role for the IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i> <a href="#">designated-role</a> <i>keyword</i>
Tree	<a href="#">designated-role</a>
Description	This command configures the designated role of the tunnel group in the IPsec domain.
Options	standby, active
Default	standby
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** *number*

Synopsis	Priority for the IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i> <a href="#">priority</a> <i>number</i>

Tree	<a href="#">priority</a>
Description	This command configures the priority for the tunnel group in the IPsec domain. The node with the higher priority is more likely to be elected as active within the domain.
Range	0 to 255
Default	100
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **revertive** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable revertive behavior for the tunnel group
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i> <a href="#">revertive</a> <i>boolean</i>
Tree	<a href="#">revertive</a>
Description	When configured to <b>true</b> , the router enables the revertive behavior of the tunnel group, which allows a router in an N:M domain to automatically take over as the active router in the domain when it becomes eligible to do so.  When configured to <b>false</b> , the revertive behavior of the tunnel group is disabled.
Default	false
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-group** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Tunnel group ID for an IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i> <a href="#">tunnel-group</a> <i>reference</i>
Tree	<a href="#">tunnel-group</a>
Description	This command specifies the tunnel group ID for the IPsec domain.
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">tunnel-group</a> <i>number</i>
Introduced	22.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis Enter the **options** context

Context **configure** [redundancy multi-chassis options](#)

Tree [options](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-mgmt

Synopsis Enter the **sub-mgmt** context

Context **configure** [redundancy multi-chassis options sub-mgmt](#)

Tree [sub-mgmt](#)

Description Commands in this context configure subscriber management options for multi-chassis redundancy.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp-leasedtime-threshold *number*

Synopsis DHCP lease threshold to skip MCS synchronization

Context **configure** [redundancy multi-chassis options sub-mgmt dhcp-leasedtime-threshold](#) *number*

Tree [dhcp-leasedtime-threshold](#)

Description This command configures the DHCP lease time threshold to skip MCS synchronization. DHCP leases for the **sub-mgmt** MCS applications are eligible to skip synchronization if the committed lease time is less than the active threshold on a multi-chassis peer. The active threshold is the minimum value of the thresholds configured on the nodes at each end of a multi-chassis peer. The threshold is inactive when it is unconfigured on at least one end of the multi-chassis peer.

Range 0 to 86400

Units seconds

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**peer** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Description	This command configures the IP address of the peer in a redundant multi-chassis setup, and enters the context for further application-specific configuration options.
Max. Instances	20
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Peer IP address
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the MC redundancy peer
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## authentication-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Authentication key used between the node and MC peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## mc-endpoint

Synopsis	Enable the <b>mc-endpoint</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-endpoint</a>
Tree	<a href="#">mc-endpoint</a>
Introduced	22.10.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the MC-EP
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-endpoint</a> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	All

### **bfd boolean**

Synopsis	Enable BFD detection for the MC-EP peering tunnel
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-endpoint bfd boolean</a>
Tree	<a href="#">bfd</a>
Description	When configured to <b>true</b> , the system uses Bidirectional Forwarding Detection (BFD) to control the state of the associated protocol interface, where the state of the protocol interface is tied to the state of the BFD session between the local and remote nodes.  The BFD settings are configured in the IP interface contexts.
Default	false
Introduced	22.10.R1
Platforms	All

### **boot-timer number**

Synopsis	Time to attempt connection before declaring failure
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-endpoint boot-timer number</a>
Tree	<a href="#">boot-timer</a>
Description	This command configures the time interval to attempt connection that applies after the node reboots. This command specifies the time the multi-chassis endpoint (MC-EP) protocol takes to establish a connection before declaring a connection failure with the remote peer. When the time interval expires, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	1 to 600
Units	seconds
Default	300
Introduced	22.10.R1
Platforms	All

**hold-on-neighbor-failure** *number*

Synopsis	Number of keepalive intervals to wait for packets
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-endpoint</b> <b>hold-on-neighbor-failure</b> <i>number</i>
Tree	<a href="#">hold-on-neighbor-failure</a>
Description	This command configures the number of keepalive intervals that the local node waits for packets from the MC-EP peer before declaring a connection failure. When the number of intervals is reached, all configured MC-EPs revert to single chassis behavior, activating the best local pseudowire.
Range	2 to 25
Default	3
Introduced	22.10.R1
Platforms	All

**keep-alive-interval** *number*

Synopsis	Interval for exchange of keepalive messages
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-endpoint</b> <b>keep-alive-interval</b> <i>number</i>
Tree	<a href="#">keep-alive-interval</a>
Description	This command configures the interval for which keepalive messages are exchanged between two systems participating as MC-EP when BFD is not active. The fast keepalive messages are used to detect remote node failure.
Range	5 to 500
Default	10
Introduced	22.10.R1
Platforms	All

**passive-mode** *boolean*

Synopsis	Enable passive mode for the MC-EP tunnel
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-endpoint</b> <b>passive-mode</b> <i>boolean</i>
Tree	<a href="#">passive-mode</a>
Description	When configured to <b>true</b> , the system enables passive mode behavior for the MC-EP protocol. Assuming the remote pair is configured with regular MC-EP in passive mode, the MC-EP pair remains dormant until two of the pseudowires in an MC-EP are activated by the remote PEs.

When one pseudowire is active, the dormant MC-EP pair becomes active. The regular mechanism to select the best pseudowire between the active pair is initiated, and the system blocks the Rx and Tx directions of the other pseudowire.

Default	false
Introduced	22.10.R1
Platforms	All

### **system-priority** *number*

Synopsis	System priority of the MC-EP
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-endpoint system-priority</a> <i>number</i>
Tree	<a href="#">system-priority</a>
Description	This command configures the system priority of the MC-EP. The peer configured with the lower value is selected as the master. If the system priority values are equal, the peer with the higher system ID (chassis MAC address) becomes the master.
Range	0 to 255
Default	0
Introduced	22.10.R1
Platforms	All

### **mc-ipsec**

Synopsis	Enable the <b>mc-ipsec</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a>
Tree	<a href="#">mc-ipsec</a>
Description	This command enables the context to configure multi-chassis peer parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ipsec bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### discovery-interval

Synopsis	Enter the <b>discovery-interval</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ipsec discovery-interval</a>
Tree	<a href="#">discovery-interval</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### boot number

Synopsis	Maximum interval after system bootup
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ipsec discovery-interval boot</a> <i>number</i>
Tree	<a href="#">boot</a>
Range	1 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### interval-secs number

Synopsis	Maximum discovery interval
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ipsec discovery-interval interval-secs</a> <i>number</i>
Tree	<a href="#">interval-secs</a>
Range	1 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**domain** [*id*] *reference*

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a> <a href="#">domain</a> <i>reference</i>
Tree	<a href="#">domain</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *reference*

Synopsis	IPsec domain ID
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a> <a href="#">domain</a> <i>reference</i>
Tree	<a href="#">domain</a>
Reference	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">ipsec-domain</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the IPsec domain
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a> <a href="#">domain</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hold-on-neighbor-failure** *number*

Synopsis	Hold time on neighbor failure
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec</a> <a href="#">hold-on-neighbor-failure</a> <i>number</i>

Tree	<a href="#">hold-on-neighbor-failure</a>
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keep-alive-interval** *number*

Synopsis	Keepalive interval
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec keep-alive-interval</a> <i>number</i>
Tree	<a href="#">keep-alive-interval</a>
Range	5 to 500
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-group** [[tunnel-group-id](#)] *reference*

Synopsis	Enter the <b>tunnel-group</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec tunnel-group</a> <i>reference</i>
Tree	<a href="#">tunnel-group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tunnel-group-id]** *reference*

Synopsis	Tunnel group ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ipsec tunnel-group</a> <i>reference</i>
Tree	<a href="#">tunnel-group</a>
Reference	<b>configure</b> <a href="#">isa tunnel-group</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the peer IPsec tunnel group

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec tunnel-group](#) *reference* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-group** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Peer tunnel group

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec tunnel-group](#) *reference* [peer-group](#) *number*

Tree [peer-group](#)

Range 1 to 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** *number*

Synopsis Tunnel group priority

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ipsec tunnel-group](#) *reference* [priority](#) *number*

Tree [priority](#)

Range 0 to 255

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mc-lag

Synopsis	Enter the <b>mc-lag</b> context
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-lag</b>
Tree	<b>mc-lag</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of MC-LAG
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-lag</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## hold-on-neighbor-failure *number*

Synopsis	Time to wait for packets before node failure assumed
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-lag</b> <b>hold-on-neighbor-failure</b> <i>number</i>
Tree	<b>hold-on-neighbor-failure</b>
Range	2 to 25
Default	3
Introduced	16.0.R1
Platforms	All

## keep-alive-interval *number*

Synopsis	Keepalive timer value
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-lag</b> <b>keep-alive-interval</b> <i>number</i>

Tree	<a href="#">keep-alive-interval</a>
Range	5 to 500
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### **lag** [[lag-name](#)] *reference*

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag</a> <a href="#">lag</a> <i>reference</i>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

### **[lag-name]** *reference*

Synopsis	LAG name
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag</a> <a href="#">lag</a> <i>reference</i>
Tree	<a href="#">lag</a>
Reference	<b>configure</b> <a href="#">lag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

### **lACP-key** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key based on the remote MC-LAG
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag</a> <a href="#">lag</a> <i>reference</i> <a href="#">lACP-key</a> <i>number</i>
Tree	<a href="#">lACP-key</a>

Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **remote-lag** *string*

Synopsis	LAG name
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag lag</a> <i>reference</i> <a href="#">remote-lag string</a>
Tree	<a href="#">remote-lag</a>
String Length	1 to 27
Introduced	16.0.R1
Platforms	All

### **source-bmac-lsb** (*keyword* | *bmac-lsb*)

Synopsis	MAC address value to apply to all ingress traffic
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag lag</a> <i>reference</i> <a href="#">source-bmac-lsb</a> ( <i>keyword</i>   <i>bmac-lsb</i> )
Tree	<a href="#">source-bmac-lsb</a>
Options	use-lacp-key
Introduced	16.0.R1
Platforms	All

### **system-id** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ID based on the remote MC-LAG
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-lag lag</a> <i>reference</i> <a href="#">system-id string</a>
Tree	<a href="#">system-id</a>
Introduced	16.0.R1
Platforms	All

**system-priority** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Priority based on the remote MC-LAG
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-lag lag reference</a> <b>system-priority</b> <i>number</i>
Tree	<a href="#">system-priority</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**mc-ring**

Synopsis	Enter the <b>mc-ring</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring</a>
Tree	<a href="#">mc-ring</a>
Introduced	16.0.R1
Platforms	All

**ring** [[sync-tag](#)] *string*

Synopsis	Enter the <b>ring</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i>
Tree	<a href="#">ring</a>
Introduced	16.0.R1
Platforms	All

**[sync-tag]** *string*

Synopsis	Tag for synchronizing with the multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i>

Tree	<a href="#">ring</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the multi-chassis ring
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **in-band-control-path**

Synopsis	Enter the <b>in-band-control-path</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>in-band-control-path</b>
Tree	<a href="#">in-band-control-path</a>
Introduced	16.0.R1
Platforms	All

### **debounce** *boolean*

Synopsis	Enable inband control path debouncing
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>in-band-control-path</b> <b>debounce</b> <i>boolean</i>
Tree	<a href="#">debounce</a>
Default	true
Introduced	16.0.R1
Platforms	All

**dst-ip string**

Synopsis	IP address of the in-band control path peer
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <i>string</i> <a href="#">in-band-control-path</a> <b>dst-ip</b> <i>string</i>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	All

**interface string**

Synopsis	Interface to verify in-band control path
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <i>string</i> <a href="#">in-band-control-path</a> <b>interface</b> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**max-debounce-time number**

Synopsis	Maximum delay after a failure when debouncing is active
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <i>string</i> <a href="#">in-band-control-path</a> <b>max-debounce-time</b> <i>number</i>
Tree	<a href="#">max-debounce-time</a>
Range	5 to 200
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**service-name string**

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <i>string</i> <a href="#">in-band-control-path</a> <b>service-name</b> <i>string</i>

Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

## path-b

Synopsis	Enter the <b>path-b</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i> <b>path-b</b>
Tree	<a href="#">path-b</a>
Introduced	16.0.R1
Platforms	All

## range start number end number

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i> <a href="#">path-b</a> <b>range start number end number</b>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

## start number

Synopsis	Lower bound of the VLAN range
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring ring</a> <i>string</i> <a href="#">path-b</a> <b>range start number end number</b>
Tree	<a href="#">range</a>
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**end number**

Synopsis	Upper bound of the VLAN range
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <a href="#">string</a> <a href="#">path-b</a> <a href="#">range start</a> <a href="#">number</a> <a href="#">end</a> <a href="#">number</a>
Tree	<a href="#">range</a>
Range	0 to 4094
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**wildcard-saps boolean**

Synopsis	Include the SAPs starting with a wildcard '*'
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <a href="#">string</a> <a href="#">path-b</a> <a href="#">wildcard-saps</a> <a href="#">boolean</a>
Tree	<a href="#">wildcard-saps</a>
Default	false
Introduced	16.0.R4
Platforms	All

**path-excl**

Synopsis	Enter the <b>path-excl</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <a href="#">string</a> <a href="#">path-excl</a>
Tree	<a href="#">path-excl</a>
Introduced	16.0.R1
Platforms	All

**range start number end number**

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring ring</a> <a href="#">string</a> <a href="#">path-excl</a> <a href="#">range start</a> <a href="#">number</a> <a href="#">end</a> <a href="#">number</a>
Tree	<a href="#">range</a>
Introduced	16.0.R1

Platforms All

### **start number**

Synopsis Lower bound of the VLAN range

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [range](#) [start number](#) [end number](#)

Tree [range](#)

Range 0 to 4094

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **end number**

Synopsis Upper bound of the VLAN range

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [range](#) [start number](#) [end number](#)

Tree [range](#)

Range 0 to 4094

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **wildcard-saps boolean**

Synopsis Include the SAPs starting with a wildcard '\*\*'

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [mc-ring ring](#) [string](#) [path-excl](#) [wildcard-saps](#) [boolean](#)

Tree [wildcard-saps](#)

Default false

Introduced 16.0.R4

Platforms All

**ring-node** [*name*] *string*

Synopsis	Enter the <b>ring-node</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i>
Tree	<a href="#">ring-node</a>
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Name of the multi-chassis ring access node
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i>
Tree	<a href="#">ring-node</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the ring node verification
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**dst-ip** *string*

Synopsis	Destination IP address for access node connection
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i> <a href="#">dst-ip</a> <i>string</i>
Tree	<a href="#">dst-ip</a>

Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Connection verification interval
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>ring-node</b> <i>string</i> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 6000
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

### **service-name** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>ring-node</b> <i>string</i> <b>service-name</b> <i>string</i>
Tree	<b>service-name</b>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **src-ip** *string*

Synopsis	Source IP address for access node connection
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>mc-ring</b> <b>ring</b> <i>string</i> <b>ring-node</b> <i>string</i> <b>src-ip</b> <i>string</i>
Tree	<b>src-ip</b>
Introduced	16.0.R1
Platforms	All

**src-mac** (*keyword* | *ring-node-mac-address*)

Synopsis	Source MAC address for the access node connection
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i> <b>src-mac</b> ( <i>keyword</i>   <i>ring-node-mac-address</i> )
Tree	<a href="#">src-mac</a>
Options	system-mac-address
Default	system-mac-address
Introduced	16.0.R1
Platforms	All

**vlan** *string*

Synopsis	VLAN ID for access node connection
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <a href="#">ring-node</a> <i>string</i> <b>vlan</b> <i>string</i>
Tree	<a href="#">vlan</a>
String Length	1 to 11
Introduced	16.0.R1
Platforms	All

**srrp-instance** [*id*] *number*

Synopsis	Add a list entry for <b>srrp-instance</b>
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>srrp-instance</b> <i>number</i>
Tree	<a href="#">srrp-instance</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[id]** *number*

Synopsis	SRRP instance ID
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>srrp-instance</b> <i>number</i>

Tree	<a href="#">srrp-instance</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of the multi-chassis ring
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">mc-ring</a> <a href="#">ring</a> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	layer-2, layer-3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **peer-name** *string*

Synopsis	Multi-chassis peer name
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">peer-name</a> <i>string</i>
Tree	<a href="#">peer-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source address to communicate with the MC peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">source-address</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	All

## sync

Synopsis	Enable the <b>sync</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync</a>
Tree	<a href="#">sync</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the peer synchronization
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## diameter-node

Synopsis	Enable the <b>diameter-node</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync diameter-node</a>
Tree	<a href="#">diameter-node</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**node** [*host-name*] *reference*

Synopsis	Enter the <b>node</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync diameter-node node</a> <i>reference</i>
Tree	<a href="#">node</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[host-name]** *reference*

Synopsis	Origin-Host of the node
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync diameter-node node</a> <i>reference</i>
Tree	<a href="#">node</a>
Reference	<b>configure</b> <a href="#">aaa diameter node</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sync-tag** *string*

Synopsis	Sync tag to be used for synchronization
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync diameter-node node</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**igmp** *boolean*

Synopsis	Synchronize IGMP protocol information with the MC peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync igmp</a> <i>boolean</i>
Tree	<a href="#">igmp</a>



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Default	false
Introduced	16.0.R1
Platforms	All

### **igmp-snooping** *boolean*

Synopsis	Synchronize IGMP snooping information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync</a> <b>igmp-snooping</b> <i>boolean</i>
Tree	<a href="#">igmp-snooping</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipsec** *boolean*

Synopsis	Synchronize IPsec information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync</a> <b>ipsec</b> <i>boolean</i>
Tree	<a href="#">ipsec</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **l2tp** *boolean*

Synopsis	Synchronize Layer Two Tunnel Protocol (L2TP)
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync</a> <b>l2tp</b> <i>boolean</i>
Tree	<a href="#">l2tp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **local-dhcp-server** *boolean*

Synopsis	Synchronize DHCP Server information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync local-dhcp-server</a> <i>boolean</i>
Tree	<a href="#">local-dhcp-server</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mc-ring** *boolean*

Synopsis	Synchronize ring information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync mc-ring</a> <i>boolean</i>
Tree	<a href="#">mc-ring</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mld** *boolean*

Synopsis	Synchronize MLD protocol information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync mld</a> <i>boolean</i>
Tree	<a href="#">mld</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mld-snooping** *boolean*

Synopsis	Synchronize MLD snooping information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync mld-snooping</a> <i>boolean</i>
Tree	<a href="#">mld-snooping</a>
Default	false

Introduced	16.0.R1
Platforms	All

**nat**

Synopsis	Enable the <b>nat</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync nat</a>
Tree	<a href="#">nat</a>
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group [id] reference**

Synopsis	Enter the <b>nat-group</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync nat nat-group reference</a>
Tree	<a href="#">nat-group</a>
Description	Commands in this context configure multi-chassis synchronization (MCS) for a NAT group. NAT group health information is exchanged between the pair of redundant NAT nodes. The system elects one of the nodes as the active node for the NAT group and the other node becomes the standby node.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] reference**

Synopsis	NAT group ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync nat nat-group reference</a>
Tree	<a href="#">nat-group</a>
Reference	<b>configure</b> <a href="#">isa nat-group number</a>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sync-tag *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group synchronization tag
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync nat nat-group</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
Description	This command configures the synchronization tag for the NAT group. The tag must match the synchronization tag for the NAT group on the peering node.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pim-snooping

Synopsis	Enter the <b>pim-snooping</b> context
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync pim-snooping</a>
Tree	<a href="#">pim-snooping</a>
Introduced	16.0.R1
Platforms	All

## saps *boolean*

Synopsis	Synchronize PIM snooping data with the multi-chassis peer on SDP endpoints
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync pim-snooping saps</a> <i>boolean</i>
Tree	<a href="#">saps</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **spoke-sdps** *boolean*

Synopsis	Synchronize spoke SDPs with the multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync pim-snooping spoke-sdps</a> <i>boolean</i>
Tree	<a href="#">spoke-sdps</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **python** *boolean*

Synopsis	Synchronize Python
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync python</a> <i>boolean</i>
Tree	<a href="#">python</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **srrp** *boolean*

Synopsis	Synchronize SRRP information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync srrp</a> <i>boolean</i>
Tree	<a href="#">srrp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sub-host-trk** *boolean*

Synopsis	Synchronize subscriber host tracking information
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync sub-host-trk</a> <i>boolean</i>
Tree	<a href="#">sub-host-trk</a>
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-mgmt

Synopsis	Enter the <b>sub-mgmt</b> context
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync</b> <b>sub-mgmt</b>
Tree	<b>sub-mgmt</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe *boolean*

Synopsis	Synchronize subscriber management IPoE information
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync</b> <b>sub-mgmt</b> <b>ipoe</b> <i>boolean</i>
Tree	<b>ipoe</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pppoe *boolean*

Synopsis	Synchronize subscriber management PPPoE information
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync</b> <b>sub-mgmt</b> <b>pppoe</b> <i>boolean</i>
Tree	<b>pppoe</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## wlan-gw *boolean*

Synopsis	Synchronize state between BNGs for ESM over soft-GRE
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync</b> <b>sub-mgmt</b> <b>wlan-gw</b> <i>boolean</i>

Tree	<a href="#">wlan-gw</a>
Description	When configured to <b>true</b> , this command enables the synchronization of ESM state and tunnel state to an MCS peer for ESM over soft-GRE tunnels.
Default	false
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tags

Synopsis	Enter the <b>tags</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags</a>
Tree	<a href="#">tags</a>
Introduced	16.0.R1
Platforms	All

## lag [[lag-name](#)] *reference*

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag</a> <i>reference</i>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

## [[lag-name](#)] *reference*

Synopsis	LAG name
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag</a> <i>reference</i>
Tree	<a href="#">lag</a>
Reference	<b>configure lag</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**range** *start string end string*

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync</b> <b>tags</b> <b>lag</b> <i>reference</i> <b>range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i>
Tree	<b>range</b>
Introduced	16.0.R1
Platforms	All

**start** *string*

Synopsis	First encapsulation value
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync</b> <b>tags</b> <b>lag</b> <i>reference</i> <b>range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i>
Tree	<b>range</b>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end** *string*

Synopsis	Last encapsulation value
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync</b> <b>tags</b> <b>lag</b> <i>reference</i> <b>range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i>
Tree	<b>range</b>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sync-tag** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag reference range start string end string sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **sync-tag** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags lag reference sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **port** [*id*] *reference*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags port reference</a>
Tree	<a href="#">port</a>
Introduced	16.0.R1
Platforms	All

### **[id]** *reference*

Synopsis	ID of port to be synchronized with multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags port reference</a>

Tree	<a href="#">port</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **range** [start](#) *string* [end](#) *string*

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <a href="#">tags</a> <a href="#">port</a> <a href="#">reference</a> <a href="#">range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

### **start** *string*

Synopsis	First encapsulation value
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <a href="#">tags</a> <a href="#">port</a> <a href="#">reference</a> <a href="#">range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">range</a>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **end** *string*

Synopsis	Last encapsulation value
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">sync</a> <a href="#">tags</a> <a href="#">port</a> <a href="#">reference</a> <a href="#">range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">range</a>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Synchronization tag

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [port reference](#) [range start string end string](#) **sync-tag** *string*

Tree [sync-tag](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Synchronization tag

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) [port reference](#) **sync-tag** *string*

Tree [sync-tag](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

### **pw-port** [[id](#)] *reference*

Synopsis Enter the **pw-port** list instance

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync tags](#) **pw-port** *reference*

Tree [pw-port](#)

Introduced 16.0.R4

Platforms All

### [id] reference

Synopsis ID of pseudowire port to be synchronized with MC peer

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync](#) [tags](#) [pw-port](#) [reference](#)

Tree [pw-port](#)

Reference **configure** [pw-port](#) *number*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### range start string end string

Synopsis Enter the **range** list instance

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync](#) [tags](#) [pw-port](#) [reference](#) [range](#) [start](#) [string](#) [end](#) [string](#)

Tree [range](#)

Introduced 16.0.R4

Platforms All

### start string

Synopsis First encapsulation value

Context **configure** [redundancy](#) [multi-chassis peer](#) ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#)) [sync](#) [tags](#) [pw-port](#) [reference](#) [range](#) [start](#) [string](#) [end](#) [string](#)

Tree [range](#)

String Length 1 to 11

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### end string

Synopsis Last encapsulation value

Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags pw-port reference range start string end string</a>
Tree	<a href="#">range</a>
String Length	1 to 11
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags pw-port reference range start string end string sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags pw-port reference sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	All

**sdp [id] number**

Synopsis	Enter the <b>sdp</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags sdp number</a>
Tree	<a href="#">sdp</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	ID of SDP to be synchronized with multi-chassis peer
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags sdp number</a>
Tree	<a href="#">sdp</a>
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**range start number end number**

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags sdp number range start number end number</a>
Tree	<a href="#">range</a>
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	First virtual circuit ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags sdp number range start number end number</a>
Tree	<a href="#">range</a>
Range	1 to 4294967295
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Last virtual circuit ID
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags sdp number range start number end number</a>
Tree	<a href="#">range</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sync-tag string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync tags sdp number range start number end number sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**sync-tag string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag
----------	---------------------

Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync</b> <b>tags</b> <b>sdp</b> <i>number</i> <b>sync-tag</b> <i>string</i>
Tree	<b>sync-tag</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **track-srrp** [*id*] *number*

Synopsis	Enter the <b>track-srrp</b> list instance
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync</b> <b>track-srrp</b> <i>number</i>
Tree	<b>track-srrp</b>
Introduced	16.0.R1
Platforms	All

### [*id*] *number*

Synopsis	Tracked SRRP instance ID
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync</b> <b>track-srrp</b> <i>number</i>
Tree	<b>track-srrp</b>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **I2tp-tunnel-id-range**

Synopsis	Enter the <b>I2tp-tunnel-id-range</b> context
Context	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>sync</b> <b>track-srrp</b> <i>number</i> <b>I2tp-tunnel-id-range</b>
Tree	<b>I2tp-tunnel-id-range</b>
Introduced	16.0.R1
Platforms	All



**end number**

Synopsis	Upper bound of the L2TP tunnel ID range
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync track-srrp number l2tp-tunnel-id-range end number</a>
Tree	<a href="#">end</a>
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of the L2TP tunnel ID range
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync track-srrp number l2tp-tunnel-id-range start number</a>
Tree	<a href="#">start</a>
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

**transport-encryption**

Synopsis	Enter the <b>transport-encryption</b> context
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync transport-encryption</a>
Tree	<a href="#">transport-encryption</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**application** [[application-id](#)] *keyword*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync transport-encryption application keyword</a>
Tree	<a href="#">application</a>
Description	Commands in this context configure the MCS application for transport encryption. The application-id configures an application and a keychain defines the key used for the encryption.

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[application-id]** *keyword*

Synopsis	Application using transport encryption
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync transport-encryption application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Description	This command configures an MCS application for the transport encryption method.
Options	igmp, igmp-snooping, sub-mgmt-ipoe, srrp, mc-ring, mld-snooping, dhcp-server, sub-host-trk, sub-mgmt-pppoe, ipsec, mld, python, l2tp, diam-proxy, pim-snpg-sap, pim-snpg-sdp, diam-node, nat, sub-mgmt-wlan-gw
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keychain** *reference*

Synopsis	Keychain containing the authentication keys
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync transport-encryption application</a> <i>keyword</i> <a href="#">keychain</a> <i>reference</i>
Tree	<a href="#">keychain</a>
Description	This command specifies a keychain that contains authentication keys for the application.
Reference	<b>configure</b> <a href="#">system security keychains</a> <a href="#">keychain</a> <i>string</i>
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-group** [[tunnel-group-id](#)] *number*

Synopsis	Enter the <b>tunnel-group</b> list instance
Context	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <a href="#">sync tunnel-group</a> <i>number</i>
Tree	<a href="#">tunnel-group</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[tunnel-group-id] number**

Synopsis Multi-active tunnel group ID

Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **sync** **tunnel-group** *number*

Tree **tunnel-group**

Range 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag string**

Synopsis Tag to synchronize the tunnel group with the MC peer

Context **configure** **redundancy** **multi-chassis** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **sync** **tunnel-group** *number* **sync-tag** *string*

Tree **sync-tag**

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rollback-sync keyword**

Synopsis Parameters for redundancy rollback synchronization

Context **configure** **redundancy** **rollback-sync** *keyword*

Tree **rollback-sync**

Options *rollback-single*, *rollback-all*

Introduced 16.0.R1

Platforms All

### **srrp**

Synopsis Enter the **srrp** context

Context	<b>configure</b> <a href="#">redundancy srrp</a>
Tree	<a href="#">srrp</a>
Description	Commands in this context configure system attributes for SRRP.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **auto-srrp-id-range**

Synopsis	Enable the <b>auto-srrp-id-range</b> context
Context	<b>configure</b> <a href="#">redundancy srrp auto-srrp-id-range</a>
Tree	<a href="#">auto-srrp-id-range</a>
Description	Commands in this context reserve IDs for internal SRRP objects created for inter-BNG-UP resiliency. Manually provisioned SRRP instances cannot use these reserved IDs.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the ID range
Context	<b>configure</b> <a href="#">redundancy srrp auto-srrp-id-range end number</a>
Tree	<a href="#">end</a>
Range	2 to 4294967295
Default	4294967295
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	Lower bound of the ID range
Context	<b>configure</b> <a href="#">redundancy srrp auto-srrp-id-range start number</a>
Tree	<a href="#">start</a>
Range	1 to 4294967294
Default	2147483648
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**switchover-exec** *string*

Synopsis	CLI script file executed after a redundancy switchover
Context	<b>configure</b> <b>redundancy</b> <b>switchover-exec</b> <i>string</i>
Tree	<b>switchover-exec</b>
Description	<p>This command specifies the location and name of the CLI script file executed following a redundancy switchover from the previously active CPM card. A switchover can happen because of a fatal failure or by manual action.</p> <p>The CLI script file can contain commands for environment settings, classic CLI debug configuration (excluding mirroring settings), and other commands not maintained by the configuration redundancy.</p> <p>The following commands are not supported in the switchover-exec file: <b>clear</b>, <b>configure</b>, <b>candidate</b>, <b>oam</b>, <b>tools</b>, <b>oam</b>, <b>ping</b>, <b>traceroute</b>, <b>mstat</b>, <b>mtrace</b>, and <b>mrinfo</b>.</p>
String Length	1 to 100
Introduced	16.0.R1
Platforms	All

**synchronize** *keyword*

Synopsis	Parameters for redundancy synchronization
Context	<b>configure</b> <b>redundancy</b> <b>synchronize</b> <i>keyword</i>
Tree	<b>synchronize</b>
Options	off, config, boot-env
Introduced	16.0.R1
Platforms	All

### 3.39 router commands

```

configure
- router string
- aggregates
  - aggregate (ipv4-prefix | ipv6-prefix)
    - aggregator
      - address string
      - as-number number
    - apply-groups reference
    - apply-groups-exclude reference
    - as-set boolean
    - blackhole
      - generate-icmp boolean
    - community string
    - description string
    - discard-component-communities boolean
    - indirect (ipv4-address-no-zone | ipv6-address-no-zone)
    - local-preference number
    - policy reference
    - summary-only boolean
    - tunnel-group number
  - apply-groups reference
  - apply-groups-exclude reference
- allow-bgp-to-igp-export boolean
- allow-icmp-redirect boolean
- allow-icmp6-redirect boolean
- apply-groups reference
- apply-groups-exclude reference
- autonomous-system number
- bfd
  - seamless-bfd
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - discriminator number
- bgp
  - add-paths
    - evpn
      - receive boolean
      - send (number | keyword)
    - ipv4
      - receive boolean
      - send (number | keyword)
    - ipv6
      - receive boolean
      - send (number | keyword)
    - label-ipv4
      - receive boolean
      - send (number | keyword)
    - label-ipv6
      - receive boolean
      - send (number | keyword)
    - mcast-vpn-ipv4
      - receive boolean
      - send number
    - mcast-vpn-ipv6
      - receive boolean
      - send number
    - mvpn-ipv4
      - receive boolean

```

configure router bgp add-paths mvpn-ipv4 send

```

    - send number
  - mvpn-ipv6
    - receive boolean
    - send number
  - vpn-ipv4
    - receive boolean
    - send (number | keyword)
  - vpn-ipv6
    - receive boolean
    - send (number | keyword)
- admin-state keyword
- advertise-external
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- aggregator-id-zero boolean
- apply-groups reference
- apply-groups-exclude reference
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- backup-path
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
- best-path-selection
  - always-compare-med
    - med-value keyword
    - strict-as boolean
  - as-path-ignore
    - ipv4 boolean
    - ipv6 boolean
    - l2-vpn boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - mcast-ipv4 boolean
    - mcast-ipv6 boolean
    - mvpn-ipv4 boolean
    - mvpn-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - compare-origin-validation-state boolean
  - d-path-length-ignore boolean
  - deterministic-med boolean
- ebgp-ibgp-equal
  - evpn boolean
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- ignore-nh-metric boolean
- ignore-router-id

```

configure router bgp best-path-selection ignore-router-id include-internal

```

- include-internal
  - mvpn-ipv4 boolean
  - mvpn-ipv6 boolean
- origin-invalid-unusable boolean
- bfd-liveness boolean
- bfd-strict-mode
- advertise
  - holdtime number
- next-hop-reachability boolean
- bgp-tunnel-metric
  - prefer-aigp boolean
  - prefer-med boolean
  - value number
- bgp-tunnel-preference number
- block-prefix-sid boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- convergence
  - family keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - max-wait-to-advertise number
  - min-wait-to-advertise number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
  - initial-wait number
  - max-wait number
  - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- description string
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
  - export boolean
  - import boolean
- egress-peer-engineering
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- enforce-first-as boolean
- error-handling
  - update-fault-tolerance boolean
- export
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- extended-nh-encoding
  - ipv4 boolean
  - label-ipv4 boolean
  - vpn-ipv4 boolean
- family
  - bgp-ls boolean
  - evpn boolean

```



## configure router bgp family flow-ipv4

- **flow-ipv4** *boolean*
- **flow-ipv6** *boolean*
- **flow-vpn-ipv4** *boolean*
- **flow-vpn-ipv6** *boolean*
- **ipv4** *boolean*
- **ipv6** *boolean*
- **l2-vpn** *boolean*
- **label-ipv4** *boolean*
- **label-ipv6** *boolean*
- **mcast-ipv4** *boolean*
- **mcast-ipv6** *boolean*
- **mcast-vpn-ipv4** *boolean*
- **mcast-vpn-ipv6** *boolean*
- **mdt-safi** *boolean*
- **ms-pw** *boolean*
- **mvpn-ipv4** *boolean*
- **mvpn-ipv6** *boolean*
- **route-target** *boolean*
- **sr-policy-ipv4** *boolean*
- **sr-policy-ipv6** *boolean*
- **vpn-ipv4** *boolean*
- **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **flowspec**
  - **validate-dest-prefix** *boolean*
  - **validate-redirect-ip** *boolean*
- **graceful-restart**
  - **gr-notification** *boolean*
- **long-lived**
  - **advertise-stale-to-all-neighbors** *boolean*
  - **advertised-stale-time** *number*
  - **family** *keyword*
    - **advertised-stale-time** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **helper-override-stale-time** *number*
  - **forwarding-bits-set** *keyword*
  - **helper-override-restart-time** *number*
  - **helper-override-stale-time** *number*
  - **without-no-export** *boolean*
- **restart-time** *number*
- **stale-routes-time** *number*
- **group** *string*
  - **add-paths**
    - **evpn**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **ipv4**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **ipv6**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **label-ipv4**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **label-ipv6**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **mcast-vpn-ipv4**
      - **receive** *boolean*
      - **send** *number*
    - **mcast-vpn-ipv6**
      - **receive** *boolean*

configure router bgp group add-paths mcast-vpn-ipv6 send

```

- send number
- mvpn-ipv4
  - receive boolean
  - send number
- mvpn-ipv6
  - receive boolean
  - send number
- vpn-ipv4
  - receive boolean
  - send (number | keyword)
- vpn-ipv6
  - receive boolean
  - send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- bfd-strict-mode
  - advertise
    - holdtime number
  - next-hop-reachability boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-recv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean
- description string
- dynamic-neighbor
  - interface string
    - allowed-peer-as string
    - apply-groups reference
    - apply-groups-exclude reference

```

configure router bgp group dynamic-neighbor interface max-sessions

```

- max-sessions number
- match
- prefix (ipv4-prefix | ipv6-prefix)
  - allowed-peer-as string
  - apply-groups reference
  - apply-groups-exclude reference
- dynamic-neighbor-limit number
- ebgp-default-reject-policy
- export boolean
- import boolean
- egress-engineering
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- egress-peer-engineering-label-unicast boolean
- enforce-first-as boolean
- error-handling
- update-fault-tolerance boolean
- export
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- extended-nh-encoding
- ipv4 boolean
- label-ipv4 boolean
- vpn-ipv4 boolean
- family
- bgp-ls boolean
- evpn boolean
- flow-ipv4 boolean
- flow-ipv6 boolean
- flow-vpn-ipv4 boolean
- flow-vpn-ipv6 boolean
- ipv4 boolean
- ipv6 boolean
- l2-vpn boolean
- label-ipv4 boolean
- label-ipv6 boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- mcast-vpn-ipv4 boolean
- mcast-vpn-ipv6 boolean
- mdt-safi boolean
- ms-pw boolean
- mvpn-ipv4 boolean
- mvpn-ipv6 boolean
- route-target boolean
- sr-policy-ipv4 boolean
- sr-policy-ipv6 boolean
- vpn-ipv4 boolean
- vpn-ipv6 boolean
- fast-external-failover boolean
- graceful-restart
- gr-notification boolean
- long-lived
- advertise-stale-to-all-neighbors boolean
- advertised-stale-time number
- family keyword
- advertised-stale-time number
- apply-groups reference
- apply-groups-exclude reference
- helper-override-stale-time number
- forwarding-bits-set keyword
- helper-override-restart-time number

```

configure router bgp group graceful-restart long-lived helper-override-stale-time

```

    - helper-override-stale-time number
    - without-no-export boolean
  - restart-time number
  - stale-routes-time number
- hold-time
  - minimum-hold-time number
  - seconds number
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
  - accept-from-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - add-to-received-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - aggregate-used-paths
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
  - send-to-ebgp
    - ipv4 boolean
    - ipv6 boolean
    - label-ipv4 boolean
    - label-ipv6 boolean
    - vpn-ipv4 boolean
    - vpn-ipv6 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
  - admin-state keyword
  - all-stations boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - route-monitoring
    - post-policy boolean
    - pre-policy boolean
  - station reference
- multihop number
- multipath-eligible boolean

```

## configure router bgp group next-hop-self

- **next-hop-self** *boolean*
- **next-hop-unchanged**
  - **evpn** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **origin-validation**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
- **outbound-route-filtering**
  - **extended-community**
    - **accept-orf** *boolean*
    - **send-orf**
      - **route-target** *string*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hold-excess** *number*
  - **idle-timeout** *number*
  - **log-only** *boolean*
  - **maximum** *number*
  - **post-import** *boolean*
  - **threshold** *number*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **segment-routing-v6**
  - **route-advertisement**
    - **drop-routes-with-srv6-tlvs** *boolean*
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **strip-srv6-tlvs** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **static-group** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-nexthop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **hold-time**
  - **minimum-hold-time** *number*
  - **seconds** *number*
- **ibgp-multipath** *boolean*
- **import**

## configure router bgp import apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **inter-as-vpn** *boolean*
- **keepalive** *number*
- **label-allocation**
  - **label-ipv6**
    - **explicit-null** *boolean*
- **label-preference** *number*
- **link-state-route-export** *boolean*
- **link-state-route-import** *boolean*
- **local-as**
  - **as-number** *number*
  - **prepend-global-as** *boolean*
  - **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*
- **med-out** (*number* | *keyword*)
- **min-route-advertisement** *number*
- **monitor**
  - **admin-state** *keyword*
  - **all-stations** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **route-monitoring**
    - **post-policy** *boolean*
    - **pre-policy** *boolean*
  - **station** *reference*
- **mp-bgp-keep** *boolean*
- **multihop** *number*
- **multipath**
  - **ebgp** *number*
  - **family** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ebgp** *number*
    - **ibgp** *number*
    - **max-paths** *number*
    - **restrict** *keyword*
    - **unequal-cost** *boolean*
  - **ibgp** *number*
  - **max-paths** *number*
  - **restrict** *keyword*
  - **unequal-cost** *boolean*
- **mvpn-vrf-import-subtype-new** *boolean*
- **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
  - **add-paths**
    - **evpn**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **ipv4**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **ipv6**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **label-ipv4**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)
    - **label-ipv6**
      - **receive** *boolean*
      - **send** (*number* | *keyword*)

configure router bgp neighbor add-paths mcast-vpn-ipv4

```

- mcast-vpn-ipv4
  - receive boolean
  - send number
- mcast-vpn-ipv6
  - receive boolean
  - send number
- mvpn-ipv4
  - receive boolean
  - send number
- mvpn-ipv6
  - receive boolean
  - send number
- vpn-ipv4
  - receive boolean
  - send (number | keyword)
- vpn-ipv6
  - receive boolean
  - send (number | keyword)
- admin-state keyword
- advertise-inactive boolean
- advertise-ipv6-next-hops
  - evpn boolean
  - ipv4 boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- advertise-ldp-prefix boolean
- aggregator-id-zero boolean
- aigp boolean
- apply-groups reference
- apply-groups-exclude reference
- as-override boolean
- asn-4-byte boolean
- authentication-key string
- authentication-keychain reference
- bfd-liveness boolean
- bfd-strict-mode
  - advertise
    - holdtime number
  - next-hop-reachability boolean
- block-prefix-sid boolean
- capability-negotiation boolean
- client-reflect boolean
- cluster
  - allow-local-fallback boolean
  - cluster-id string
  - orr-location number
- connect-retry number
- damp-peer-oscillations
  - error-interval number
  - idle-hold-time
    - initial-wait number
    - max-wait number
    - second-wait number
- damping boolean
- def-rcv-evpn-encap keyword
- default-label-preference
  - ebgp number
  - ibgp number
- default-preference
  - ebgp number
  - ibgp number
- default-route-target boolean

```

## configure router bgp neighbor description

- **description** *string*
- **ebgp-default-reject-policy**
  - **export** *boolean*
  - **import** *boolean*
- **egress-engineering**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **egress-peer-engineering-label-unicast** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
  - **update-fault-tolerance** *boolean*
- **export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
  - **ipv4** *boolean*
  - **label-ipv4** *boolean*
  - **vpn-ipv4** *boolean*
- **family**
  - **bgp-ls** *boolean*
  - **evpn** *boolean*
  - **flow-ipv4** *boolean*
  - **flow-ipv6** *boolean*
  - **flow-vpn-ipv4** *boolean*
  - **flow-vpn-ipv6** *boolean*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **l2-vpn** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
  - **mcast-ipv4** *boolean*
  - **mcast-ipv6** *boolean*
  - **mcast-vpn-ipv4** *boolean*
  - **mcast-vpn-ipv6** *boolean*
  - **mdt-safi** *boolean*
  - **ms-pw** *boolean*
  - **mvpn-ipv4** *boolean*
  - **mvpn-ipv6** *boolean*
  - **route-target** *boolean*
  - **sr-policy-ipv4** *boolean*
  - **sr-policy-ipv6** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **graceful-restart**
  - **gr-notification** *boolean*
  - **long-lived**
    - **advertise-stale-to-all-neighbors** *boolean*
    - **advertised-stale-time** *number*
    - **family** *keyword*
      - **advertised-stale-time** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **helper-override-stale-time** *number*
    - **forwarding-bits-set** *keyword*
    - **helper-override-restart-time** *number*
    - **helper-override-stale-time** *number*
    - **without-no-export** *boolean*
  - **restart-time** *number*
  - **stale-routes-time** *number*
- **group** *reference*
- **hold-time**



configure router bgp neighbor hold-time minimum-hold-time

- **minimum-hold-time** *number*
- **seconds** *number*
- **import**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **initial-send-delay-zero** *boolean*
- **keepalive** *number*
- **l2vpn-cisco-interop** *boolean*
- **label-preference** *number*
- **link-bandwidth**
  - **accept-from-ebgp**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **label-ipv6** *boolean*
    - **vpn-ipv4** *boolean*
    - **vpn-ipv6** *boolean*
  - **add-to-received-ebgp**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **label-ipv6** *boolean*
    - **vpn-ipv4** *boolean*
    - **vpn-ipv6** *boolean*
  - **aggregate-used-paths**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **label-ipv6** *boolean*
    - **vpn-ipv4** *boolean*
    - **vpn-ipv6** *boolean*
  - **send-to-ebgp**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **label-ipv6** *boolean*
    - **vpn-ipv4** *boolean*
    - **vpn-ipv6** *boolean*
- **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)
- **local-as**
  - **as-number** *number*
  - **prepend-global-as** *boolean*
  - **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*
- **med-out** (*number* | *keyword*)
- **min-route-advertisement** *number*
- **monitor**
  - **admin-state** *keyword*
  - **all-stations** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **route-monitoring**
    - **post-policy** *boolean*
    - **pre-policy** *boolean*
  - **station** *reference*
- **multihop** *number*
- **multipath-eligible** *boolean*
- **next-hop-self** *boolean*
- **next-hop-unchanged**
  - **evpn** *boolean*
  - **label-ipv4** *boolean*

configure router bgp neighbor next-hop-unchanged label-ipv6

- **label-ipv6** *boolean*
- **vpn-ipv4** *boolean*
- **vpn-ipv6** *boolean*
- **origin-validation**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
  - **label-ipv6** *boolean*
- **outbound-route-filtering**
  - **extended-community**
    - **accept-orf** *boolean*
    - **send-orf**
      - **route-target** *string*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-creation-type** *keyword*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hold-excess** *number*
  - **idle-timeout** *number*
  - **log-only** *boolean*
  - **maximum** *number*
  - **post-import** *boolean*
  - **threshold** *number*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **segment-routing-v6**
  - **route-advertisement**
    - **drop-routes-with-srv6-tlvs** *boolean*
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **strip-srv6-tlvs** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-nexthop** *boolean*
- **tll-security** *number*
- **type** *keyword*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **neighbor-trust**
  - **evpn** *boolean*
  - **vpn-ipv4** *boolean*
  - **vpn-ipv6** *boolean*
- **next-hop-resolution**
  - **allow-unresolved-leaking** *boolean*
  - **labeled-routes**
    - **allow-static** *boolean*
    - **rr-use-route-table** *boolean*

configure router bgp next-hop-resolution labeled-routes transport-tunnel

- **transport-tunnel**
  - **family** *keyword*
    - **allow-flex-algo-fallback** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **enforce-strict-tunnel-tagging** *boolean*
    - **resolution** *keyword*
    - **resolution-filter**
      - **bgp** *boolean*
      - **ldp** *boolean*
      - **mpls-fwd-policy** *boolean*
      - **rib-api** *boolean*
      - **rsvp** *boolean*
      - **sr-isis** *boolean*
      - **sr-ospf** *boolean*
      - **sr-ospf3** *boolean*
      - **sr-policy** *boolean*
      - **sr-te** *boolean*
      - **udp** *boolean*
  - **use-bgp-routes**
    - **label-ipv6-explicit-null** *boolean*
- **policy** *reference*
- **shortcut-tunnel**
  - **family** *keyword*
    - **allow-flex-algo-fallback** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **disallow-igp** *boolean*
    - **enforce-strict-tunnel-tagging** *boolean*
    - **resolution** *keyword*
    - **resolution-filter**
      - **bgp** *boolean*
      - **ldp** *boolean*
      - **mpls-fwd-policy** *boolean*
      - **rib-api** *boolean*
      - **rsvp** *boolean*
      - **sr-isis** *boolean*
      - **sr-ospf** *boolean*
      - **sr-ospf3** *boolean*
      - **sr-policy** *boolean*
      - **sr-te** *boolean*
  - **use-bgp-routes** *boolean*
- **use-leaked-routes**
  - **static** *boolean*
- **vpn-family-policy** *reference*
- **weighted-ecmp** *boolean*
- **optimal-route-reflection**
  - **location** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **primary-ip-address** *string*
    - **primary-ipv6-address** *string*
    - **secondary-ip-address** *string*
    - **secondary-ipv6-address** *string*
    - **tertiary-ip-address** *string*
    - **tertiary-ipv6-address** *string*
- **spf-wait**
  - **initial-wait** *number*
  - **max-wait** *number*
  - **second-wait** *number*
- **outbound-route-filtering**
  - **extended-community**
    - **accept-orf** *boolean*
    - **send-orf**

configure router bgp outbound-route-filtering extended-community send-orf route-target

```

    - route-target string
- override-tunnel-elc boolean
- path-mtu-discovery boolean
- peer-ip-tracking boolean
- peer-tracking-policy reference
- preference number
- purge-timer number
- rapid-update
  - evpn boolean
  - l2-vpn boolean
  - label-ipv4 boolean
  - label-ipv6 boolean
  - mcast-vpn-ipv4 boolean
  - mcast-vpn-ipv6 boolean
  - mdt-safi boolean
  - mvpn-ipv4 boolean
  - mvpn-ipv6 boolean
  - vpn-ipv4 boolean
  - vpn-ipv6 boolean
- rapid-withdrawal boolean
- remove-private
  - limited boolean
  - replace boolean
  - skip-peer-as boolean
- rib-management
  - ipv4
    - leak-import
      - apply-groups reference
      - apply-groups-exclude reference
      - policy (policy-expr-string | string)
    - route-table-import
      - apply-groups reference
      - apply-groups-exclude reference
      - policy-name reference
  - ipv6
    - leak-import
      - apply-groups reference
      - apply-groups-exclude reference
      - policy (policy-expr-string | string)
    - route-table-import
      - apply-groups reference
      - apply-groups-exclude reference
      - policy-name reference
  - label-ipv4
    - leak-import
      - apply-groups reference
      - apply-groups-exclude reference
      - policy (policy-expr-string | string)
    - route-table-import
      - apply-groups reference
      - apply-groups-exclude reference
      - policy-name reference
  - label-ipv6
    - route-table-import
      - apply-groups reference
      - apply-groups-exclude reference
      - policy-name reference
- route-table-install boolean
- route-target-list string
- router-id string
- rr-vpn-forwarding boolean
- segment-routing
  - admin-state keyword
  - apply-groups reference

```

configure router bgp segment-routing apply-groups-exclude

- **apply-groups-exclude** *reference*
- **prefix-sid-range**
  - **global**
  - **max-index** *number*
  - **start-label** *number*
- **segment-routing-v6**
  - **family** *keyword*
  - **add-srv6-tlvs**
    - **locator-name** *reference*
    - **micro-segment-locator-name** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ignore-received-srv6-tlvs** *boolean*
  - **resolution** *keyword*
  - **source-address** *string*
- **selective-label-ip** *keyword*
- **selective-label-ip-prioritization** *boolean*
- **selective-label-ipv4-install** *boolean*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **sr-policy-import** *boolean*
- **subconfed-vpn-forwarding** *boolean*
- **tcp-mss** *number*
- **third-party-nexthop** *boolean*
- **vpn-apply-export** *boolean*
- **vpn-apply-import** *boolean*
- **bier**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bfd-liveness** *keyword*
  - **fast-reroute** *boolean*
  - **template** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sub-domain** *number* **end** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **bfr-id** *number*
    - **multi-topology** *keyword*
    - **prefix** *string*
- **class-forwarding** *boolean*
- **confederation**
  - **confed-as-num** *number*
  - **members** *number*
- **description** *string*
- **dhcp-server**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dhcpv4** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **failover**
      - **admin-state** *keyword*

configure router dhcp-server dhcpv4 failover apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- ignore-mclt-on-takeover boolean
- maximum-client-lead-time number
- partner-down-delay number
- peer reference
  - apply-groups reference
  - apply-groups-exclude reference
  - sync-tag string
- startup-wait-time number
- force-renews boolean
- lease-hold
  - additional-scenarios
    - internal-lease-ipsec boolean
    - solicited-release boolean
  - time number
- pool string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - failover
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ignore-mclt-on-takeover boolean
    - maximum-client-lead-time number
    - partner-down-delay number
    - peer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - sync-tag string
    - startup-wait-time number
  - max-lease-time number
  - min-lease-time number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number
  - nak-non-matching-subnet boolean
  - offer-time number
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - duration number
      - empty
      - hex-string string
      - ipv4-address string
      - netbios-node-type keyword
  - subnet string
    - address-range string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - failover-control-type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drain boolean
  - exclude-addresses string end string
  - maximum-declined number
  - minimum-free
    - absolute number
    - event-when-depleted boolean
    - percent number

```

configure router dhcp-server dhcpv4 pool subnet options

```

- options
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
- pool-selection
  - use-gi-address
    - scope keyword
  - use-pool-from-client
    - delimiter string
- user-db reference
- user-identification keyword
- dhcpv6 string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- auto-provisioned boolean
- defaults
  - apply-groups reference
  - apply-groups-exclude reference
  - options
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - domain-string string
      - duration number
      - empty
      - hex-string string
      - ipv6-address string
  - preferred-lifetime number
  - rebind-time number
  - renew-time number
  - valid-lifetime number
- description string
- failover
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ignore-mclt-on-takeover boolean
  - maximum-client-lead-time number
  - partner-down-delay number
  - peer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sync-tag string
  - startup-wait-time number
- ignore-rapid-commit boolean
- interface-id-mapping boolean
- lease-hold
  - additional-scenarios
    - internal-lease-ipsec boolean
    - solicited-release boolean
  - time number
- lease-query boolean
- pool string
  - apply-groups reference
  - apply-groups-exclude reference
  - delegated-prefix

```

configure router dhcp-server dhcpv6 pool delegated-prefix length

- **length** *number*
- **maximum** *number*
- **minimum** *number*
- **description** *string*
- **exclude-prefix** *string*
- **failover**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ignore-mclt-on-takeover** *boolean*
  - **maximum-client-lead-time** *number*
  - **partner-down-delay** *number*
  - **peer** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sync-tag** *string*
  - **startup-wait-time** *number*
- **options**
  - **option** (*number* | *keyword*)
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ascii-string** *string*
    - **domain-string** *string*
    - **duration** *number*
    - **empty**
    - **hex-string** *string*
    - **ipv6-address** *string*
- **prefix** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **drain** *boolean*
  - **failover-control-type** *keyword*
  - **options**
    - **option** (*number* | *keyword*)
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ascii-string** *string*
      - **domain-string** *string*
      - **duration** *number*
      - **empty**
      - **hex-string** *string*
      - **ipv6-address** *string*
  - **preferred-lifetime** *number*
  - **prefix-length-threshold** *number*
    - **absolute** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **event-when-depleted** *boolean*
    - **percent** *number*
  - **prefix-type**
    - **pd** *boolean*
    - **wan-host** *boolean*
  - **rebind-time** *number*
  - **renew-time** *number*
  - **valid-lifetime** *number*
- **prefix-length-threshold** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **event-when-depleted** *boolean*
  - **minimum-free-percent** *number*
- **pool-selection**
  - **use-link-address**
  - **scope** *keyword*
- **use-pool-from-client**



configure router dhcp-server dhcpv6 pool-selection use-pool-from-client delimiter

```

    - delimiter string
  - server-id
    - apply-groups reference
    - apply-groups-exclude reference
    - duid-enterprise
      - ascii-string string
      - hex-string string
      - duid-link-local
    - user-identification keyword
- dns
  - redirect-vprn
    - service reference
    - apply-groups reference
    - apply-groups-exclude reference
    - preference number
- ecmp number
- entropy-label boolean
- fib-priority keyword
- fib-telemetry boolean
- firewall
  - apply-groups reference
  - apply-groups-exclude reference
  - domain string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - dhcpv6-server
    - name string
    - router-instance string
  - nat-group reference
  - prefix string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - wlan-gw-group reference
- flowspec
  - apply-groups reference
  - apply-groups-exclude reference
  - filter-cam-type keyword
  - ip-filter-max-size number
  - ipv6-filter-max-size number
- gtm
  - apply-groups reference
  - apply-groups-exclude reference
  - mvpn boolean
  - provider-tunnel
    - inclusive
      - rsvp
        - admin-state keyword
        - lsp-template reference
    - selective
      - data-delay-interval number
      - data-threshold
        - group-prefix (ipv4-prefix | ipv6-prefix)
          - apply-groups reference
          - apply-groups-exclude reference
          - pe-threshold-add number
          - pe-threshold-delete number
          - threshold number
      - maximum-p2mp-spmsi number
      - rsvp
        - admin-state keyword
        - lsp-template reference
- gtp

```

configure router gtp s11

```

- s11
  - interface reference
  - apn-policy reference
  - apply-groups reference
  - apply-groups-exclude reference
  - peer-profile-map
    - prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - peer-profile reference
  - upf-data-endpoint
    - apply-groups reference
    - apply-groups-exclude reference
    - fpe reference
    - interface reference
  - uplink
    - apn string
    - apply-groups reference
    - apply-groups-exclude reference
    - pdn-type keyword
    - peer-profile-map
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - peer-profile reference
  - icmp-tunneling boolean
  - igmp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - forwarding-group-interface forwarding-service string group-interface-
name reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - mcac
      - bandwidth
        - mandatory (number | keyword)
        - total (number | keyword)
      - interface-policy reference
      - policy reference
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - query-source-address string
    - router-alert-check boolean
    - sub-hosts-only boolean
    - subnet-check boolean
    - version keyword
  - group-if-query-source-address string
  - group-interface reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - mcac
      - bandwidth

```

configure router igmp group-interface mcac bandwidth mandatory

```

    - mandatory (number | keyword)
    - total (number | keyword)
  - interface-policy reference
  - policy reference
- query-interval number
- query-last-member-interval number
- query-response-interval number
- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - mc-constraints
      - level number
        - apply-groups reference
        - apply-groups-exclude reference
        - bandwidth number
      - number-down number
        - apply-groups reference
        - apply-groups-exclude reference
        - level number
      - use-lag-port-weight boolean
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - redundant-mcast boolean
  - router-alert-check boolean
- ssm-translate
  - group-range start string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - group-range start string end string step string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - subnet-check boolean
  - version keyword
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- ssm-translate

```

configure router igmp ssm-translate group-range

- **group-range** *start* *string* *end* *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source** *string*
- **tunnel-interface**
  - **ldp-p2mp-root** *reference* **sender-address** *reference*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **static**
      - **group** *string*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **source** *string*
        - **starg**
  - **rsvp-p2mp-root** *reference*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **static**
      - **group** *string*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **source** *string*
        - **starg**
- **interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cflowd-parameters**
    - **sampling** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **direction** *keyword*
      - **sample-profile** (*keyword* | *number*)
      - **type** *keyword*
  - **cpu-protection** *reference*
  - **description** *string*
  - **dist-cpu-protection** *reference*
  - **egress**
    - **filter**
      - **ip** *reference*
      - **ipv6** *reference*
  - **eth-cfm**
    - **mep** *md-admin-name* *reference* *ma-admin-name* *reference* **mep-id** *number*
      - **admin-state** *keyword*
      - **alarm-notification**
        - **fng-alarm-time** *number*
        - **fng-reset-time** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ccm** *boolean*
      - **ccm-ltm-priority** *number*
      - **ccm-padding-size** *number*
      - **ccm-tlv-ignore** *keyword*
      - **collect-lmm-fc-stats**
        - **fc** *keyword*
        - **fc-in-profile** *keyword*
      - **collect-lmm-stats** *boolean*
      - **description** *string*
      - **eth-test**
        - **bit-error-threshold** *number*
        - **test-pattern**
          - **crc-tlv** *boolean*

configure router interface eth-cfm mep eth-test test-pattern pattern

- **pattern** *keyword*
- **facility-fault** *boolean*
- **grace**
  - **eth-ed**
    - **max-rx-defect-window** *number*
    - **priority** *number*
    - **rx-eth-ed** *boolean*
    - **tx-eth-ed** *boolean*
  - **eth-vsm-grace**
    - **rx-eth-vsm-grace** *boolean*
    - **tx-eth-vsm-grace** *boolean*
- **lbm-svc-act-responder** *boolean*
- **low-priority-defect** *keyword*
- **mac-address** *string*
- **one-way-delay-threshold** *number*
- **external-reference**
  - **openconfig**
    - **subinterface** *number*
- **flavor** *keyword*
- **gre-termination** *boolean*
- **hold-time**
  - **ipv4**
    - **down**
      - **init-only** *boolean*
      - **seconds** *number*
    - **up**
      - **seconds** *number*
  - **ipv6**
    - **down**
      - **init-only** *boolean*
      - **seconds** *number*
    - **up**
      - **seconds** *number*
- **if-attribute**
  - **admin-group** *reference*
  - **delay**
    - **delay-selection** *keyword*
    - **dynamic**
      - **measurement-template** *reference*
      - **twamp-light**
        - **ipv4**
          - **admin-state** *keyword*
          - **destination** *string*
          - **source** *string*
        - **ipv6**
          - **admin-state** *keyword*
          - **destination** *string*
          - **source** *string*
    - **static** *number*
  - **srlg-group** *reference*
- **ingress**
  - **destination-class-lookup** *boolean*
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
  - **policy-accounting** *reference*
- **ingress-stats** *boolean*
- **ip-mtu** *number*
- **ipsec**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip-exception** *reference*
  - **ipsec-tunnel** *string*

configure router interface ipsec ipsec-tunnel admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd
  - bfd-designate boolean
  - bfd-liveness
    - dest-ip string
    - interface string
    - service-name string
- clear-df-bit boolean
- copy-traffic-class-upon-decapsulation boolean
- description string
- encapsulated-ip-mtu number
- icmp-generation
  - frag-required
    - admin-state keyword
    - interval number
    - message-count number
- icmp6-generation
  - packet-too-big
    - admin-state keyword
    - interval number
    - message-count number
- ip-mtu number
- key-exchange
  - dynamic
    - auto-establish boolean
    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
- local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-zone)
- max-history-key-records
  - esp number
  - ike number
- pmtu-discovery-aging number
- private-sap number
- private-service string
- private-tcp-mss-adjust number
- propagate-pmtu-v4 boolean
- propagate-pmtu-v6 boolean
- public-tcp-mss-adjust (number | keyword)
- remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
- replay-window number
- security-policy
  - id number

```

configure router interface ipsec ipsec-tunnel security-policy strict-match

```

    - strict-match boolean
  - ipv6-exception reference
  - public-sap number
  - tunnel-group reference
- ipv4
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - option-82
      - action keyword
      - circuit-id
        - ascii-tuple
        - if-name
        - ifindex
        - none
        - port-id
        - vlan-ascii-tuple
      - remote-id
        - ascii-string string
        - mac
        - none
      - vendor-specific-option
        - client-mac-address boolean
        - pool-name boolean
        - port-id boolean
        - service-id boolean
        - string string
        - system-id boolean
    - python-policy reference
    - relay-plain-bootp boolean
    - release-include-gi-address boolean
    - server string
    - src-ip-addr keyword
    - trusted boolean
  - icmp
    - mask-reply boolean
    - param-problem
      - admin-state keyword
      - number number
      - seconds number
    - redirects
      - admin-state keyword
      - number number
      - seconds number
    - ttl-expired
      - admin-state keyword
      - number number
      - seconds number
    - unreachables
      - admin-state keyword
      - number number
      - seconds number
  - ip-helper-address string

```

configure router interface ipv4 local-dhcp-server

```

- local-dhcp-server reference
- neighbor-discovery
  - learn-unsolicited boolean
  - limit
    - log-only boolean
    - max-entries number
    - threshold number
  - local-proxy-arp boolean
  - proactive-refresh boolean
  - proxy-arp-policy reference
  - remote-proxy-arp boolean
  - retry-timer number
  - static-neighbor string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac-address string
  - static-neighbor-unnumbered
    - mac-address string
  - timeout number
- primary
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - broadcast keyword
  - gre-termination boolean
  - prefix-length number
  - track-srrp number
- qos-route-lookup keyword
- secondary string
  - apply-groups reference
  - apply-groups-exclude reference
  - broadcast keyword
  - igp-inhibit boolean
  - prefix-length number
  - track-srrp number
- tcp-mss number
- unnumbered
  - ip-address string
  - ip-int-name string
  - system
- urpf-check
  - ignore-default boolean
  - mode keyword
- vrrp number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - backup string
  - bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip string
    - interface-name string
    - service-name string
  - init-delay number
  - mac string
  - master-int-inherit boolean
  - message-interval number
  - monitor-oper-group reference
  - ntp-reply boolean
  - oper-group reference
  - owner boolean
  - passive boolean

```



configure router interface ipv4 vrrp ping-reply

- ping-reply *boolean*
- policy *reference*
- preempt *boolean*
- priority *number*
- ssh-reply *boolean*
- standby-forwarding *boolean*
- telnet-reply *boolean*
- traceroute-reply *boolean*
- ipv6
  - address *string*
  - apply-groups *reference*
  - apply-groups-exclude *reference*
  - duplicate-address-detection *boolean*
  - eui-64 *boolean*
  - prefix-length *number*
  - primary-preference *number*
  - track-srrp *number*
  - bfd
    - admin-state *keyword*
    - echo-receive *number*
    - multiplier *number*
    - receive *number*
    - transmit-interval *number*
    - type *keyword*
  - duplicate-address-detection *boolean*
  - forward-ipv4-packets *boolean*
  - icmp6
    - packet-too-big
      - admin-state *keyword*
      - number *number*
      - seconds *number*
    - param-problem
      - admin-state *keyword*
      - number *number*
      - seconds *number*
    - redirects
      - admin-state *keyword*
      - number *number*
      - seconds *number*
    - time-exceeded
      - admin-state *keyword*
      - number *number*
      - seconds *number*
    - unreachablees
      - admin-state *keyword*
      - number *number*
      - seconds *number*
  - link-local-address
    - address *string*
    - duplicate-address-detection *boolean*
  - local-dhcp-server *reference*
  - neighbor-discovery
    - learn-unsolicited *keyword*
    - limit
      - log-only *boolean*
      - max-entries *number*
      - threshold *number*
    - local-proxy-nd *boolean*
    - proactive-refresh *keyword*
    - proxy-nd-policy *reference*
    - reachable-time *number*
    - secure-nd
      - admin-state *keyword*
      - allow-unsecured-msgs *boolean*

configure router interface ipv6 neighbor-discovery secure-nd public-key-min-bits

```

    - public-key-min-bits number
    - security-parameter number
    - stale-time number
    - static-neighbor string
      - apply-groups reference
      - apply-groups-exclude reference
      - mac-address string
    - qos-route-lookup keyword
    - tcp-mss number
    - urpf-check
      - ignore-default boolean
      - mode keyword
    - vrrp number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - backup string
      - bfd-liveness
        - apply-groups reference
        - apply-groups-exclude reference
        - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
        - interface-name string
        - service-name string
      - init-delay number
      - mac string
      - master-int-inherit boolean
      - message-interval number
      - monitor-oper-group reference
      - ntp-reply boolean
      - oper-group reference
      - owner boolean
      - passive boolean
      - ping-reply boolean
      - policy reference
      - preempt boolean
      - priority number
      - standby-forwarding boolean
      - telnet-reply boolean
      - traceroute-reply boolean
    - lag
      - link-map-profile number
    - per-link-hash
      - class number
      - weight number
    - ldp-sync-timer
      - end-of-lib boolean
      - seconds number
    - load-balancing
      - flow-label-load-balancing boolean
      - ip-load-balancing keyword
      - lsr-load-balancing keyword
      - spi-load-balancing boolean
      - teid-load-balancing boolean
    - loopback
    - mac string
    - mac-accounting boolean
    - network-domains
      - network-domain reference
    - port (port-and-encap | keyword)
    - ptp-hw-assist
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - qos

```

## configure router interface qos apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **egress-instance** *number*
- **egress-port-redirect-group** *reference*
- **ingress-fp-redirect-group** *reference*
- **ingress-instance** *number*
- **network-policy** *reference*
- **strip-label** *boolean*
- **tos-marking-state** *keyword*
- **untrusted**
  - **default-forwarding** *keyword*
- **urpf-selected-vprns** *boolean*
- **vas-if-type** *keyword*
- **ipsec**
  - **multi-chassis-shunt-interface** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **next-hop**
      - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **multi-chassis-shunting-profile** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **peer** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **multi-chassis-shunt-interface** *reference*
  - **security-policy** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **entry** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **local-ip**
        - **address** *string*
        - **any** *boolean*
      - **local-ipv6**
        - **address** *string*
        - **any** *boolean*
      - **remote-ip**
        - **address** *string*
        - **any** *boolean*
      - **remote-ipv6**
        - **address** *string*
        - **any** *boolean*
- **ipv6**
  - **neighbor-discovery**
    - **reachable-time** *number*
    - **stale-time** *number*
  - **router-advertisement**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dns-options**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rdnss-lifetime** (*keyword | number*)
      - **server** *string*
  - **interface** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **current-hop-limit** *number*
    - **dns-options**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*

configure router ipv6 router-advertisement interface dns-options include-rdnss

```

- include-rdnss boolean
- rdnss-lifetime (number | keyword)
- server string
- managed-configuration boolean
- max-advertisement-interval number
- min-advertisement-interval number
- mtu number
- nd-router-preference keyword
- other-stateful-configuration boolean
- prefix string
- apply-groups reference
- apply-groups-exclude reference
- autonomous boolean
- on-link boolean
- preferred-lifetime (keyword | number)
- valid-lifetime (keyword | number)
- reachable-time number
- retransmit-time number
- router-lifetime number
- use-virtual-mac boolean
- ipv6-te-router-id
- interface reference
- isa-service-chaining
- apply-groups reference
- apply-groups-exclude reference
- nat-group number
- vxlan-vtep-range
- end (ipv4-address-no-zone | ipv6-address-no-zone)
- start (ipv4-address-no-zone | ipv6-address-no-zone)
- isis number
- admin-state keyword
- advertise-passive-only boolean
- advertise-router-capability keyword
- advertise-tunnel-link boolean
- all-l1isis string
- all-l2isis string
- apply-groups reference
- apply-groups-exclude reference
- area-address string
- authentication-check boolean
- authentication-key string
- authentication-keychain reference
- authentication-type keyword
- csnp-authentication boolean
- database-export
- bgp-ls-identifier
- value number
- igp-identifier number
- default-route-tag number
- entropy-label
- override-tunnel-elc boolean
- export-limit
- log-percent number
- number number
- export-policy reference
- flexible-algorithms
- admin-state keyword
- advertise-admin-group keyword
- flex-algo number
- advertise reference
- apply-groups reference
- apply-groups-exclude reference
- loopfree-alternate
- micro-loop-avoidance

```

configure router isis flexible-algorithms flex-algo participate

- **participate** *boolean*
- **graceful-restart**
  - **helper-mode** *boolean*
- **hello-authentication** *boolean*
- **hello-padding** *keyword*
- **ignore-attached-bit** *boolean*
- **ignore-lsp-errors** *boolean*
- **ignore-narrow-metric** *boolean*
- **igp-shortcut**
  - **admin-state** *keyword*
  - **allow-sr-over-srte** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tunnel-next-hop**
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **resolution** *keyword*
      - **resolution-filter**
        - **rsvp** *boolean*
        - **sr-te** *boolean*
- **iid-tlv** *boolean*
- **import-policy** *reference*
- **interface** *string*
  - **adjacency-set** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bfd-liveness**
    - **ipv4**
      - **include-bfd-tlv** *boolean*
    - **ipv6**
      - **include-bfd-tlv** *boolean*
  - **csnp-interval** *number*
  - **default-instance** *boolean*
  - **flex-algo** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ipv4-node-sid**
      - **index** *number*
      - **label** *number*
    - **ipv6-node-sid**
      - **index** *number*
      - **label** *number*
  - **hello-authentication** *boolean*
  - **hello-authentication-key** *string*
  - **hello-authentication-keychain** *reference*
  - **hello-authentication-type** *keyword*
  - **hello-padding** *keyword*
  - **interface-type** *keyword*
  - **ipv4-adjacency-sid**
    - **label** *number*
  - **ipv4-multicast** *boolean*
  - **ipv4-node-sid**
    - **clear-n-flag** *boolean*
    - **index** *number*
    - **label** *number*
  - **ipv6-adjacency-sid**
    - **label** *number*
  - **ipv6-multicast** *boolean*
  - **ipv6-node-sid**
    - **clear-n-flag** *boolean*
    - **index** *number*
    - **label** *number*

configure router isis interface ipv6-unicast

```

- ipv6-unicast boolean
- level keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - hello-authentication-key string
  - hello-authentication-keychain reference
  - hello-authentication-type keyword
  - hello-interval number
  - hello-multiplier number
  - hello-padding keyword
  - ipv4-multicast-metric number
  - ipv6-multicast-metric number
  - ipv6-unicast-metric number
  - metric number
  - passive boolean
  - priority number
  - sd-offset number
  - sf-offset number
- level-capability keyword
- load-balancing-weight number
- loopfree-alternate
  - exclude boolean
  - policy-map
    - route-nh-template reference
- lsp-pacing-interval number
- mesh-group
  - blocked
  - value number
- passive boolean
- retransmit-interval number
- sid-protection boolean
- tag number
- ipv4-multicast-routing keyword
- ipv4-routing boolean
- ipv6-multicast-routing keyword
- ipv6-routing keyword
- ldp-over-rsvp boolean
- ldp-sync boolean
- level keyword
  - advertise-router-capability boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-keychain reference
  - authentication-type keyword
  - bier
    - admin-state keyword
    - template reference
  - csnp-authentication boolean
  - database-export-exclude boolean
  - default-ipv4-multicast-metric number
  - default-ipv6-multicast-metric number
  - default-ipv6-unicast-metric number
  - default-metric number
  - external-preference number
  - hello-authentication boolean
  - hello-padding keyword
  - loopfree-alternate-exclude boolean
  - lsp-mtu-size number
  - preference number
  - psnp-authentication boolean
  - wide-metrics-only boolean
- level-capability keyword
- link-group string

```

## configure router isis link-group apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **level** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ipv4-multicast-metric-offset** *number*
  - **ipv4-unicast-metric-offset** *number*
  - **ipv6-multicast-metric-offset** *number*
  - **ipv6-unicast-metric-offset** *number*
  - **member** *reference*
  - **oper-members** *number*
  - **revert-members** *number*
- **loopfree-alternate**
  - **augment-route-table** *boolean*
  - **exclude**
    - **prefix-policy** *reference*
  - **multi-homed-prefix**
    - **preference** *keyword*
  - **remote-lfa**
    - **max-pq-cost** *number*
    - **node-protect**
      - **max-pq-nodes** *number*
  - **ti-lfa**
    - **max-sr-frr-labels** *number*
    - **max-srv6-frr-sids** *number*
    - **node-protect**
- **lsp-lifetime** *number*
- **lsp-minimum-remaining-lifetime** *number*
- **lsp-mtu-size** *number*
- **lsp-refresh**
  - **half-lifetime** *boolean*
  - **interval** *number*
- **mru-mismatch-detection** *boolean*
- **multi-topology**
  - **ipv4-multicast** *boolean*
  - **ipv6-multicast** *boolean*
  - **ipv6-unicast** *boolean*
- **multicast-import**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **overload**
  - **max-metric** *boolean*
- **overload-export-external** *boolean*
- **overload-export-interlevel** *boolean*
- **overload-fib-error-notify-only**
  - **retry** *number*
- **overload-include-locators** *boolean*
- **overload-on-boot**
  - **max-metric** *boolean*
  - **timeout** *number*
- **poi-tlv** *boolean*
- **prefix-attributes-tlv** *boolean*
- **prefix-limit**
  - **limit** *number*
  - **log-only** *boolean*
  - **overload-timeout** (*number* | *keyword*)
  - **warning-threshold** *number*
- **psnp-authentication** *boolean*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*
    - **tag** *number*

## configure router isis router-id

- **router-id** *string*
- **segment-routing**
  - **adj-sid-hold** (*number* | *keyword*)
  - **adjacency-set** *number*
    - **advertise** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **family** *keyword*
    - **parallel** *boolean*
    - **sid**
      - **label** *number*
  - **adjacency-sid**
    - **allocate-dual-sids** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **class-forwarding** *boolean*
  - **egress-statistics**
    - **adj-set** *boolean*
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **entropy-label** *boolean*
  - **export-tunnel-table** *keyword*
  - **ingress-statistics**
    - **adj-set** *boolean*
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **mapping-server**
    - **admin-state** *keyword*
    - **node-sid-map** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **clear-n-flag** *boolean*
      - **ip-prefix** *string*
      - **level-capability** *keyword*
      - **range** *number*
      - **set-flags**
        - **bit-s** *boolean*
  - **maximum-sid-depth**
    - **override-bmi** *number*
    - **override-erld** *number*
  - **micro-loop-avoidance**
    - **fib-delay** *number*
  - **multi-topology**
    - **mt2** *boolean*
  - **prefix-sid-range**
    - **global**
    - **max-index** *number*
    - **start-label** *number*
  - **srlb** *reference*
  - **tunnel-mtu** *number*
  - **tunnel-table-pref** *number*
- **segment-routing-v6**
  - **adj-sid-hold** (*number* | *keyword*)
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **locator** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **level** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **metric** *number*



configure router isis segment-routing-v6 locator level-capability

- **level-capability** *keyword*
- **multi-topology**
  - **mt0** *boolean*
  - **mt2** *boolean*
- **tag** *number*
- **micro-segment-locator** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **level** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **metric** *number*
- **level-capability** *keyword*
- **multi-topology**
  - **mt0** *boolean*
  - **mt2** *boolean*
- **tag** *number*
- **standard-multi-instance** *boolean*
- **strict-adjacency-check** *boolean*
- **summary-address** (*ipv4-prefix* | *ipv6-prefix*)
  - **algorithm** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **level-capability** *keyword*
  - **route-tag** *number*
- **suppress-attached-bit** *boolean*
- **system-id** *string*
- **timers**
  - **lsp-wait**
    - **lsp-initial-wait** *number*
    - **lsp-max-wait** *number*
    - **lsp-second-wait** *number*
  - **spf-wait**
    - **spf-initial-wait** *number*
    - **spf-max-wait** *number*
    - **spf-second-wait** *number*
- **traffic-engineering** *boolean*
- **traffic-engineering-options**
  - **advertise-delay** *boolean*
  - **application-link-attributes**
    - **legacy** *boolean*
  - **ipv6** *boolean*
- **unicast-import**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **l2tp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **avp-hiding** *keyword*
  - **challenge** *boolean*
  - **destruct-timeout** *number*
  - **ethernet-tunnel**
    - **reconnect-timeout** (*number* | *keyword*)
  - **exclude-avps**
    - **calling-number** *boolean*
    - **initial-rx-lcp-conf-req** *boolean*
  - **failover**
    - **recovery-max-session-lifetime** *number*
    - **recovery-method** *keyword*
    - **recovery-time** *number*
  - **track-srrp** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*

configure router l2tp failover track-srrp peer

- **peer** *reference*
- **sync-tag** *string*
- **group** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **avp-hiding** *keyword*
  - **challenge** *keyword*
  - **description** *string*
  - **destruct-timeout** *number*
  - **ethernet-tunnel**
    - **reconnect-timeout** (*number* | *keyword*)
- **failover**
  - **recovery-method** *keyword*
  - **recovery-time** *number*
- **hello-interval** (*number* | *keyword*)
- **idle-timeout** (*number* | *keyword*)
- **l2tpv3**
  - **cookie-length** (*number* | *keyword*)
  - **digest-type** *keyword*
  - **nonce-length** *number*
  - **password** *string*
  - **private-tcp-mss-adjust** (*number* | *keyword*)
  - **public-tcp-mss-adjust** (*number* | *keyword*)
  - **pw-cap-list**
    - **ethernet** *boolean*
    - **ethernet-vlan** *boolean*
  - **rem-router-id** *string*
  - **track-password-change** *boolean*
- **lac**
  - **df-bit** *keyword*
- **lns**
  - **lns-group** *reference*
  - **load-balance-method** *keyword*
- **mlppp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **endpoint**
    - **ip** (*ipv4-address* | *keyword*)
    - **mac** (*mac-address* | *keyword*)
  - **interleave** *boolean*
  - **max-fragment-delay** (*number* | *keyword*)
  - **max-links** *number*
  - **reassemble-timeout** *number*
  - **short-sequence-numbers** *boolean*
- **ppp**
  - **authentication** *keyword*
  - **authentication-policy** *string*
  - **chap-challenge-length**
    - **end** *number*
    - **start** *number*
  - **default-group-interface**
    - **interface** *string*
    - **service-name** *string*
  - **ipcp-subnet-negotiation** *boolean*
  - **keepalive**
    - **interval** *number*
    - **multiplier** *number*
  - **lcp-force-ack-accm** *boolean*
  - **lcp-ignore-magic-numbers** *boolean*
  - **mtu** *number*
  - **proxy-authentication** *boolean*
  - **proxy-lcp** *boolean*

configure router l2tp group lns ppp reject-disabled-ncp

```

    - reject-disabled-ncp boolean
    - user-db string
  - local-address string
  - local-name string
  - max-retries-estab number
  - max-retries-not-estab number
  - password string
  - protocol keyword
  - radius-accounting-policy reference
  - receive-window-size number
  - session-assign-method keyword
  - session-limit (number | keyword)
  - tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-establish boolean
    - avp-hiding keyword
    - challenge keyword
    - description string
    - destruct-timeout number
    - failover
      - recovery-method keyword
      - recovery-time number
    - hello-interval (number | keyword)
    - idle-timeout (number | keyword)
  - l2tpv3
    - private-tcp-mss-adjust (number | keyword)
    - public-tcp-mss-adjust (number | keyword)
  - lac
    - df-bit keyword
  - lns
    - lns-group reference
    - load-balance-method keyword
  - mlppp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - endpoint
      - ip (ipv4-address | keyword)
      - mac (mac-address | keyword)
    - interleave keyword
    - max-fragment-delay number
    - max-links number
    - reassembly-timeout number
    - short-sequence-numbers keyword
  - ppp
    - authentication keyword
    - authentication-policy string
    - chap-challenge-length
      - end number
      - start number
    - default-group-interface
      - interface string
      - service-name string
    - ipcp-subnet-negotiation keyword
    - keepalive
      - interval number
      - multiplier number
    - lcp-force-ack-accm keyword
    - lcp-ignore-magic-numbers keyword
    - mtu number
    - proxy-authentication keyword
    - proxy-lcp keyword

```

configure router l2tp group tunnel lns ppp reject-disabled-ncp

```

    - reject-disabled-ncp keyword
      - user-db string
    - local-address string
    - local-name string
    - max-retries-estab number
    - max-retries-not-estab number
    - password string
    - peer string
    - preference number
    - radius-accounting-policy reference
    - receive-window-size number
    - remote-name string
    - session-limit (number | keyword)
  - group-session-limit number
  - hello-interval (number | keyword)
  - idle-timeout (number | keyword)
  - ignore-avps
    - sequencing-required boolean
  - l2tpv3
    - cookie-length number
    - digest-type keyword
    - nonce-length number
    - password string
    - private-tcp-mss-adjust number
    - public-tcp-mss-adjust number
    - transport-type
      - ip boolean
  - lac
    - calling-number-format string
    - cisco-nas-port
      - ethernet string
    - df-bit boolean
    - local-address string
    - local-name string
    - max-retries-estab number
    - max-retries-not-estab number
    - next-attempt keyword
    - password string
    - peer-address-change-policy keyword
    - radius-accounting-policy reference
    - receive-window-size number
  - replace-result-code
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
  - rtm-debounce-time (number | keyword)
  - session-assign-method keyword
  - session-limit number
  - tunnel-selection-blacklist
    - add-tunnel-on
      - address-change-timeout boolean
      - cdn-err-code boolean
      - cdn-invalid-dst boolean
      - cdn-permanent-no-facilities boolean
      - cdn-temporary-no-facilities boolean
      - stop-ccn-err-code boolean
      - stop-ccn-other boolean
      - tx-cdn-not-established-in-time boolean
    - max-list-length (number | keyword)
    - max-time number
    - timeout-action keyword
  - tunnel-session-limit number
  - ldp
    - admin-state keyword

```

configure router ldp aggregate-prefix-match

- **aggregate-prefix-match**
  - **admin-state** *keyword*
  - **prefix-exclude** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **class-forwarding** *keyword*
- **consider-system-ip-in-gep** *boolean*
- **egress-statistics**
  - **fec-prefix** (*ipv4-prefix | ipv6-prefix*)
    - **accounting-policy** *reference*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **collect-stats** *boolean*
- **entropy-label-capability** *boolean*
- **export-policy** *reference*
- **export-tunnel-table** *reference*
- **fast-reroute**
  - **backup-sr-tunnel** *boolean*
- **fec-originate** (*ipv4-prefix | ipv6-prefix*)
  - **advertised-label** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **interface** *string*
  - **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **pop** *boolean*
  - **swap-label** *number*
- **generate-basic-fec-only** *boolean*
- **graceful-restart**
  - **helper-mode** *boolean*
  - **maximum-recovery-time** *number*
  - **neighbor-liveness-time** *number*
- **implicit-null-label** *boolean*
- **import-mcast-policy** *reference*
- **import-pmsi-routes**
  - **mvpn** *boolean*
  - **mvpn-no-export-community** *boolean*
- **import-policy** *reference*
- **import-tunnel-table** *reference*
- **interface-parameters**
  - **interface** *reference*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **bfd-liveness**
      - **ipv4** *boolean*
      - **ipv6** *boolean*
  - **ipv4**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fec-type-capability**
      - **p2mp-ipv4** *boolean*
      - **p2mp-ipv6** *boolean*
      - **prefix-ipv4** *boolean*
      - **prefix-ipv6** *boolean*
    - **hello**
      - **factor** *number*
      - **timeout** *number*
    - **keepalive**
      - **factor** *number*
      - **timeout** *number*
    - **local-lsr-id**
      - **interface-name** *reference*

configure router ldp interface-parameters interface ipv4 transport-address

```

- transport-address keyword
- ipv6
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - fec-type-capability
    - p2mp-ipv4 boolean
    - p2mp-ipv6 boolean
    - prefix-ipv4 boolean
    - prefix-ipv6 boolean
  - hello
    - factor number
    - timeout number
  - keepalive
    - factor number
    - timeout number
  - local-lsr-id
    - format-32bit boolean
    - interface-name reference
    - transport-address keyword
  - load-balancing-weight number
- ipv4
  - hello
    - factor number
    - timeout number
  - keepalive
    - factor number
    - timeout number
  - transport-address keyword
- ipv6
  - hello
    - factor number
    - timeout number
  - keepalive
    - factor number
    - timeout number
  - transport-address keyword
- label-withdrawal-delay number
- ldp-shortcut
  - ipv4 boolean
  - ipv6 boolean
- legacy-ipv4-lsr-interop boolean
- lsp-bfd reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - bfd-template reference
  - failure-action keyword
  - lsp-ping-interval (number | keyword)
  - priority number
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- max-ecmp-routes number
- mcast-upstream-asbr-frr boolean
- mcast-upstream-frr boolean
- mp-mbb-time number
- prefer-mcast-tunnel-in-tunnel boolean
- prefer-protocol-stitching boolean
- prefer-tunnel-in-tunnel boolean
- resolve-root-using keyword
- session-parameters
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - adv-adj-addr-only boolean
    - adv-local-lsr-id boolean
    - apply-groups reference

```

configure router ldp session-parameters peer apply-groups-exclude

```

- apply-groups-exclude reference
- community string
- dod-label-distribution boolean
- export-addresses reference
- export-prefixes reference
- fec-limit
  - limit number
  - log-only boolean
  - threshold number
- fec-type-capability
  - p2mp boolean
  - prefix-ipv4 boolean
  - prefix-ipv6 boolean
- fec129-cisco-interop boolean
- import-prefixes reference
- pe-id-mac-flush-interop boolean
- shortcut-local-ttl-propagate boolean
- shortcut-transit-ttl-propagate boolean
- targeted-session
- auto-rx
  - ipv4
    - admin-state keyword
    - tunneling boolean
- auto-tx
  - ipv4
    - admin-state keyword
    - tunneling boolean
- export-prefixes reference
- import-prefixes reference
- ipv4
  - hello
    - factor number
    - timeout number
  - hello-reduction
    - admin-state keyword
    - factor number
  - keepalive
    - factor number
    - timeout number
- ipv6
  - hello
    - factor number
    - timeout number
  - hello-reduction
    - admin-state keyword
    - factor number
  - keepalive
    - factor number
    - timeout number
- peer (ipv4-address-no-zone | ipv6-address-no-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - hello
    - factor number
    - timeout number
  - hello-reduction
    - admin-state keyword
    - factor number
  - keepalive
    - factor number
    - timeout number
  - local-lsr-id

```

configure router ldp targeted-session peer local-lsr-id format-32bit

```

    - format-32bit boolean
    - interface-name reference
  - mcast-tunneling
    - lsp string
  - tunneling
    - lsp string
- peer-template string
  - admin-state keyword
  - adv-local-lsr-id boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - community string
  - hello
    - factor number
    - timeout number
  - hello-reduction
    - admin-state keyword
    - factor number
  - keepalive
    - factor number
    - timeout number
  - local-lsr-id
    - interface-name reference
    - mcast-tunneling boolean
    - tunneling boolean
  - peer-template-map reference
    - apply-groups reference
    - apply-groups-exclude reference
    - policy-map reference
  - resolve-v6-prefix-over-shortcut boolean
  - sdp-auto-targeted-session boolean
- tcp-session-parameters
  - authentication-key string
  - authentication-keychain reference
  - peer-transport (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-keychain reference
    - path-mtu-discovery boolean
    - ttl-security number
  - tunnel-down-damp-time number
  - tunnel-table-pref number
  - weighted-ecmp boolean
- leak-export
  - leak-export-limit number
  - policy-name (policy-expr-string | string)
- lsp-bfd
  - bfd-sessions number
  - tail-end
    - apply-groups reference
    - apply-groups-exclude reference
    - multiplier number
    - receive-interval number
    - transmit-interval number
- mc-maximum-routes
  - log-only boolean
  - threshold number
  - value number
- mld
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```



configure router mld forwarding-group-interface

```

- forwarding-group-interface forwarding-service string group-interface-
name reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
- bandwidth
  - mandatory (number | keyword)
  - total (number | keyword)
- interface-policy reference
- policy reference
- query-interval number
- query-last-member-interval number
- query-response-interval number
- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- group-if-query-source-address string
- group-interface reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
- bandwidth
  - mandatory (number | keyword)
  - total (number | keyword)
- interface-policy reference
- policy reference
- query-interval number
- query-last-member-interval number
- query-response-interval number
- query-source-address string
- router-alert-check boolean
- sub-hosts-only boolean
- subnet-check boolean
- version keyword
- interface string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
- bandwidth
  - mandatory (number | keyword)
  - total (number | keyword)
- interface-policy reference
- mc-constraints
  - level number
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth number

```

configure router mld interface mcac mc-constraints number-down

- **number-down** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **level** *number*
- **use-lag-port-weight** *boolean*
- **policy** *reference*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **router-alert-check** *boolean*
- **ssm-translate**
  - **group-range** **start** *string* **end** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source** *string*
- **static**
  - **group** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source** *string*
  - **starg**
  - **group-range** **start** *string* **end** *string* **step** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source** *string*
  - **starg**
- **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
  - **group-range** **start** *string* **end** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source** *string*
- **mpls**
  - **admin-group-frr** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auto-bandwidth-multipliers**
    - **adjust-multiplier** *number*
    - **sample-multiplier** *number*
  - **auto-lsp** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **one-hop** *boolean*
    - **policy** *reference*
  - **aux-stats**
    - **sr** *boolean*
  - **bypass-resignal-timer** *number*
  - **class-forwarding-policy** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **default-set** *number*
  - **fc** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **forwarding-set** *number*
  - **cspf-on-loose-hop** *boolean*
  - **dynamic-bypass** *boolean*
  - **entropy-label**
  - **rsvp-te** *boolean*

configure router mpls entropy-label sr-te

```

- sr-te boolean
- exponential-backoff-retry boolean
- forwarding-policies
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- forwarding-policy string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - binding-label number
- egress-statistics
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
- ingress-statistics
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- metric number
- next-hop-group number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-next-hop
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
    - pushed-labels number
      - apply-groups reference
      - apply-groups-exclude reference
      - label number
  - load-balancing-weight number
- primary-next-hop
  - apply-groups reference
  - apply-groups-exclude reference
  - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - pushed-labels number
    - apply-groups reference
    - apply-groups-exclude reference
    - label number
  - resolution-type keyword
- preference number
- revert-timer number
- tunnel-table-pref number
- reserved-label-block reference
- frr-object boolean
- hold-timer number
- ingress-statistics
  - lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) lsp-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - stat-mode keyword
  - p2mp-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean

```

configure router mpls ingress-statistics p2mp-template-lsp max-stats

```

    - max-stats number
    - stat-mode keyword
  - p2mp-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-
    session-name string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-stats boolean
    - max-stats number
    - stat-mode keyword
  - interface reference
    - admin-group reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - label-map number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - pop
    - swap
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop string
    - out-label (number | keyword)
  - srlg-group reference
  - te-metric number
  - least-fill-min-thd number
  - least-fill-reoptim-thd number
  - logger-event-bundling boolean
  - lsp string
    - adaptive boolean
    - admin-state keyword
    - admin-tag reference
    - adspec boolean
    - apply-groups reference
    - apply-groups-exclude reference
  - auto-bandwidth
    - adjust-down
      - bw number
      - percent number
    - adjust-up
      - bw number
      - percent number
    - apply-groups reference
    - apply-groups-exclude reference
  - fc keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - sampling-weight number
  - max-bandwidth number
  - min-bandwidth number
  - monitor-bandwidth boolean
  - multipliers
    - adjust-multiplier number
    - sample-multiplier number
  - overflow-limit
    - bw number
    - number number
    - threshold number
  - underflow-limit
    - bw number
    - number number

```

configure router mpls lsp auto-bandwidth underflow-limit threshold

```

    - threshold number
  - use-last-adj-bw
  - secondary-retry-limit (number | keyword)
- bfd
  - bfd-liveness boolean
  - bfd-template reference
  - failure-action keyword
  - lsp-ping-interval (number | keyword)
  - return-path-label number
  - wait-for-up-timer number
- bgp-shortcut boolean
- bgp-transport-tunnel boolean
- binding-sid number
- class-forwarding
  - forwarding-set
    - policy reference
    - set number
  - class-type number
- egress-statistics
  - accounting-policy reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-stats boolean
  - stat-mode keyword
- entropy-label keyword
- exclude-admin-group reference
- exclude-node (ipv4-address-no-zone | ipv6-address-no-zone)
- fallback-path-computation-method keyword
- fast-reroute
  - frr-method keyword
  - hop-limit number
  - node-protect boolean
  - propagate-admin-group boolean
- from (ipv4-address-no-zone | ipv6-address-no-zone)
- hop-limit number
- igp-shortcut
  - admin-state keyword
  - allow-sr-over-srte boolean
  - lfa-type keyword
  - relative-metric number
- include-admin-group reference
- label-stack-reduction boolean
- ldp-over-rsvp boolean
- least-fill boolean
- load-balancing-weight number
- local-sr-protection keyword
- lsp-self-ping keyword
- main-ct-retry-limit number
- max-sr-labels
  - additional-frr-labels number
  - label-stack-size number
- metric number
- metric-type keyword
- override-tunnel-elc boolean
- p2mp-id number
- path-computation-method keyword
- path-profile number
  - apply-groups reference
  - apply-groups-exclude reference
  - path-group number
- pce-associations
  - diversity reference
  - policy reference

```

configure router mpls lsp pce-control

- **pce-control** *boolean*
- **pce-report** *keyword*
- **primary** *reference*
  - **adaptive** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **backup-class-type** *number*
  - **bandwidth** *number*
  - **bfd**
    - **bfd-liveness** *boolean*
    - **bfd-template** *reference*
    - **lsp-ping-interval** (*number* | *keyword*)
    - **return-path-label** *number*
    - **wait-for-up-timer** *number*
  - **class-type** *number*
  - **exclude-admin-group**
    - **group** *reference*
  - **hop-limit** *number*
  - **include-admin-group**
    - **group** *reference*
  - **priority**
    - **hold-priority** *number*
    - **setup-priority** *number*
  - **record** *boolean*
  - **record-label** *boolean*
- **primary-p2mp-instance** *string*
  - **adaptive** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **exclude-admin-group**
    - **group** *reference*
  - **hop-limit** *number*
  - **include-admin-group**
    - **group** *reference*
  - **priority**
    - **hold-priority** *number*
    - **setup-priority** *number*
  - **record** *boolean*
  - **record-label** *boolean*
  - **s2l-path** *reference to (ipv4-address-no-zone | ipv6-address-no-zone)*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **propagate-admin-group** *boolean*
- **retry-limit** *number*
- **retry-timer** *number*
- **revert-timer** *number*
- **rsvp-resv-style** *keyword*
- **secondary** *reference*
  - **adaptive** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **bfd**
    - **bfd-liveness** *boolean*
    - **bfd-template** *reference*
    - **lsp-ping-interval** (*number* | *keyword*)
    - **return-path-label** *number*
    - **wait-for-up-timer** *number*
  - **class-type** *number*

configure router mpls lsp secondary exclude-admin-group

```

- exclude-admin-group
-   group reference
- hop-limit number
- include-admin-group
-   group reference
- path-preference number
- priority
-   hold-priority number
-   setup-priority number
- record boolean
- record-label boolean
- srlg boolean
- standby boolean
- soft-preemption boolean
- to (ipv4-address-no-zone | ipv6-address-no-zone)
- type keyword
- vprn-auto-bind boolean
- lsp-bsid-block reference
- lsp-history
-   admin-state keyword
- lsp-init-retry-timeout number
- lsp-self-ping
-   interval number
-   rsvp-te boolean
-   timeout number
-   timeout-action keyword
- lsp-template string
-   adaptive boolean
-   admin-state keyword
-   admin-tag reference
-   adspec boolean
-   apply-groups reference
-   apply-groups-exclude reference
-   auto-bandwidth
-     adjust-down
-       bw number
-       percent number
-     adjust-up
-       bw number
-       percent number
-     apply-groups reference
-     apply-groups-exclude reference
-     fc keyword
-     apply-groups reference
-     apply-groups-exclude reference
-     sampling-weight number
-   max-bandwidth number
-   min-bandwidth number
-   monitor-bandwidth boolean
-   multipliers
-     adjust-multiplier number
-     sample-multiplier number
-   overflow-limit
-     bw number
-     number number
-     threshold number
-   underflow-limit
-     bw number
-     number number
-     threshold number
- backup-class-type number
- bandwidth number
- bfd
-   bfd-liveness boolean

```

configure router mpls lsp-template bfd bfd-template

```

- bfd-template reference
- failure-action keyword
- lsp-ping-interval (number | keyword)
- return-path-label number
- wait-for-up-timer number
- bgp-shortcut boolean
- bgp-transport-tunnel boolean
- binding-sid boolean
- class-forwarding
  - forwarding-set
    - policy reference
    - set number
- class-type number
- default-path reference
- egress-statistics
  - accounting-policy reference
  - collect-stats boolean
  - stat-mode keyword
- entropy-label keyword
- exclude-admin-group reference
- fallback-path-computation-method keyword
- family keyword
- fast-reroute
  - frr-method keyword
  - hop-limit number
  - node-protect boolean
  - propagate-admin-group boolean
- from (ipv4-address-no-zone | ipv6-address-no-zone)
- hop-limit number
- igp-shortcut
  - admin-state keyword
  - allow-sr-over-srte boolean
  - lfa-type keyword
  - relative-metric number
- include-admin-group reference
- label-stack-reduction boolean
- ldp-over-rsvp boolean
- least-fill boolean
- load-balancing-weight number
- local-sr-protection keyword
- lsp-self-ping keyword
- main-ct-retry-limit number
- max-sr-labels
  - additional-frr-labels number
  - label-stack-size number
- metric number
- metric-type keyword
- override-tunnel-elc boolean
- path-computation-method keyword
- path-profile number
  - apply-groups reference
  - apply-groups-exclude reference
  - path-group number
- pce-associations
  - diversity reference
  - policy reference
- pce-control boolean
- pce-report keyword
- priority
  - hold-priority number
  - setup-priority number
- propagate-admin-group boolean
- record boolean
- record-label boolean

```



## configure router mpls lsp-template retry-limit

```

- retry-limit number
- retry-timer number
- soft-preemption boolean
- template-id (number | keyword)
- type keyword
- vprn-auto-bind boolean
- max-bypass-associations number
- max-bypass-plr-associations number
- mbb-prefer-current-hops boolean
- p2mp-resignal-timer number
- p2mp-s2l-fast-retry number
- p2mp-ttl-propagate boolean
- p2p-active-path-fast-retry number
- path string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- hop number
  - apply-groups reference
  - apply-groups-exclude reference
  - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - sid-label number
  - type keyword
- pce-init-lsp
  - apply-groups reference
  - apply-groups-exclude reference
  - sr-te
    - admin-state keyword
- pce-report
  - rsvp-te boolean
  - sr-te boolean
- resignal-on-igp-overload boolean
- resignal-timer number
- retry-on-igp-overload boolean
- secondary-fast-retry-timer number
- shortcut-local-ttl-propagate boolean
- shortcut-transit-ttl-propagate boolean
- sr-te-resignal
  - resignal-on-igp-event boolean
  - resignal-on-igp-overload boolean
  - resignal-timer number
- srlg-database
  - router-id string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - interface string srlg-group reference
- srlg-frr keyword
- static-lsp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - metric number
  - push
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop string
    - out-label (number | keyword)
  - to string
- static-lsp-fast-retry number
- strict-ero-nhop-direct-resolution boolean
- tunnel-table-pref
  - rsvp-te number
  - sr-te number

```

## configure router mpls user-srlg-db

- **user-srlg-db** *boolean*
- **mpls-labels**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bgp-labels-hold-timer** *number*
  - **reserved-label-block** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **end-label** *number*
    - **start-label** *number*
  - **sr-labels**
    - **end** *number*
    - **start** *number*
  - **static-label-range** *number*
- **msdp**
  - **active-source-limit** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **data-encapsulation** *boolean*
  - **export-policy** *reference*
  - **group** *string*
    - **active-source-limit** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **export-policy** *reference*
    - **import-policy** *reference*
    - **local-address** *string*
    - **mode** *keyword*
    - **peer** *string*
      - **active-source-limit** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication-key** *string*
      - **default-peer** *boolean*
      - **export-policy** *reference*
      - **import-policy** *reference*
      - **local-address** *string*
      - **receive-message-rate**
        - **rate** *number*
        - **threshold** *number*
        - **time** *number*
    - **receive-message-rate**
      - **rate** *number*
      - **threshold** *number*
      - **time** *number*
    - **import-policy** *reference*
    - **local-address** *string*
    - **peer** *string*
      - **active-source-limit** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication-key** *string*
      - **default-peer** *boolean*
      - **export-policy** *reference*
      - **import-policy** *reference*
      - **local-address** *string*
      - **receive-message-rate**
        - **rate** *number*
        - **threshold** *number*
        - **time** *number*

configure router msdp receive-message-rate

- **receive-message-rate**
  - **rate** *number*
  - **threshold** *number*
  - **time** *number*
- **rpf-table** *keyword*
- **source** *string*
  - **active-source-limit** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **source-active-cache-lifetime** *number*
- **mss-adjust**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **nat-group** *number*
  - **segment-size** *number*
- **mtrace2**
  - **admin-state** *keyword*
  - **udp-port** *number*
- **multicast-info-policy** *reference*
- **nat**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **inside**
    - **l2-aware**
      - **force-unique-ip-addresses** *boolean*
      - **subscribers** *string*
    - **large-scale**
      - **dnat-only**
        - **source-prefix-list** *reference*
      - **dual-stack-lite**
        - **admin-state** *keyword*
        - **deterministic**
          - **prefix-map** *string nat-policy reference*
            - **admin-state** *keyword*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
            - **map** *string to string*
              - **apply-groups** *reference*
              - **apply-groups-exclude** *reference*
              - **first-outside-address** *string*
      - **endpoint** *string*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **ip-fragmentation** *keyword*
        - **min-first-fragment-size-rx** *number*
        - **reassembly** *boolean*
        - **tunnel-mtu** *number*
        - **max-subscriber-limit** *number*
        - **subscriber-prefix-length** *number*
    - **nat-policy** *reference*
    - **nat44**
      - **destination-prefix** *string*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **nat-policy** *reference*
      - **deterministic**
        - **prefix-map** *string nat-policy reference*
          - **admin-state** *keyword*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **map** *string to string*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
            - **first-outside-address** *string*

## configure router nat inside large-scale nat44 max-subscriber-limit

```

- max-subscriber-limit number
- nat-import reference
- source-prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - nat-policy reference
- nat64
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - drop-zero-ipv4-checksum boolean
  - insert-ipv6-fragment-header boolean
  - ip-fragmentation keyword
  - ipv6-mtu number
  - prefix string
  - subscriber-prefix-length number
  - tos
    - downstream
      - use-ipv4 boolean
    - upstream
      - set-tos (keyword | number)
- redundancy
  - peer string
  - peer6 string
  - steering-route string
- static-port-forwards
  - spf-nat-policy reference
- subscriber-identification
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - attribute
    - type keyword
    - vendor keyword
  - description string
  - drop-unidentified-traffic boolean
  - radius-proxy-server
    - router-instance string
    - server string
- traffic-identification
  - source-prefix-only boolean
- map
  - map-domain reference
- outside
  - dnat-only
    - route-limit number
  - filters
    - downstream
      - ipv4 reference
      - ipv6 reference
    - upstream
      - ipv4 reference
      - ipv6 reference
- mtu number
- pool string
  - address-pooling keyword
  - address-range string end string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - drain boolean
  - admin-state keyword
  - applications
    - agnostic boolean

```

## configure router nat outside pool applications flexible-port-allocation

```

- flexible-port-allocation boolean
- apply-groups reference
- apply-groups-exclude reference
- description string
- icmp-echo-reply boolean
- l2-aware
- default-host
- inside-router-instance string
- ip-address string
- rate-limit number
- external-assignment boolean
- port-block-extension
- ports number
- subscriber
- watermarks
- high number
- low number
- subscriber-limit number
- watermarks
- high number
- low number
- large-scale
- default-host
- inside-router-instance string
- ip-address string
- rate-limit number
- deterministic
- port-reservation number
- watermarks
- high number
- low number
- flexible-port-allocation
- free-port-limit
- icmp number
- tcp number
- udp number
- redundancy
- admin-state keyword
- export-route string
- follow
- name string
- router-instance string
- monitor-route string
- subscriber-limit number
- mode keyword
- nat-group reference
- port-forwarding
- dynamic-block-reservation boolean
- range-end number
- range-start number
- port-reservation
- port-blocks number
- ports number
- type keyword
- watermarks
- high number
- low number
- wlan-gw-group reference
- network-domains
- network-domain string
- apply-groups reference
- apply-groups-exclude reference
- description string
- origin-validation

```

## configure router origin-validation apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **rpki-session** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **connect-retry** *number*
  - **description** *string*
  - **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **port** *number*
  - **refresh-time**
    - **hold-time** *number*
    - **value** *number*
  - **stale-time** *number*
- **static-entry** (*ipv4-prefix* | *ipv6-prefix*) **upto** *number* **origin-as** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **valid** *boolean*
- **ospf** *number*
  - **admin-state** *keyword*
  - **advertise-router-capability** *keyword*
  - **advertise-tunnel-link** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **area** *string*
    - **advertise-router-capability** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **area-range** *string*
      - **advertise** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
  - **bier**
    - **admin-state** *keyword*
    - **template** *reference*
  - **blackhole-aggregate** *boolean*
  - **database-export-exclude** *boolean*
  - **export-policy** *reference*
  - **import-policy** *reference*
  - **interface** *string*
    - **adjacency-set** *reference*
    - **adjacency-sid**
      - **label** *number*
    - **admin-state** *keyword*
    - **advertise-router-capability** *boolean*
    - **advertise-subnet** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authentication-key** *string*
    - **authentication-keychain** *reference*
    - **authentication-type** *keyword*
    - **bfd-liveness**
      - **remain-down-on-failure** *boolean*
      - **strict** *boolean*
      - **strict-mode-holddown** *number*
    - **dead-interval** *number*
    - **flex-algo** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **node-sid**
      - **index** *number*
      - **label** *number*
    - **hello-interval** *number*
    - **interface-type** *keyword*

configure router ospf area interface load-balancing-weight

- **load-balancing-weight** *number*
- **loopfree-alternate**
  - **exclude** *boolean*
  - **policy-map**
    - **route-nh-template** *reference*
- **lsa-filter-out** *keyword*
- **message-digest-key** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **md5** *string*
- **metric** *number*
- **mtu** *number*
- **neighbor** *string*
- **node-sid**
  - **clear-n-flag** *boolean*
  - **index** *number*
  - **label** *number*
- **passive** *boolean*
- **poll-interval** *number*
- **priority** *number*
- **retransmit-interval** *number*
- **rib-priority** *keyword*
- **sid-protection** *boolean*
- **transit-delay** *number*
- **loopfree-alternate-exclude** *boolean*
- **nssa**
  - **area-range** *string*
    - **advertise** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **originate-default-route**
    - **adjacency-check** *boolean*
    - **type-nssa** *boolean*
  - **redistribute-external** *boolean*
  - **summaries** *boolean*
- **stub**
  - **default-metric** *number*
  - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **dead-interval** *number*
  - **hello-interval** *number*
  - **message-digest-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **md5** *string*
  - **retransmit-interval** *number*
  - **transit-delay** *number*
- **asbr**
  - **trace-path** (*number* | *keyword*)
- **compatible-rfc1583** *boolean*
- **database-export**
  - **bgp-ls-identifier**
    - **value** *number*
  - **igp-identifier** *number*
- **entropy-label**
  - **override-tunnel-elc** *boolean*
- **export-limit**
  - **log-percent** *number*

## configure router ospf export-limit number

- **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
  - **interval** *number*
  - **limit** *number*
- **external-preference** *number*
- **flexible-algorithms**
  - **admin-state** *keyword*
  - **advertise-admin-group** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **flex-algo** *number*
    - **advertise** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **loopfree-alternate**
    - **participate** *boolean*
- **graceful-restart**
  - **helper-mode** *boolean*
  - **strict-lsa-checking** *boolean*
- **igp-shortcut**
  - **admin-state** *keyword*
  - **allow-sr-over-srte** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tunnel-next-hop**
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **resolution** *keyword*
      - **resolution-filter**
        - **rsvp** *boolean*
        - **sr-te** *boolean*
- **import-policy** *reference*
- **ldp-over-rsvp** *boolean*
- **ldp-sync** *boolean*
- **loopfree-alternate**
  - **augment-route-table** *boolean*
  - **exclude**
    - **prefix-policy** *reference*
  - **multi-homed-prefix**
    - **preference** *keyword*
  - **remote-lfa**
    - **max-pq-cost** *number*
    - **node-protect**
      - **max-pq-nodes** *number*
  - **ti-lfa**
    - **max-sr-frr-labels** *number*
    - **node-protect**
- **multi-instance** *boolean*
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
  - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**



configure router ospf rtr-adv-lsa-limit log-only

- **log-only** *boolean*
- **max-lsa-count** *number*
- **overload-timeout** (*number* | *keyword*)
- **warning-threshold** *number*
- **segment-routing**
  - **adj-sid-hold** (*number* | *keyword*)
  - **adjacency-set** *number*
    - **advertise** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **parallel** *boolean*
    - **sid**
      - **label** *number*
  - **adjacency-sid**
    - **allocate-dual-sids** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **backup-node-sid**
    - **index** *number*
    - **ip-prefix** *string*
    - **label** *number*
  - **class-forwarding** *boolean*
  - **egress-statistics**
    - **adj-set** *boolean*
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **entropy-label** *boolean*
  - **export-tunnel-table** *keyword*
  - **ingress-statistics**
    - **adj-set** *boolean*
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **mapping-server**
    - **admin-state** *keyword*
    - **node-sid-map** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ip-prefix** *string*
      - **range** *number*
      - **scope**
        - **area** *reference*
        - **as**
  - **maximum-sid-depth**
    - **override-bmi** *number*
    - **override-erld** *number*
  - **prefix-sid-range**
    - **global**
    - **max-index** *number*
    - **start-label** *number*
  - **srlb** *reference*
  - **tunnel-mtu** *number*
  - **tunnel-table-pref** *number*
- **timers**
  - **incremental-spf-wait** *number*
  - **lsa-accumulate** *number*
  - **lsa-arrival** *number*
  - **lsa-generate**
    - **lsa-initial-wait** *number*
    - **lsa-second-wait** *number*
    - **max-lsa-wait** *number*
  - **redistribute-delay** *number*
  - **spf-wait**
    - **spf-initial-wait** *number*

configure router ospf timers spf-wait spf-max-wait

```

    - spf-max-wait number
    - spf-second-wait number
  - traffic-engineering boolean
  - traffic-engineering-options
    - advertise-delay boolean
    - sr-te keyword
  - unicast-import boolean
- ospf3 number
  - admin-state keyword
  - advertise-router-capability keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - area-range (ipv4-prefix | ipv6-prefix)
      - advertise boolean
      - apply-groups reference
      - apply-groups-exclude reference
    - blackhole-aggregate boolean
    - database-export-exclude boolean
    - export-policy reference
    - extended-lsa keyword
    - import-policy reference
    - interface string
      - admin-state keyword
      - advertise-router-capability boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication
        - inbound reference
        - outbound reference
    - bfd-liveness
      - remain-down-on-failure boolean
      - strict boolean
      - strict-mode-holddown number
    - dead-interval number
    - hello-interval number
    - interface-type keyword
    - load-balancing-weight number
    - loopfree-alternate
      - exclude boolean
      - policy-map
        - route-nh-template reference
    - lsa-filter-out keyword
    - metric number
    - mtu number
    - neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
    - node-sid
      - clear-n-flag boolean
      - index number
      - label number
    - passive boolean
    - poll-interval number
    - priority number
    - retransmit-interval number
    - rib-priority keyword
    - sid-protection boolean
    - transit-delay number
  - key-rollover-interval number
  - loopfree-alternate-exclude boolean
  - nssa
    - area-range (ipv4-prefix | ipv6-prefix)

```

configure router ospf3 area nssa area-range advertise

- **advertise** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **originate-default-route**
  - **adjacency-check** *boolean*
  - **type-nssa** *boolean*
- **redistribute-external** *boolean*
- **summaries** *boolean*
- **stub**
  - **default-metric** *number*
  - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication**
    - **inbound** *reference*
    - **outbound** *reference*
  - **dead-interval** *number*
  - **hello-interval** *number*
  - **retransmit-interval** *number*
  - **transit-delay** *number*
- **asbr**
- **database-export**
  - **bgp-ls-identifier**
    - **value** *number*
  - **igp-identifier** *number*
- **export-limit**
  - **log-percent** *number*
  - **number** *number*
- **export-policy** *reference*
- **extended-lsa** *keyword*
- **external-db-overflow**
  - **interval** *number*
  - **limit** *number*
- **external-preference** *number*
- **graceful-restart**
  - **helper-mode** *boolean*
  - **strict-lsa-checking** *boolean*
- **igp-shortcut**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tunnel-next-hop**
    - **family** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **resolution** *keyword*
      - **resolution-filter**
        - **rsvp** *boolean*
        - **sr-te** *boolean*
- **import-policy** *reference*
- **ldp-sync** *boolean*
- **loopfree-alternate**
  - **exclude**
    - **prefix-policy** *reference*
- **remote-lfa**
  - **max-pq-cost** *number*
  - **node-protect**
    - **max-pq-nodes** *number*
- **ti-lfa**
  - **max-sr-frr-labels** *number*
  - **node-protect**
- **multicast-import** *boolean*

## configure router ospf3 overload

- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
  - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
  - **log-only** *boolean*
  - **max-lsa-count** *number*
  - **overload-timeout** (*number* | *keyword*)
  - **warning-threshold** *number*
- **segment-routing**
  - **adj-sid-hold** (*number* | *keyword*)
  - **adjacency-sid**
    - **allocate-dual-sids** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress-statistics**
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **ingress-statistics**
    - **adj-sid** *boolean*
    - **node-sid** *boolean*
  - **prefix-sid-range**
    - **global**
    - **max-index** *number*
    - **start-label** *number*
  - **tunnel-mtu** *number*
  - **tunnel-table-pref** *number*
- **timers**
  - **incremental-spf-wait** *number*
  - **lsa-accumulate** *number*
  - **lsa-arrival** *number*
  - **lsa-generate**
    - **lsa-initial-wait** *number*
    - **lsa-second-wait** *number*
    - **max-lsa-wait** *number*
  - **redistribute-delay** *number*
  - **spf-wait**
    - **spf-initial-wait** *number*
    - **spf-max-wait** *number*
    - **spf-second-wait** *number*
- **unicast-import** *boolean*
- **p2mp-sr-tree**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bfd-liveness** *keyword*
  - **p2mp-policy** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **candidate-path** *string*
      - **active-instance** *reference*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*

configure router p2mp-sr-tree p2mp-policy candidate-path path-instances

```

    - path-instances number
      - apply-groups reference
      - apply-groups-exclude reference
      - instance-id number
      - preference number
    - root-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - tree-id number
  - replication-segment string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - downstream-nodes number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - label
        - sid-list number
        - apply-groups reference
        - apply-groups-exclude reference
        - replication-sid number
      - next-hop-address (ipv4-address-with-zone | ipv6-address-with-zone)
      - next-hop-interface-name string
      - protect-nexthop-id reference
    - instance-id number
    - replication-sid number
    - root-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - sid-action keyword
    - tree-id number
  - reserved-label-block reference
- pcep
  - apply-groups reference
  - apply-groups-exclude reference
  - pcc
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dead-timer number
    - keepalive number
    - local-address string
    - local-address-ipv6 string
    - max-srte-pce-init-lsps number
    - pce-associations
      - diversity string
        - apply-groups reference
        - apply-groups-exclude reference
        - association-id number
        - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
        - disjointness-reference boolean
        - disjointness-type keyword
        - diversity-type keyword
      - policy string
        - apply-groups reference
        - apply-groups-exclude reference
        - association-id number
        - association-source (ipv4-address-no-zone | ipv6-address-no-zone)
    - peer (ipv4-address-no-zone | ipv6-address-no-zone)
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-keychain reference
      - preference number
      - route-preference keyword
      - tls-client-profile reference
      - tls-wait-timer number

```

configure router pcep pcc redelegation-timer

```

- redelegation-timer number
- report-path-constraints boolean
- state-timer
  - timer number
  - timer-action keyword
- unknown-message-rate number
- pce
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-keychain reference
  - dead-timer number
  - keepalive number
  - local-address string
  - local-address-ipv6 string
  - tls-server-profile reference
  - tls-wait-timer number
  - unknown-message-rate number
- pcp
  - server string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dual-stack-lite-address string
  - fwd-inside-router string
  - interface reference
  - policy reference
- pim
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - apply-to keyword
  - import
    - join-policy reference
    - register-policy reference
  - interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - assert-period number
  - bfd-liveness
    - ipv4 boolean
    - ipv6 boolean
  - bier-signaling-type
    - ipv4 boolean
    - ipv6 boolean
  - bsm-check-rtr-alert boolean
  - hello-interval number
  - hello-multiplier number
  - improved-assert boolean
  - instant-prune-echo boolean
  - ipv4
    - apply-groups reference
    - apply-groups-exclude reference
    - monitor-oper-group
      - name reference
      - operation keyword
      - priority-delta number
    - multicast boolean
  - ipv6
    - apply-groups reference
    - apply-groups-exclude reference
    - monitor-oper-group

```

configure router pim interface ipv6 monitor-oper-group name

- **name** *reference*
- **operation** *keyword*
- **priority-delta** *number*
- **multicast** *boolean*
- **max-groups** *number*
- **mcac**
  - **bandwidth**
    - **mandatory** (*number* | *keyword*)
    - **total** (*number* | *keyword*)
  - **interface-policy** *reference*
  - **mc-constraints**
    - **admin-state** *keyword*
    - **level** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
    - **number-down** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *number*
    - **use-lag-port-weight** *boolean*
  - **policy** *reference*
  - **multicast-senders** *keyword*
- **p2mp-ldp-tree-join**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **priority** *number*
- **sticky-dr**
  - **priority** *number*
- **three-way-hello** *boolean*
- **tracking-support** *boolean*
- **ipv4**
  - **admin-state** *keyword*
  - **gtm**
    - **auto-discovery** *keyword*
  - **multicast-fast-failover** *boolean*
  - **rpf-table** *keyword*
  - **source-address**
    - **register-message** *string*
  - **ssm-assert-compatible-mode** *boolean*
  - **ssm-default-range** *boolean*
- **ipv6**
  - **admin-state** *keyword*
  - **multicast-fast-failover** *boolean*
  - **rpf-table** *keyword*
  - **source-address**
    - **register-message** *string*
    - **ssm-default-range** *boolean*
- **lag-usage-optimization** *boolean*
- **mc-ecmp-balance** *boolean*
- **mc-ecmp-balance-hold** *number*
- **mc-ecmp-hashing**
  - **rebalance** *boolean*
- **mdt-spt** *boolean*
- **non-dr-attract-traffic** *boolean*
- **pim-ssm-scaling** *boolean*
- **rp**
  - **bootstrap**
    - **export** *reference*
    - **import** *reference*
  - **ipv4**
    - **anycast** *string* **rp-set-peer** *string*
    - **auto-rp-discovery** *boolean*
    - **bsr-candidate**

configure router pim rp ipv4 bsr-candidate address

```

- address string
- admin-state keyword
- hash-mask-len number
- priority number
- candidate boolean
- mapping-agent boolean
- rp-candidate
- address string
- admin-state keyword
- group-range string
- holdtime number
- priority number
- static
- address string
- apply-groups reference
- apply-groups-exclude reference
- group-prefix string
- override boolean
- ipv6
- anycast string rp-set-peer string
- bsr-candidate
- address string
- admin-state keyword
- hash-mask-len number
- priority number
- embedded-rp
- admin-state keyword
- group-range string
- rp-candidate
- address string
- admin-state keyword
- group-range string
- holdtime number
- priority number
- static
- address string
- apply-groups reference
- apply-groups-exclude reference
- group-prefix string
- override boolean
- rpfv
- core boolean
- mvpn boolean
- spt-switchover (ipv4-prefix | ipv6-prefix)
- apply-groups reference
- apply-groups-exclude reference
- threshold (number | keyword)
- ssm-groups
- group-range (ipv4-prefix | ipv6-prefix)
- radius
- apply-groups reference
- apply-groups-exclude reference
- proxy string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- attribute-matching
- entry number
- accounting-server-policy string
- apply-groups reference
- apply-groups-exclude reference
- authentication-server-policy string
- prefix-string string
- suffix-string string

```



## configure router radius proxy attribute-matching type

- **type** *number*
- **vendor** (*number* | *keyword*)
- **cache**
  - **admin-state** *keyword*
  - **key**
    - **attribute-type** *number*
    - **packet-type** *keyword*
    - **vendor** (*number* | *keyword*)
- **timeout** *number*
- **track-accounting**
  - **accounting-off** *boolean*
  - **accounting-on** *boolean*
  - **interim-update** *boolean*
  - **start** *boolean*
  - **stop** *boolean*
- **track-authentication**
  - **accept** *boolean*
- **track-delete-hold-time** *number*
- **defaults**
  - **accounting-server-policy** *string*
  - **authentication-server-policy** *string*
- **description** *string*
- **interface** *string*
- **load-balance-key**
  - **attribute-1**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-2**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-3**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-4**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
  - **attribute-5**
    - **type** *number*
    - **vendor** (*number* | *keyword*)
- **source-ip-udp**
- **purpose** *keyword*
- **python-policy** *reference*
- **secret** *string*
- **send-accounting-response** *boolean*
- **wlan-gw**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ipv6-address** *string*
- **wlan-gw-group** *reference*
- **server** *string*
  - **accept-coa** *boolean*
  - **acct-port** *number*
  - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auth-port** *number*
  - **description** *string*
  - **pending-requests-limit** *number*
  - **python-policy** *reference*
  - **secret** *string*
- **reassembly**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

## configure router reassembly nat-group

```

- nat-group number
- to-base-network boolean
- rib-api
- apply-groups reference
- apply-groups-exclude reference
- mpls
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - label-name reference
- rip
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-type keyword
  - bfd-liveness boolean
  - check-zero boolean
  - description string
  - export-limit
    - log-percent number
    - number number
  - export-policy reference
  - group string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - authentication-type keyword
    - bfd-liveness boolean
    - check-zero boolean
    - description string
    - export-policy reference
    - import-policy reference
    - message-size number
    - metric-in number
    - metric-out number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - authentication-type keyword
      - bfd-liveness boolean
      - check-zero boolean
      - description string
      - export-policy reference
      - import-policy reference
      - message-size number
      - metric-in number
      - metric-out number
      - preference number
      - receive keyword
      - send keyword
      - split-horizon boolean
      - timers
        - flush number
        - timeout number
        - update number
    - unicast-address string
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean

```

## configure router rip group timers

```

- timers
  - flush number
  - timeout number
  - update number
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- ripng
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness boolean
- check-zero boolean
- description string
- export-limit
  - log-percent number
  - number number
- export-policy reference
- group string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness boolean
- check-zero boolean
- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- neighbor string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness boolean
  - check-zero boolean
  - description string
  - export-policy reference
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - unicast-address string
- preference number
- receive keyword
- send keyword
- split-horizon boolean

```

## configure router ripng group timers

```

- timers
  - flush number
  - timeout number
  - update number
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- router-id string
- rsvp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-over-bypass boolean
  - dbw-accounting
    - dbw-multiplier number
    - down-threshold
      - bw number
      - percent number
    - sample-interval number
    - sample-multiplier number
    - up-threshold
      - bw number
      - percent number
  - diffserv-te
    - admission-control-model keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - class-type-bw
      - ct0 number
      - ct1 number
      - ct2 number
      - ct3 number
      - ct4 number
      - ct5 number
      - ct6 number
      - ct7 number
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - class-type number
    - te-class number
      - apply-groups reference
      - apply-groups-exclude reference
      - class-type number
      - priority number
  - entropy-label-capability boolean
- graceful-restart
  - max-recovery number
  - max-restart number
- graceful-shutdown boolean
- implicit-null-label boolean
- include-node-id-in-rro boolean
- interface reference
  - admin-state keyword
  - apply-groups reference

```

configure router rsvp interface apply-groups-exclude

- **apply-groups-exclude** *reference*
- **authentication-key** *string*
- **authentication-keychain** *reference*
- **bfd-liveness** *boolean*
- **class-type-bw**
  - **ct0** *number*
  - **ct1** *number*
  - **ct2** *number*
  - **ct3** *number*
  - **ct4** *number*
  - **ct5** *number*
  - **ct6** *number*
  - **ct7** *number*
- **dbw-down-threshold**
  - **bw** *number*
  - **percent** *number*
- **dbw-multiplier** *number*
- **dbw-up-threshold**
  - **bw** *number*
  - **percent** *number*
- **graceful-restart-helper-mode** *boolean*
- **graceful-shutdown** *boolean*
- **hello-interval** *number*
- **implicit-null-label** *boolean*
- **refresh-reduction**
  - **reliable-delivery** *boolean*
- **subscription** *number*
- **te-down-threshold**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **value** *number*
- **te-up-threshold**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **value** *number*
- **keep-multiplier** *number*
- **msg-pacing**
  - **max-burst** *number*
  - **period** *number*
- **p2mp-merge-point-abort-timer** *number*
- **p2p-merge-point-abort-timer** *number*
- **preemption-timer** *number*
- **rapid-retransmit-time** *number*
- **rapid-retry-limit** *number*
- **refresh-reduction-over-bypass** *boolean*
- **refresh-time** *number*
- **te-down-threshold** *number*
- **te-threshold-update**
  - **on-cac-failure** *boolean*
  - **update-timer** *number*
- **te-up-threshold** *number*
- **segment-routing**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **maintenance-policy** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **bfd-liveness** *boolean*
    - **bfd-template** *reference*
    - **hold-down-timer** *number*
    - **mode** *keyword*
    - **return-path-label** *number*
    - **revert-timer** *number*

configure router segment-routing maintenance-policy threshold

- **threshold** *number*
- **segment-routing-v6**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **base-routing-instance**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **locator** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **function**
        - **end** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **srh-mode** *keyword*
        - **end-dt4**
          - **value** *number*
        - **end-dt46**
          - **value** *number*
        - **end-dt6**
          - **value** *number*
        - **end-x** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **interface-name** *reference*
          - **protection** *keyword*
          - **srh-mode** *keyword*
          - **end-x-auto-allocate** *keyword* **protection** *keyword*
  - **micro-segment-locator** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **function**
      - **ua** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **interface-name** *reference*
        - **protection** *keyword*
        - **srh-mode** *keyword*
        - **ua-auto-allocate** *keyword* **protection** *keyword*
      - **udt4**
        - **value** *number*
      - **udt46**
        - **value** *number*
      - **udt6**
        - **value** *number*
  - **locator** *string*
    - **admin-state** *keyword*
    - **algorithm** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **argument-length** *number*
    - **block-length** *number*
    - **function-length** *number*
    - **label-block** *reference*
    - **prefix**
      - **ip-prefix** *string*
    - **static-function**
      - **label-block** *reference*
      - **max-entries** *number*
    - **termination-fpe** *reference*
  - **micro-segment**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **argument-length** *number*

configure router segment-routing segment-routing-v6 micro-segment block

- **block** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **label-block** *reference*
  - **prefix**
    - **ip-prefix** *string*
  - **static-function**
    - **max-entries** *number*
    - **termination-fpe** *reference*
- **block-length** *number*
- **global-sid-entries** *number*
- **sid-length** *number*
- **micro-segment-locator** *string*
  - **admin-state** *keyword*
  - **algorithm** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **block** *reference*
  - **un**
    - **srh-mode** *keyword*
    - **value** *number*
- **origination-fpe** *reference*
- **source-address** *string*
- **sr-mpls**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **prefix-sids** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **ipv4-sid**
    - **index** *number*
    - **label** *number*
  - **ipv6-sid**
    - **index** *number*
    - **label** *number*
  - **node-sid** *boolean*
- **sr-policies**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress-statistics**
    - **accounting-policy** *reference*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **collect-stats** *boolean*
  - **ingress-statistics**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **reserved-label-block** *reference*
- **static-policy** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **binding-sid** *number*
  - **color** *number*
  - **distinguisher** *number*
  - **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **head-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)
  - **maintenance-policy** *reference*
  - **preference** *number*
  - **segment-list** *number*

configure router segment-routing sr-policies static-policy segment-list admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **segment** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **behavior-and-structure**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **behavior** *keyword*
    - **block-length** *number*
    - **function-length** *number*
    - **node-length** *number*
  - **mpls-label** *number*
  - **srv6-sid** *string*
- **weight** *number*
- **segment-routing-v6**
  - **binding-sid** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ip-address** *string*
    - **locator**
      - **function** *keyword*
      - **function-value** *number*
      - **locator-name** *reference*
    - **micro-segment-locator**
      - **function** *keyword*
      - **function-value** *number*
      - **locator-name** *reference*
  - **return-path-bfd-sid** *string*
  - **type** *keyword*
- **selective-fib** *boolean*
- **sfm-overload**
  - **holdoff-time** *number*
- **sgt-qos**
  - **dot1p**
    - **application** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dot1p** (*keyword* | *number*)
  - **dscp**
    - **application** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dscp** (*keyword* | *number*)
    - **dscp-map** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **fc** *keyword*
- **static-routes**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hold-down**
    - **initial** *number*
    - **max-value** *number*
    - **multiplier** *number*
  - **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **backup-tag** *number*
    - **blackhole**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*



## configure router static-routes route blackhole community

```

- community string
- description string
- dynamic-bgp boolean
- generate-icmp boolean
- metric number
- preference number
- prefix-list
  - flag keyword
  - name reference
- tag number
- community string
- indirect (ipv4-address-no-zone | ipv6-address-no-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - metric number
  - preference number
  - prefix-list
    - flag keyword
    - name reference
  - qos
    - forwarding-class keyword
    - priority keyword
  - source-class number
  - tag number
  - tunnel-next-hop
    - disallow-igp boolean
    - flex-algo number
    - resolution keyword
    - resolution-filter
      - ldp boolean
      - mpls-fwd-policy boolean
      - rib-api boolean
      - rsvp-te
        - lsp string
      - sr-isis boolean
      - sr-ospf boolean
      - sr-ospf3 boolean
      - sr-te
        - lsp string
  - interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number

```

configure router static-routes route interface load-balancing-weight

```

- load-balancing-weight number
- metric number
- preference number
- prefix-list
  - flag keyword
  - name reference
- qos
  - forwarding-class keyword
  - priority keyword
- source-class number
- tag number
- ipsec-tunnel string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- community string
- description string
- metric number
- preference number
- tag number
- next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- backup-next-hop
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
- bfd-liveness boolean
- community string
- cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - drop-count number
  - interval number
  - log boolean
  - padding-size number
- description string
- destination-class number
- ldp-sync boolean
- load-balancing-weight number
- metric number
- preference number
- prefix-list
  - flag keyword
  - name reference
- qos
  - forwarding-class keyword
  - priority keyword
- source-class number
- tag number
- validate-next-hop boolean
- tag number
- subscriber-mgmt
- apply-groups reference
- apply-groups-exclude reference
- dhcpv4
  - apply-groups reference
  - apply-groups-exclude reference
  - routed-subnet-transparent-forward boolean
- triggered-policy boolean
- ttl-propagate
- apply-groups reference
- apply-groups-exclude reference
- label-route-local keyword
- label-route-transit keyword

```

configure router ttl-propagate lsr-label-route

- **lsr-label-route** *keyword*
- **vprn-local** *keyword*
- **vprn-transit** *keyword*
- **tunnel-interface**
  - **ldp-p2mp-leaf** *number sender-address string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
  - **ldp-p2mp-root** *number sender-address string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
  - **rsvp-p2mp-leaf** *string sender-address string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
  - **rsvp-p2mp-root** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
- **twamp-light**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **reflector**
    - **admin-state** *keyword*
    - **allow-ipv6-udp-checksum-zero** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **prefix** (*ipv4-prefix | ipv6-prefix*)
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
    - **type** *keyword*
    - **udp-port** *number*
- **vrgw**
  - **lanext**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **vlan-port** *number*
    - **vlan-vtep-range**
      - **end** (*ipv4-address-no-zone | ipv6-address-no-zone*)
      - **start** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **wlan-gw-group** *reference*
- **weighted-ecmp** *keyword*
- **wlan-gw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **distributed-subscriber-mgmt**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ipv6-tcp-mss-adjust** *number*
  - **mobility-triggered-accounting**
    - **admin-state** *keyword*
    - **hold-down** *number*
    - **include-counters** *boolean*
  - **xconnect**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **tunnel-source-ip** *string*
    - **wlan-gw-group** *reference*
- **wpp**

---

configure router wpp admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **portal** *string*
  - **ack-auth-retry-count** *number*
  - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ntf-logout-retry-count** *number*
  - **port-format** *keyword*
  - **retry-interval** *number*
  - **secret** *string*
  - **version** *number*

### 3.39.1 router command descriptions

#### **router** [**router-name**] *string*

Synopsis	Enter the <b>router</b> list instance
Context	<b>configure router</b> <i>string</i>
Tree	<b>router</b>
Description	Commands in this context configure a router instance that represents a virtual router in the system. There will always be at least two instances in the system. The Base or transport router and the management router are created when the system is initialized and cannot be deleted.
Max. Instances	4
Introduced	16.0.R1
Platforms	All

#### **[router-name]** *string*

Synopsis	Administrative router name
Context	<b>configure router</b> <i>string</i>
Tree	<b>router</b>
String Length	1 to 64
MD-CLI Default	Base
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

#### **aggregates**

Synopsis	Enter the <b>aggregates</b> context
Context	<b>configure router</b> <i>string aggregates</i>
Tree	<b>aggregates</b>
Introduced	16.0.R1
Platforms	All

**aggregate** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>aggregate</b> list instance
Context	<b>configure router</b> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">aggregate</a>
Description	<p>Commands in this context add aggregate routes to the routing table when there are one or more component routes. A component route is any route installed in the forwarding table that is a more-specific match of the aggregate.</p> <p>The use of aggregate routes can lead to smaller routing table sizes by reducing the number of routes that need to be advertised to neighbor routes.</p>
Introduced	16.0.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix of the aggregate route
Context	<b>configure router</b> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">aggregate</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**aggregator**

Synopsis	Enter the <b>aggregator</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">aggregator</a>
Tree	<a href="#">aggregator</a>
Description	Commands in this context configure the BGP AGGREGATOR path attribute for the aggregate route.
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	Aggregator IP address
----------	-----------------------

Context	<b>configure router string aggregates aggregate (ipv4-prefix   ipv6-prefix) aggregator address string</b>
Tree	<b>address</b>
Introduced	16.0.R1
Platforms	All

### **as-number number**

Synopsis	Aggregator AS number
Context	<b>configure router string aggregates aggregate (ipv4-prefix   ipv6-prefix) aggregator as-number number</b>
Tree	<b>as-number</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **as-set boolean**

Synopsis	Use AS_SET path segment type for the aggregate route
Context	<b>configure router string aggregates aggregate (ipv4-prefix   ipv6-prefix) as-set boolean</b>
Tree	<b>as-set</b>
Description	<p>When configured to <b>true</b>, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes.</p> <p>When configured to <b>false</b>, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **blackhole**

Synopsis	Enable the <b>blackhole</b> context
Context	<b>configure router string aggregates aggregate (ipv4-prefix   ipv6-prefix) blackhole</b>
Tree	<b>blackhole</b>
Notes	The following elements are part of a choice: <b>blackhole</b> or <b>indirect</b> .

Introduced	16.0.R1
Platforms	All

### **generate-icmp** *boolean*

Synopsis	Send ICMP unreachable messages for aggregate routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>blackhole</b> <b>generate-icmp</b> <i>boolean</i>
Tree	<b>generate-icmp</b>
Description	When configured to <b>true</b> , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to <b>false</b> , ICMP unreachable messages are not generated.
Default	false
Introduced	16.0.R2
Platforms	All

### **community** *string*

Synopsis	Community name that is added to the aggregate route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>community</b> <i>string</i>
Tree	<b>community</b>
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>



String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **discard-component-communities** *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>discard-component-communities</b> <i>boolean</i>
Tree	<b>discard-component-communities</b>
Default	false
Introduced	19.7.R1
Platforms	All

### **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>indirect</b>
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: <b>blackhole</b> or <b>indirect</b> .
Introduced	16.0.R1
Platforms	All

### **local-preference** *number*

Synopsis	Local preference used when aggregate route is exported
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>local-preference</b> <i>number</i>
Tree	<b>local-preference</b>

Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Policy name for the aggregated route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>policy reference</b>
Tree	<b>policy</b>
Description	<p>This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.</p> <p>If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.</p>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Introduced	20.10.R1
Platforms	All

### **summary-only boolean**

Synopsis	Advertise the aggregate route only
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>summary-only boolean</b>
Tree	<b>summary-only</b>
Description	<p>When configured to <b>true</b>, the router suppresses the advertisement of more specific component routes for the aggregate.</p> <p>When configured to <b>false</b>, the router advertises both the aggregate route and its contributing routes.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**tunnel-group** *number*

Synopsis	Tunnel group from which to associate the MC IPsec state
Context	<b>configure</b> <b>router</b> <i>string</i> <b>aggregates</b> <b>aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>tunnel-group</b> <i>number</i>
Tree	<b>tunnel-group</b>
Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	20.7.R1
Platforms	All

**allow-bgp-to-igp-export** *boolean*

Synopsis	Enable the distribution of BGP routes into the IGP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>allow-bgp-to-igp-export</b> <i>boolean</i>
Tree	<b>allow-bgp-to-igp-export</b>
Description	When configured to <b>true</b> , the router can export base BGP RTM routes into the IGP routing instance within the base router. This command applies to already exported BGP prefixes and to newly received BGP prefixes.
Default	true
Introduced	23.7.R1
Platforms	All

**allow-icmp-redirect** *boolean*

Synopsis	Allow ICMP redirects on the management interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>allow-icmp-redirect</b> <i>boolean</i>
Tree	<b>allow-icmp-redirect</b>
Description	When configured to <b>true</b> , ICMP redirect messages can be received on the management interface. When configured to <b>false</b> , all received ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

### **allow-icmp6-redirect** *boolean*

Synopsis	Allow IPv6 ICMP redirects on the management interface
Context	<b>configure</b> <i>router string</i> <b>allow-icmp6-redirect</b> <i>boolean</i>
Tree	<b>allow-icmp6-redirect</b>
Description	When configured to <b>true</b> , IPv6 ICMP redirect messages can be received on the management interface. When configured to <b>false</b> , all received IPv6 ICMP redirect messages are dropped. This command cannot be configured on a non-management interface.
Default	false
Introduced	16.0.R1
Platforms	All

### **autonomous-system** *number*

Synopsis	AS number advertised to peers for this router
Context	<b>configure</b> <i>router string</i> <b>autonomous-system</b> <i>number</i>
Tree	<b>autonomous-system</b>
Description	This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated. If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <i>router string</i> <b>bfd</b>
Tree	<b>bfd</b>
Introduced	19.7.R1
Platforms	All

**seamless-bfd**

Synopsis	Enter the <b>seamless-bfd</b> context
Context	<b>configure router</b> <i>string</i> <b>bfd seamless-bfd</b>
Tree	<b>seamless-bfd</b>
Introduced	19.7.R1
Platforms	All

**peer** [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure router</b> <i>string</i> <b>bfd seamless-bfd peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Max. Instances	8000
Introduced	19.7.R1
Platforms	All

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Address of the remote node
Context	<b>configure router</b> <i>string</i> <b>bfd seamless-bfd peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

**discriminator** *number*

Synopsis	Discriminator of the remote node
Context	<b>configure router</b> <i>string</i> <b>bfd seamless-bfd peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>discriminator</b> <i>number</i>
Tree	<b>discriminator</b>
Range	1 to 4294967295
Introduced	19.7.R1

Platforms All

## bgp

Synopsis Enable the **bgp** context  
Context **configure router string bgp**  
Tree **bgp**  
Introduced 16.0.R1  
Platforms All

## add-paths

Synopsis Enable the **add-paths** context  
Context **configure router string bgp add-paths**  
Tree **add-paths**  
Description Commands in this context configure add-paths support for the specified address families of the BGP instance. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.  
Introduced 16.0.R1  
Platforms All

## evpn

Synopsis Enter the **evpn** context  
Context **configure router string bgp add-paths evpn**  
Tree **evpn**  
Description Commands in this context configure the Add-Paths capability for EVPN routes. By default, Add-Paths is not enabled for EVPN routes.  
Introduced 21.10.R1  
Platforms All

## receive boolean

Synopsis Receive multiple EVPN paths per prefix from a peer  
Context **configure router string bgp add-paths evpn receive boolean**  
Tree **receive**

Default	false
Introduced	21.10.R1
Platforms	All

### **send** (*number* | *keyword*)

Synopsis	Maximum number of EVPN paths to send
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths evpn send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	21.10.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths ipv4</b>
Tree	<b>ipv4</b>
Description	Commands in this context configure add-paths support for the IPv4 unicast address family.
Introduced	16.0.R1
Platforms	All

### **receive** *boolean*

Synopsis	Receive multiple routes per unlabeled IPv4 prefix
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths ipv4 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple unlabeled IPv4 unicast routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**send** (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths ipv4 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths ipv6</b>
Tree	<b>ipv6</b>
Description	Commands in this context configure add-paths support for the IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

**receive** *boolean*

Synopsis	Receive multiple routes per unlabeled IPv6 prefix
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths ipv6 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer.  When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1



Platforms All

### **send** (*number* | *keyword*)

Synopsis Maximum paths per unlabeled IPv6 unicast prefix

Context **configure router** *string* **bgp add-paths ipv6 send** (*number* | *keyword*)

Tree **send**

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per unlabeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, add-paths send capability is not enabled for unlabeled IPv6 unicast routes.

Range 1 to 16

Options multipaths – Number of best multipaths for each NLRI

Introduced 16.0.R1

Platforms All

### **label-ipv4**

Synopsis Enter the **label-ipv4** context

Context **configure router** *string* **bgp add-paths label-ipv4**

Tree **label-ipv4**

Description Commands in this context configure add-paths support for the labeled IPv4 unicast address family.

Introduced 16.0.R1

Platforms All

### **receive** *boolean*

Synopsis Receive multiple labeled-unicast routes per IPv4 prefix

Context **configure router** *string* **bgp add-paths label-ipv4 receive** *boolean*

Tree **receive**

Description When configured to **true**, this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer.

When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced	16.0.R1
Platforms	All

### **send** (*number* | *keyword*)

Synopsis	Paths advertised per labeled IPv4 unicast prefix
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths label-ipv4 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

### **label-ipv6**

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths label-ipv6</b>
Tree	<b>label-ipv6</b>
Description	Commands in this context configure add-paths support for the labeled IPv6 unicast address family.
Introduced	16.0.R1
Platforms	All

### **receive** *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths label-ipv6 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer.  When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **send** (*number* | *keyword*)

Synopsis	Paths advertised per labeled IPv6 unicast prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp add-paths label-ipv6 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv4**

Synopsis	Enter the <b>mcast-vpn-ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp add-paths mcast-vpn-ipv4</b>
Tree	<b>mcast-vpn-ipv4</b>
Description	Commands in this context configure add-paths support for the multicast IPv4 VPN address family.
Introduced	16.0.R1
Platforms	All

### **receive** *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp add-paths mcast-vpn-ipv4 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer.

	When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send number**

Synopsis	Maximum paths advertised per multicast IPv4 VPN prefix
Context	<b>configure router string</b> <a href="#">bgp add-paths mcast-vpn-ipv4 send number</a>
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for multicast IPv4 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv6**

Synopsis	Enter the <b>mcast-vpn-ipv6</b> context
Context	<b>configure router string</b> <a href="#">bgp add-paths mcast-vpn-ipv6</a>
Tree	<a href="#">mcast-vpn-ipv6</a>
Description	Commands in this context configure add-paths support for the multicast IPv6 VPN address family.
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	<b>configure router string</b> <a href="#">bgp add-paths mcast-vpn-ipv6 receive boolean</a>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer.

	When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send number**

Synopsis	Maximum paths advertised per multicast IPv6 VPN prefix
Context	<b>configure router string</b> <a href="#">bgp add-paths mcast-vpn-ipv6 send number</a>
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for multicast IPv6 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv4**

Synopsis	Enter the <b>mvpn-ipv4</b> context
Context	<b>configure router string</b> <a href="#">bgp add-paths mvpn-ipv4</a>
Tree	<a href="#">mvpn-ipv4</a>
Description	Commands in this context configure add-paths support for the multicast VPN IPv4 address family.
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple routes per multicast VPN IPv4 NRLI
Context	<b>configure router string</b> <a href="#">bgp add-paths mvpn-ipv4 receive boolean</a>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple routes per multicast VPN IPv4 NRLI to be received from a peer.

	When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send number**

Synopsis	Maximum paths advertised per multicast VPN IPv4 NRLI
Context	<b>configure router string</b> <a href="#">bgp add-paths mvpn-ipv4 send number</a>
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv6**

Synopsis	Enter the <b>mvpn-ipv6</b> context
Context	<b>configure router string</b> <a href="#">bgp add-paths mvpn-ipv6</a>
Tree	<a href="#">mvpn-ipv6</a>
Description	Commands in this context configure add-paths support for the multicast VPN IPv6 address family.
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple routes per multicast VPN IPv6 NRLI
Context	<b>configure router string</b> <a href="#">bgp add-paths mvpn-ipv6 receive boolean</a>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple routes per multicast VPN IPv6 NRLI to be received from a peer.

	When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send number**

Synopsis	Maximum paths advertised per multicast VPN IPv6 NRLI
Context	<b>configure router string</b> <a href="#">bgp add-paths mvpn-ipv6 send number</a>
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 NRLI. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4**

Synopsis	Enter the <b>vpn-ipv4</b> context
Context	<b>configure router string</b> <a href="#">bgp add-paths vpn-ipv4</a>
Tree	<a href="#">vpn-ipv4</a>
Description	Commands in this context configure add-paths support for the VPN-IPv4 address family.
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	<b>configure router string</b> <a href="#">bgp add-paths vpn-ipv4 receive boolean</a>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple routes per VPN-IPv4 prefix to be received from a peer.

	When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send** (*number* | *keyword*)

Synopsis	Maximum paths advertised per VPN-IPv4 prefix
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths vpn-ipv4 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6**

Synopsis	Enter the <b>vpn-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths vpn-ipv6</b>
Tree	<b>vpn-ipv6</b>
Description	Commands in this context configure add-paths support for the VPN-IPv6 address family.
Introduced	16.0.R1
Platforms	All

### **receive** *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	<b>configure</b> <i>router string</i> <b>bgp add-paths vpn-ipv6 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple routes per VPN-IPv6 prefix to be received from a peer.



When configured to **false**, the ADD-PATH receive capability is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **send** (*number* | *keyword*)

Synopsis	Maximum paths advertised per VPN-IPv6 prefix
Context	<b>configure</b> <i>router string</i> <a href="#">bgp add-paths vpn-ipv6 send</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, add-paths send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the BGP instance
Context	<b>configure</b> <i>router string</i> <a href="#">bgp admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **advertise-external**

Synopsis	Enter the <b>advertise-external</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp advertise-external</a>
Tree	<a href="#">advertise-external</a>

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Description	Commands in this context allow BGP to advertise its best external route to a destination for specified address families even when its best overall route is an internal route.
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>advertise-external</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>advertise-external</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>advertise-external</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
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Context	<b>configure router</b> <i>string</i> <b>bgp advertise-external label-ipv6</b> <i>boolean</i>
Tree	<b>label-ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **advertise-inactive** *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	<b>configure router</b> <i>string</i> <b>bgp advertise-inactive</b> <i>boolean</i>
Tree	<b>advertise-inactive</b>
Description	When configured to <b>true</b> , this command allows any inactive BGP route to be advertised, even though it is not the used route.  When configured to <b>false</b> , the advertisement of inactive BGP routes to other BGP peers is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **advertise-ipv6-next-hops**

Synopsis	Enter the <b>advertise-ipv6-next-hops</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp advertise-ipv6-next-hops</b>
Tree	<b>advertise-ipv6-next-hops</b>
Description	Commands in this context allow specified BGP address family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.  This command context has no effect on routes advertised to IPv4 peers.
Introduced	16.0.R1
Platforms	All

### **evpn** *boolean*

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	<b>configure router</b> <i>string</i> <b>bgp advertise-ipv6-next-hops evpn</b> <i>boolean</i>
Tree	<b>evpn</b>

Description	When configured to <b>true</b> , EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. When configured to <b>false</b> , EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <b>bgp advertise-ipv6-next-hops</b> <i>ipv4 boolean</i>
Tree	<a href="#">ipv4</a>
Description	When configured to <b>true</b> , IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.  When configured to <b>false</b> , IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	19.5.R1
Platforms	All

### **label-ipv4 boolean**

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <b>bgp advertise-ipv6-next-hops</b> <i>label-ipv4 boolean</i>
Tree	<a href="#">label-ipv4</a>
Description	When configured to <b>true</b> , label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.  When configured to <b>false</b> , label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.

Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp advertise-ipv6-next-hops label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Description	<p>When configured to <b>true</b>, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp advertise-ipv6-next-hops vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Description	<p>When configured to <b>true</b>, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <a href="#">bgp advertise-ipv6-next-hops</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Description	When configured to <b>true</b> , VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.  When configured to <b>false</b> , VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.
Default	false
Introduced	16.0.R1
Platforms	All

**aggregator-id-zero** *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	<b>configure</b> <i>router string</i> <a href="#">bgp aggregator-id-zero</a> <i>boolean</i>
Tree	<a href="#">aggregator-id-zero</a>
Description	When configured to <b>true</b> , the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.  When configured to <b>false</b> , the AS number and router ID are added to the AGGREGATOR path attribute.
Default	false
Introduced	16.0.R1
Platforms	All

**asn-4-byte** *boolean*

Synopsis	Advertise support for 4-byte ASNs
Context	<b>configure</b> <i>router string</i> <a href="#">bgp asn-4-byte</a> <i>boolean</i>
Tree	<a href="#">asn-4-byte</a>
Default	true
Introduced	16.0.R1
Platforms	All

**authentication-key *string***

Synopsis	BGP authentication key for all peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the <b>configure system security hash-control management-interface md-cli hash-algorithm</b> setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

**authentication-keychain *reference***

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	<b>configure</b> <a href="#">system security keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

**backup-path**

Synopsis	Enter the <b>backup-path</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp backup-path</a>
Tree	<a href="#">backup-path</a>
Description	<p>Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.</p> <p>By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.</p>
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp backup-path ipv4 boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp backup-path ipv6 boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp backup-path label-ipv4 boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp backup-path label-ipv6 boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All



## best-path-selection

Synopsis	Enter the <b>best-path-selection</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection</a>
Tree	<a href="#">best-path-selection</a>
Introduced	16.0.R1
Platforms	All

## always-compare-med

Synopsis	Enter the <b>always-compare-med</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection always-compare-med</a>
Tree	<a href="#">always-compare-med</a>
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	16.0.R1
Platforms	All

## med-value *keyword*

Synopsis	Action for a missing MED attribute
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection always-compare-med med-value keyword</a>
Tree	<a href="#">med-value</a>
Options	off, missing-med-zero, missing-med-infinity, on
Default	off
Introduced	16.0.R1
Platforms	All

## strict-as *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection always-compare-med strict-as boolean</a>
Tree	<a href="#">strict-as</a>
Description	When configured to <b>true</b> , the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS.

When configured to **false**, the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.

Default	true
Introduced	16.0.R1
Platforms	All

## as-path-ignore

Synopsis	Enter the <b>as-path-ignore</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection as-path-ignore</b>
Tree	<a href="#">as-path-ignore</a>
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	16.0.R1
Platforms	All

## ipv4 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection as-path-ignore ipv4 <i>boolean</i></b>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6 *boolean*

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection as-path-ignore ipv6 <i>boolean</i></b>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### ***l2-vpn boolean***

Synopsis	Ignore AS path length for L2-VPN routes
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection as-path-ignore l2-vpn boolean</a>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

### ***label-ipv4 boolean***

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection as-path-ignore label-ipv4 boolean</a>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### ***label-ipv6 boolean***

Synopsis	Ignore AS path length for labeled-unicast IPv6 routes
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection as-path-ignore label-ipv6 boolean</a>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### ***mcast-ipv4 boolean***

Synopsis	Ignore AS path length for IPv4 multicast routes
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection as-path-ignore mcast-ipv4 boolean</a>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv6** *boolean*

Synopsis	Ignore AS path length for IPv6 multicast routes
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">best-path-selection</a> <a href="#">as-path-ignore</a> <a href="#">mcast-ipv6</a> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv4** *boolean*

Synopsis	Ignore AS path length for IPv4 MVPN routes
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">best-path-selection</a> <a href="#">as-path-ignore</a> <a href="#">mvpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv6** *boolean*

Synopsis	Ignore AS path length for IPv6 MVPN routes
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">best-path-selection</a> <a href="#">as-path-ignore</a> <a href="#">mvpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Ignore AS path length for VPN IPv4 (SAFI 128) routes
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">best-path-selection</a> <a href="#">as-path-ignore</a> <a href="#">vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Ignore AS path length for VPN IPv6 (SAFI 128) routes
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp best-path-selection as-path-ignore vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**compare-origin-validation-state** *boolean*

Synopsis	Compare RPKI origin validation state of usable routes
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp best-path-selection compare-origin-validation-state</a> <i>boolean</i>
Tree	<a href="#">compare-origin-validation-state</a>
Description	<p>When configured to <b>true</b>, the RPKI origin validation state is compared between BGP routes, where a Valid state is preferred over a Not-Found state, and a Not-Found state is preferred over an Invalid state.</p> <p>When configured to <b>false</b>, the RPKI origin validate state comparison is not performed as part of the BGP route selection process.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**d-path-length-ignore** *boolean*

Synopsis	Enable D-PATH length ignore
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp best-path-selection d-path-length-ignore</a> <i>boolean</i>
Tree	<a href="#">d-path-length-ignore</a>
Description	<p>When configured to <b>true</b>, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.</p> <p>At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.</p> <p>At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.</p>

Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

Default	false
Introduced	21.10.R1
Platforms	All

### **deterministic-med** *boolean*

Synopsis	Group paths based on AS before MED attribute comparison
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection deterministic-med</a> <i>boolean</i>
Tree	<a href="#">deterministic-med</a>
Description	<p>When configured to <b>true</b>, BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.</p> <p>When configured to <b>false</b>, paths are not grouped and the overall best-path selection can depend on the order of route arrival.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **ebgp-ibgp-equal**

Synopsis	Enter the <b>ebgp-ibgp-equal</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal</a>
Tree	<a href="#">ebgp-ibgp-equal</a>
Description	<p>Commands in this context allow BGP to ignore the difference between EBGp and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.</p> <p>By default, the BGP decision process prefers an EBGp learned route over an IBGP learned route.</p>
Introduced	16.0.R1
Platforms	All

### **evpn** *boolean*

Synopsis	Consider EBGP and IBGP EVPN routes equal
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal evpn</a> <i>boolean</i>
Tree	<a href="#">evpn</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Consider EBGP and IBGP IPv4 routes equal
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Consider EBGP and IBGP IPv6 routes equal
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Consider EBGP and IBGP label-IPv4 routes equal
Context	<b>configure</b> <i>router string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Consider EBGP and IBGP label-IPv6 routes equal
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection ebgp-ibgp-equal label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv4 routes equal
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection ebgp-ibgp-equal vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Consider EBGP and IBGP VPN-IPv6 routes equal
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection ebgp-ibgp-equal vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ignore-nh-metric** *boolean*

Synopsis	Ignore next-hop distance in best path selection
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp best-path-selection ignore-nh-metric</b> <i>boolean</i>
Tree	<a href="#">ignore-nh-metric</a>
Description	When configured to <b>true</b> , BGP ignores the resolved distance to the BGP next hop in its route selection process.  When configured to <b>false</b> , BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router



	BGP peers (in the <b>router</b> context) or IP prefix learned from VPRN BGP peers (in the <b>vprn</b> context).
Default	false
Introduced	16.0.R1
Platforms	All

## ignore-router-id

Synopsis	Enable the <b>ignore-router-id</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection</a> <a href="#">ignore-router-id</a>
Tree	<a href="#">ignore-router-id</a>
Description	<p>Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families.</p> <p>By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.</p>
Introduced	16.0.R1
Platforms	All

## include-internal

Synopsis	Enter the <b>include-internal</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection</a> <a href="#">ignore-router-id</a> <a href="#">include-internal</a>
Tree	<a href="#">include-internal</a>
Description	Commands in this context specify the internal address families for which the router ID values are ignored, even when comparing two IBGP paths or an EBGP and an IBGP path.
Introduced	16.0.R1
Platforms	All

## mvpn-ipv4 *boolean*

Synopsis	Ignore the router IDs of MVPN-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection</a> <a href="#">ignore-router-id</a> <a href="#">include-internal</a> <a href="#">mvpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false

Introduced	16.0.R1
Platforms	All

### **mvpn-ipv6** *boolean*

Synopsis	Ignore the router IDs of MVPN-IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection ignore-router-id include-internal mvpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **origin-invalid-unusable** *boolean*

Synopsis	Deem invalid routes unusable for best-path selection
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp best-path-selection origin-invalid-unusable</a> <i>boolean</i>
Tree	<a href="#">origin-invalid-unusable</a>
Description	<p>When configured to <b>true</b>, routes that have an RPKI origin validation state of Invalid are considered unusable by the best-path selection algorithm. These routes cannot be used for forwarding and cannot be advertised to BGP peers.</p> <p>When configured to <b>false</b>, routes with an RPKI origin validation state of Invalid are compared to other usable routes for the same prefix according to the BGP decision process.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations.</p> <p>When configured to <b>false</b>, BFD is not enabled globally for all BGP sessions.</p>
Default	false

Introduced	16.0.R1
Platforms	All

## **bfd-strict-mode**

Synopsis	Enter the <b>bfd-strict-mode</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">bfd-strict-mode</a>
Tree	<a href="#">bfd-strict-mode</a>
Introduced	23.7.R1
Platforms	All

## **advertise**

Synopsis	Enable the <b>advertise</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">bfd-strict-mode</a> <a href="#">advertise</a>
Tree	<a href="#">advertise</a>
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none"><li>• The inherited or configured value for the <b>bfd-liveness</b> command that applies to the peer is <b>true</b>.</li><li>• The interface associated with the peer has a valid BFD configuration.</li></ul> <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.</p> <p>When unconfigured, BGP does not advertise the Strict-BFD capability to peers.</p>
Introduced	23.7.R1
Platforms	All

## **holdtime** *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">bfd-strict-mode</a> <a href="#">advertise</a> <a href="#">holdtime</a> <i>number</i>
Tree	<a href="#">holdtime</a>
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.

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Range	1 to 65535
Units	seconds
Default	30
Introduced	23.7.R1
Platforms	All

### **next-hop-reachability** *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>bfd-strict-mode</b> <b>next-hop-reachability</b> <i>boolean</i>
Tree	<b>next-hop-reachability</b>
Description	<p>When configured to <b>true</b>, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:</p> <ul style="list-style-type: none"><li>• The BFD session to the peer is in a down state.</li><li>• There is a valid interface BFD configuration that applies to the peer.</li><li>• There is a valid BFD liveness configuration that applies to the peer.</li></ul> <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p> <p>Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.</p> <p>The behavior of the router when this command is <b>true</b> does not depend on whether Strict-BFD is used, as both features are independent.</p> <p>Configuring this command to <b>true</b> only affects routes belonging to the following address families:</p> <ul style="list-style-type: none"><li>• IPv4</li><li>• IPv6</li><li>• IPv4 VPN</li><li>• IPv6 VPN</li><li>• labeled unicast IPv4</li><li>• labeled unicast IPv6</li><li>• EVPN</li><li>• IPv4 multicast</li><li>• IPv6 multicast</li><li>• IPv4 VPN multicast</li><li>• IPv6 VPN multicast</li></ul>

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Default	false
Introduced	23.7.R1
Platforms	All

## bgp-tunnel-metric

Synopsis	Enter the <b>bgp-tunnel-metric</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <b>bgp-tunnel-metric</b>
Tree	<b>bgp-tunnel-metric</b>
Description	Commands in this context control the tunnel table metrics associated with BGP label unicast routes.
Introduced	20.5.R1
Platforms	All

## prefer-aigp *boolean*

Synopsis	Use the AIGP attribute as tunnel metric when present
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <b>bgp-tunnel-metric</b> <b>prefer-aigp</b> <i>boolean</i>
Tree	<b>prefer-aigp</b>
Description	When configured to <b>true</b> , the TTM metric is based on the AIGP metric if the route has the path attribute. When the BGP-LU route is selected for installation in TTM and it is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the AIGP metric value of the BGP-LU route plus the resolved cost to the BGP next-hop of the route; otherwise, the metric is set to the value in the <b>value</b> setting.  When configured to <b>false</b> , the AIGP attribute is ignored for purposes to TTM metric derivation.
Default	false
Introduced	20.5.R1
Platforms	All

## prefer-med *boolean*

Synopsis	Use the MED attribute as tunnel metric when present
Context	<b>configure</b> <i>router string</i> <b>bgp</b> <b>bgp-tunnel-metric</b> <b>prefer-med</b> <i>boolean</i>

Tree	<a href="#">prefer-med</a>
Description	<p>When configured to <b>true</b>, the TTM metric is based on the MED metric value of the BGP-LU route. When a BGP-LU route is selected for installation in TTM and is not matched by a BGP import policy entry that overrides the BGP tunnel metric action, the TTM metric of the tunnel is set to the MED metric value of the BGP-LU route with the resolved cost to the BGP next hop of the route added to it. Otherwise, the metric is set to the value configured using the <b>value</b> command.</p> <p>When configured to <b>false</b>, the MED attribute is ignored for TTM metric derivation.</p> <p><b>Note:</b> <b>prefer-aigp</b> takes precedence over this command if the received BGP-LU has both attributes.</p>
Default	false
Introduced	23.3.R1
Platforms	All

### **value** *number*

Synopsis	BGP tunnel metric value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">bgp-tunnel-metric</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Description	<p>This command configures a BGP tunnel metric for label IPv4 routes that do not have their metric set by more specific means.</p> <p>If a BGP-LU route is selected for installation in the TTM and there is no tunnel metric policy action that applies to the route, the TTM metric of the associated tunnel is set to this value if either:</p> <ul style="list-style-type: none"> <li>• <b>prefer-aigp</b> is set to <b>false</b></li> <li>• <b>prefer-aigp</b> is set to <b>true</b> but the BGP-LU route does not have an AIGP attribute</li> </ul>
Range	0 to 4294967295
Default	1000
Introduced	20.5.R1
Platforms	All

### **bgp-tunnel-preference** *number*

Synopsis	BGP tunnel table preference
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">bgp-tunnel-preference</a> <i>number</i>
Tree	<a href="#">bgp-tunnel-preference</a>
Description	This command configures the tunnel table preference for BGP-LU tunnel type.

The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.

This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the **mixed-lsp-mode** option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.

Range	1 to 255
Default	12
Introduced	21.10.R1
Platforms	All

### **block-prefix-sid** *boolean*

Synopsis	Block the prefix SID attribute
Context	<b>configure</b> <i>router string</i> <i>bgp block-prefix-sid boolean</i>
Tree	<a href="#">block-prefix-sid</a>
Description	<p>When configured to <b>true</b>, all prefix SID attributes are removed from label IPv4 and label IPv6 routes when they are exchanged with EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.</p> <p>When configured to <b>false</b>, all prefix SID attributes associated with label IPv4 and label IPv6 routes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **client-reflect** *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	<b>configure</b> <i>router string</i> <i>bgp client-reflect boolean</i>
Tree	<a href="#">client-reflect</a>
Description	<p>When configured to <b>true</b>, routes received from neighbors considered to be RR clients are reflected to other peers as expected.</p> <p>When configured to <b>false</b>, routes received from neighbors considered to be RR clients are not reflected to other clients.</p>
Default	true
Introduced	16.0.R1
Platforms	All

**cluster**

Synopsis	Enter the <b>cluster</b> context
Context	<b>configure router string bgp cluster</b>
Tree	<b>cluster</b>
Introduced	16.0.R1
Platforms	All

**allow-local-fallback boolean**

Synopsis	Allow fallback to RR topology location for ORR
Context	<b>configure router string bgp cluster allow-local-fallback boolean</b>
Tree	<b>allow-local-fallback</b>
Description	When configured to <b>true</b> , this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to <b>true</b> .  When configured to <b>false</b> , no route is advertised to the clients when there are no reachable routes from the client's ORR location.
Default	false
Introduced	16.0.R1
Platforms	All

**cluster-id string**

Synopsis	Route reflector cluster ID
Context	<b>configure router string bgp cluster cluster-id string</b>
Tree	<b>cluster-id</b>
Description	The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.
Introduced	16.0.R1
Platforms	All

**orr-location number**

Synopsis	Optimal route reflection location for the cluster
Context	<b>configure router string bgp cluster orr-location number</b>



Tree	<a href="#">orr-location</a>
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.  With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **connect-retry** *number*

Synopsis	BGP connect retry timer value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp connect-retry</a> <i>number</i>
Tree	<a href="#">connect-retry</a>
Description	This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.
Range	1 to 65535
Default	120
Introduced	16.0.R1
Platforms	All

### **convergence**

Synopsis	Enter the <b>convergence</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp convergence</a>
Tree	<a href="#">convergence</a>
Introduced	19.7.R1
Platforms	All

### **family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp convergence</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>

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Description	Commands in this context configure route convergence options for a specific BGP address family, specifically, the maximum amount of time BGP waits until it advertises the routes of the address family to its BGP peers.
Introduced	19.7.R1
Platforms	All

**[family-type] keyword**

Synopsis	Address family for which convergence selection applies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp convergence family</b> <i>keyword</i>
Tree	<b>family</b>
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

**max-wait-to-advertise number**

Synopsis	Maximum wait time before advertising routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp convergence family</b> <i>keyword</i> <b>max-wait-to-advertise</b> <i>number</i>
Tree	<b>max-wait-to-advertise</b>
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

**min-wait-to-advertise number**

Synopsis	Minimum wait time before advertising routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp convergence min-wait-to-advertise</b> <i>number</i>
Tree	<b>min-wait-to-advertise</b>
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

## damp-peer-oscillations

Synopsis	Enable the <b>damp-peer-oscillations</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp damp-peer-oscillations</b>
Tree	<b>damp-peer-oscillations</b>
Description	Commands in this context support the DampPeerOscillations FSM behavior described in section 8.1 of RFC 4271, <i>A Border Gateway Protocol 4 (BGP-4)</i> .  When unconfigured, the router does not perform peer oscillation damping and immediately transitions out of the idle state after every reset.
Introduced	16.0.R1
Platforms	All

## error-interval *number*

Synopsis	Time after a reset that the session must be error-free
Context	<b>configure</b> <i>router string</i> <b>bgp damp-peer-oscillations error-interval</b> <i>number</i>
Tree	<b>error-interval</b>
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

## idle-hold-time

Synopsis	Enter the <b>idle-hold-time</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp damp-peer-oscillations idle-hold-time</b>
Tree	<b>idle-hold-time</b>
Description	Commands in this context configure how long a BGP peer session remains in the idle state after some type of error causes the session to reset.  In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur in a short time period after each session reset cause longer and longer hold times in the idle state.
Introduced	16.0.R1
Platforms	All

### **initial-wait** *number*

Synopsis	Time session remains in idle state after stabilization
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp damp-peer-oscillations idle-hold-time initial-wait</b> <i>number</i>
Tree	<b>initial-wait</b>
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

### **max-wait** *number*

Synopsis	Maximum session idle time after repeated instability
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp damp-peer-oscillations idle-hold-time max-wait</b> <i>number</i>
Tree	<b>max-wait</b>
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

### **second-wait** *number*

Synopsis	Time that doubles after each session failure
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp damp-peer-oscillations idle-hold-time second-wait</b> <i>number</i>
Tree	<b>second-wait</b>
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

### **damping** *boolean*

Synopsis	Use BGP route damping to reduce route flap
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Context	<b>configure router</b> <i>string</i> <b>bgp damping</b> <i>boolean</i>
Tree	<b>damping</b>
Description	<p>When configured to <b>true</b>, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> <li>• Half-life: 15 minutes</li> <li>• Max-suppress: 60 minutes</li> <li>• Suppress-threshold: 3000</li> <li>• Reuse-threshold: 750</li> </ul> <p>When configured to <b>false</b>, BGP route damping for learned routes is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **def-recv-evpn-encap** *keyword*

Synopsis	Default EVPN encapsulation type
Context	<b>configure router</b> <i>string</i> <b>bgp def-recv-evpn-encap</b> <i>keyword</i>
Tree	<b>def-recv-evpn-encap</b>
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.
Options	mpls, vxlan
Default	mpls
Introduced	16.0.R1
Platforms	All

### **default-label-preference**

Synopsis	Enter the <b>default-label-preference</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp default-label-preference</b>
Tree	<b>default-label-preference</b>
Introduced	19.5.R1
Platforms	All

### **ebgp number**

Synopsis	Default preference for EBGp
Context	<b>configure</b> <i>router string</i> <i>bgp default-label-preference ebgp number</i>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

### **ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure</b> <i>router string</i> <i>bgp default-label-preference ibgp number</i>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

### **default-preference**

Synopsis	Enter the <b>default-preference</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp default-preference</i>
Tree	<a href="#">default-preference</a>
Introduced	19.5.R1
Platforms	All

### **ebgp number**

Synopsis	Default preference for EBGp
Context	<b>configure</b> <i>router string</i> <i>bgp default-preference ebgp number</i>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Default	0

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Introduced	19.5.R1
Platforms	All

### **ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure router string bgp default-preference ibgp number</b>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

### **description string**

Synopsis	Text description
Context	<b>configure router string bgp description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **dynamic-neighbor-limit number**

Synopsis	Max dynamic BGP sessions to accept from remote peers
Context	<b>configure router string bgp dynamic-neighbor-limit number</b>
Tree	<a href="#">dynamic-neighbor-limit</a>
Description	This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

## **ebgp-default-reject-policy**

Synopsis	Enter the <b>ebgp-default-reject-policy</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp ebgp-default-reject-policy</a>
Tree	<a href="#">ebgp-default-reject-policy</a>
Introduced	19.5.R1
Platforms	All

## **export** *boolean*

Synopsis	Enable default reject export policy for external peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp ebgp-default-reject-policy export</a> <i>boolean</i>
Tree	<a href="#">export</a>
Default	true
Introduced	19.5.R1
Platforms	All

## **import** *boolean*

Synopsis	Enable default reject import policy for external peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp ebgp-default-reject-policy import</a> <i>boolean</i>
Tree	<a href="#">import</a>
Default	true
Introduced	19.5.R1
Platforms	All

## **egress-peer-engineering**

Synopsis	Enable the <b>egress-peer-engineering</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp egress-peer-engineering</a>
Tree	<a href="#">egress-peer-engineering</a>
Introduced	21.7.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	<b>configure</b> <i>router string</i> <i>bgp egress-peer-engineering admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

**enforce-first-as** *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	<b>configure</b> <i>router string</i> <i>bgp enforce-first-as boolean</i>
Tree	<a href="#">enforce-first-as</a>
Description	<p>When configured to <b>true</b> for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the <b>update-fault-tolerance</b> command in the <b>error-handling</b> context is set to <b>false</b>) or the session is left up but the route is treated as withdrawn (if <b>update-fault-tolerance</b> is set to <b>true</b>).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When configured to <b>false</b>, received routes are not checked for compliance with the rule.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**error-handling**

Synopsis	Enter the <b>error-handling</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp error-handling</i>
Tree	<a href="#">error-handling</a>
Introduced	16.0.R1
Platforms	All

**update-fault-tolerance** *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp error-handling update-fault-tolerance</b> <i>boolean</i>
Tree	<b>update-fault-tolerance</b>
Description	When configured to <b>true</b> , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.  When configured to <b>false</b> , most errors trigger a session reset.
Default	false
Introduced	16.0.R1
Platforms	All

**export**

Synopsis	Enable the <b>export</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp export</b>
Tree	<b>export</b>
Description	Commands in this context specify route policies that control the handling of outbound routes transmitted to all peers. Route policies are configured in the <b>configure policy-options</b> context.  When no export policies are specified in this context, BGP-learned routes are advertised by default and non-BGP routes are not advertised.
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	List of export policy names
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp export policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	This command specifies route policies that control the handling of outbound routes transmitted to certain peers.  Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.

Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

When no export policies are specified, BGP-learned routes are advertised by default and non-BGP routes are not advertised.

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### extended-nh-encoding

Synopsis	Enter the <b>extended-nh-encoding</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp extended-nh-encoding</a>
Tree	<a href="#">extended-nh-encoding</a>
Description	Commands in this context specify the IPv4-related address families that can receive IPv6 next hops from peers. The peers should not send such routes unless the peers receive notification of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.
Introduced	16.0.R1
Platforms	All

### ipv4 boolean

Synopsis	Advertise encoding capability for IPv4 routes
Context	<b>configure</b> <i>router string</i> <a href="#">bgp extended-nh-encoding ipv4 boolean</a>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.5.R1
Platforms	All

**label-ipv4** *boolean*

Synopsis	Advertise encoding capability for label-IPv4 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp extended-nh-encoding label-ipv4 boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Advertise encoding capability for VPN-IPv4 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp extended-nh-encoding vpn-ipv4 boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**family**

Synopsis	Enter the <b>family</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp family</i>
Tree	<a href="#">family</a>
Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	16.0.R1
Platforms	All

**bgp-ls** *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp family bgp-ls boolean</i>
Tree	<a href="#">bgp-ls</a>
Default	false
Introduced	16.0.R1
Platforms	All

**evpn boolean**

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	<b>configure</b> <i>router string</i> <i>bgp family evpn boolean</i>
Tree	<a href="#">evpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-ipv4 boolean**

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	<b>configure</b> <i>router string</i> <i>bgp family flow-ipv4 boolean</i>
Tree	<a href="#">flow-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-ipv6 boolean**

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	<b>configure</b> <i>router string</i> <i>bgp family flow-ipv6 boolean</i>
Tree	<a href="#">flow-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-vpn-ipv4 boolean**

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	<b>configure</b> <i>router string</i> <i>bgp family flow-vpn-ipv4 boolean</i>
Tree	<a href="#">flow-vpn-ipv4</a>
Default	false
Introduced	22.7.R1
Platforms	All

**flow-vpn-ipv6** *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>flow-vpn-ipv6</i> <i>boolean</i>
Tree	<a href="#">flow-vpn-ipv6</a>
Default	false
Introduced	22.7.R1
Platforms	All

**ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ipv4</i> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

**ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>ipv6</i> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**l2-vpn** *boolean*

Synopsis	Advertise MP-BGP support for the L2-VPN address family
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>family</i> <i>l2-vpn</i> <i>boolean</i>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv4** *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv4** *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>mcast-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-ipv6** *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>mcast-ipv6</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-vpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	<b>configure</b> <i>router string bgp family mcast-vpn-ipv4 boolean</i>
Tree	<a href="#">mcast-vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mcast-vpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	<b>configure</b> <i>router string bgp family mcast-vpn-ipv6 boolean</i>
Tree	<a href="#">mcast-vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mdt-safi** *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	<b>configure</b> <i>router string bgp family mdt-safi boolean</i>
Tree	<a href="#">mdt-safi</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ms-pw** *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	<b>configure</b> <i>router string bgp family ms-pw boolean</i>
Tree	<a href="#">ms-pw</a>
Default	false
Introduced	16.0.R1
Platforms	All



**mvpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	<b>configure</b> <i>router string</i> <i>bgp family mvpn-ipv4 boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	<b>configure</b> <i>router string</i> <i>bgp family mvpn-ipv6 boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**route-target** *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	<b>configure</b> <i>router string</i> <i>bgp family route-target boolean</i>
Tree	<a href="#">route-target</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-policy-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	<b>configure</b> <i>router string</i> <i>bgp family sr-policy-ipv4 boolean</i>
Tree	<a href="#">sr-policy-ipv4</a>
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false

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Introduced	16.0.R1
Platforms	All

### **sr-policy-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>sr-policy-ipv6</b> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv6</a>
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>family</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **fast-external-failover** *boolean*

Synopsis	Drop external BGP session immediately when link fails
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Context	<b>configure router</b> <i>string</i> <b>bgp fast-external-failover</b> <i>boolean</i>
Tree	<b>fast-external-failover</b>
Description	When configured to <b>true</b> , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to <b>false</b> , the BGP session remains up until the hold time expires.
Default	true
Introduced	16.0.R1
Platforms	All

## flowspec

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp flowspec</b>
Tree	<b>flowspec</b>
Introduced	16.0.R1
Platforms	All

## validate-dest-prefix *boolean*

Synopsis	Validate destination prefix in FlowSpec-IPv4/IPv6 route
Context	<b>configure router</b> <i>string</i> <b>bgp flowspec validate-dest-prefix</b> <i>boolean</i>
Tree	<b>validate-dest-prefix</b>
Description	When configured to <b>true</b> , this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: <ul style="list-style-type: none"> <li>• it was originated outside the local AS of the receiving BGP router</li> <li>• the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix</li> </ul> An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers. When configured to <b>false</b> , destination-prefix validation is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

**validate-redirect-ip** *boolean*

Synopsis	Validate the redirect-to-IPv4 action in FlowSpec route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>flowspec</b> <b>validate-redirect-ip</b> <i>boolean</i>
Tree	<a href="#">validate-redirect-ip</a>
Description	<p>When configured to <b>true</b>, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance.</p> <p>A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path.</p> <p>When configured to <b>false</b>, the validation check is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>graceful-restart</b>
Tree	<a href="#">graceful-restart</a>
Description	Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.
Introduced	16.0.R1
Platforms	All

**gr-notification** *boolean*

Synopsis	Perform Graceful Restart procedures
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>graceful-restart</b> <b>gr-notification</b> <i>boolean</i>
Tree	<a href="#">gr-notification</a>
Description	<p>When configured to <b>true</b>, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to <b>false</b>, NOTIFICATION messages are not supported.</p>
Default	false

Introduced	16.0.R1
Platforms	All

## long-lived

Synopsis	Enable the <b>long-lived</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp graceful-restart long-lived</a>
Tree	<a href="#">long-lived</a>
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p> <p>The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.</p>
Introduced	16.0.R1
Platforms	All

## advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp graceful-restart long-lived advertise-stale-to-all-neighbors</a> <i>boolean</i>
Tree	<a href="#">advertise-stale-to-all-neighbors</a>
Default	false
Introduced	16.0.R1
Platforms	All

## advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp graceful-restart long-lived advertised-stale-time</a> <i>number</i>
Tree	<a href="#">advertised-stale-time</a>
Range	0 to 16777215
Default	86400
Introduced	16.0.R1

Platforms All

### **family** [[family-type](#)] *keyword*

Synopsis Enter the **family** list instance

Context **configure** [router](#) *string* [bgp graceful-restart long-lived family](#) *keyword*

Tree [family](#)

Introduced 16.0.R1

Platforms All

### **[family-type]** *keyword*

Synopsis Family type for family-specific LLGR configuration

Context **configure** [router](#) *string* [bgp graceful-restart long-lived family](#) *keyword*

Tree [family](#)

Options [ipv4](#), [vpn-ipv4](#), [ipv6](#), [vpn-ipv6](#), [l2-vpn](#), [flow-ipv4](#), [route-target](#), [flow-ipv6](#), [label-ipv4](#), [label-ipv6](#), [flow-vpn-ipv4](#), [flow-vpn-ipv6](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **advertised-stale-time** *number*

Synopsis LLGR stale routes time for family override

Context **configure** [router](#) *string* [bgp graceful-restart long-lived family](#) *keyword* [advertised-stale-time](#) *number*

Tree [advertised-stale-time](#)

Range 0 to 16777215

Default 86400

Introduced 16.0.R1

Platforms All

### **helper-override-stale-time** *number*

Synopsis Locally-configured stale routes override time

Context	<b>configure</b> <i>router string</i> <a href="#">bgp graceful-restart long-lived family keyword helper-override-stale-time number</a>
Tree	<a href="#">helper-override-stale-time</a>
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

### **forwarding-bits-set** *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	<b>configure</b> <i>router string</i> <a href="#">bgp graceful-restart long-lived forwarding-bits-set keyword</a>
Tree	<a href="#">forwarding-bits-set</a>
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

### **helper-override-restart-time** *number*

Synopsis	Locally-configured override for restart time
Context	<b>configure</b> <i>router string</i> <a href="#">bgp graceful-restart long-lived helper-override-restart-time number</a>
Tree	<a href="#">helper-override-restart-time</a>
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1

Platforms All

### **helper-override-stale-time** *number*

Synopsis Locally-configured stale routes override time

Context **configure** *router string* **bgp graceful-restart long-lived helper-override-stale-time** *number*

Tree [helper-override-stale-time](#)

Description This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.

This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.

Range 0 to 16777215

Introduced 16.0.R1

Platforms All

### **without-no-export** *boolean*

Synopsis Advertise LLGR stale routes to non-LLGR peers

Context **configure** *router string* **bgp graceful-restart long-lived without-no-export** *boolean*

Tree [without-no-export](#)

Description When configured to **true**, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.

When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO\_EXPORT standard community is automatically added to the routes.

Default false

Introduced 16.0.R1

Platforms All

### **restart-time** *number*

Synopsis Restart time advertised by GR capability

Context **configure** *router string* **bgp graceful-restart restart-time** *number*

Tree [restart-time](#)



Range	0 to 4095
Default	120
Introduced	16.0.R1
Platforms	All

**stale-routes-time** *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>graceful-restart</b> <b>stale-routes-time</b> <i>number</i>
Tree	<b>stale-routes-time</b>
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

**group** [*group-name*] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i>
Tree	<b>group</b>
Description	Commands in this context define BGP peer groups and their group-specific command options. The options in this context are identical to the global BGP options. Any options that are not overridden by the group-specific commands inherit the configuration settings from the BGP global level.
Introduced	16.0.R1
Platforms	All

**[group-name]** *string*

Synopsis	BGP peer group name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i>
Tree	<b>group</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## add-paths

Synopsis	Enable the <b>add-paths</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>add-paths</b>
Tree	<b>add-paths</b>
Description	<p>Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

## evpn

Synopsis	Enter the <b>evpn</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>add-paths evpn</b>
Tree	<b>evpn</b>
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>add-paths evpn receive</b> <i>boolean</i>
Tree	<b>receive</b>
Default	false
Introduced	21.10.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>add-paths evpn send</b> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">send</a>
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	21.10.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">add-paths</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">add-paths</a> <a href="#">ipv4</a> <a href="#">receive</a> <i>boolean</i>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv4 unicast prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">add-paths</a> <a href="#">ipv4</a> <a href="#">send</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple routes per IPv6 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to <b>true</b> , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths ipv6 send (number   keyword)</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

## label-ipv4

Synopsis	Enter the <b>label-ipv4</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv4</b>
Tree	<b>label-ipv4</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv4</b> <i>receive boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv4</b> <i>send (number   keyword)</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

## label-ipv6

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv6</b>
Tree	<b>label-ipv6</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv6</b> <i>receive boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>label-ipv6</b> <i>send (number   keyword)</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

## mcast-vpn-ipv4

Synopsis	Enter the <b>mcast-vpn-ipv4</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv4</b>
Tree	<b>mcast-vpn-ipv4</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv4</b> <b>receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send *number*

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv4</b> <b>send</b> <i>number</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.

	When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

## mcast-vpn-ipv6

Synopsis	Enter the <b>mcast-vpn-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv6</b>
Tree	<b>mcast-vpn-ipv6</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv6</b> <b>receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send *number*

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths</i> <b>mcast-vpn-ipv6</b> <b>send</b> <i>number</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.



Range	1 to 16
Introduced	16.0.R1
Platforms	All

## **mvpn-ipv4**

Synopsis	Enter the <b>mvpn-ipv4</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths mvpn-ipv4</i>
Tree	<i>mvpn-ipv4</i>
Introduced	16.0.R1
Platforms	All

## **receive boolean**

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths mvpn-ipv4 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to <b>true</b> , this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## **send number**

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths mvpn-ipv4 send number</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16

Introduced	16.0.R1
Platforms	All

## **mvpn-ipv6**

Synopsis	Enter the <b>mvpn-ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">add-paths</a> <b>mvpn-ipv6</b>
Tree	<a href="#">mvpn-ipv6</a>
Introduced	16.0.R1
Platforms	All

## **receive** *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">add-paths</a> <b>mvpn-ipv6</b> <b>receive</b> <i>boolean</i>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## **send** *number*

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">add-paths</a> <b>mvpn-ipv6</b> <b>send</b> <i>number</i>
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1

Platforms All

## vpn-ipv4

Synopsis Enter the **vpn-ipv4** context

Context **configure** *router string bgp group string add-paths vpn-ipv4*

Tree [vpn-ipv4](#)

Introduced 16.0.R1

Platforms All

## receive *boolean*

Synopsis Receive multiple routes per VPN-IPv4 prefix

Context **configure** *router string bgp group string add-paths vpn-ipv4 receive boolean*

Tree [receive](#)

Description When configured to **true**, this command allows multiple VPN-IPv4 routes per prefix to be received from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

## send (*number* | *keyword*)

Synopsis Maximum paths per VPN-IPv4 prefix

Context **configure** *router string bgp group string add-paths vpn-ipv4 send (number | keyword)*

Tree [send](#)

Description This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.

Range 1 to 16

Options multipaths – Number of best multipaths for each NLRI

Introduced 16.0.R1

Platforms All

**vpn-ipv6**

Synopsis	Enter the <b>vpn-ipv6</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6</i>
Tree	<i>vpn-ipv6</i>
Introduced	16.0.R1
Platforms	All

**receive** *boolean*

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to <b>true</b> , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**send** (*number* | *keyword*)

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>add-paths vpn-ipv6 send (number   keyword)</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the BGP group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**advertise-inactive** *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>advertise-inactive</b> <i>boolean</i>
Tree	<a href="#">advertise-inactive</a>
Description	<p>When configured to <b>true</b>, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none"> <li>• If the active route for the IP prefix is a BGP route, that route is advertised.</li> <li>• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> <li>• If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> </ul> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Introduced	16.0.R1
Platforms	All

**advertise-ipv6-next-hops**

Synopsis	Enable the <b>advertise-ipv6-next-hops</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>advertise-ipv6-next-hops</b>
Tree	<a href="#">advertise-ipv6-next-hops</a>

Description	Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.  When unconfigured, command settings are inherited from a higher level BGP configuration.
Introduced	16.0.R1
Platforms	All

### **evpn boolean**

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	<b>configure</b> <i>router string bgp group string advertise-ipv6-next-hops evpn boolean</i>
Tree	<a href="#">evpn</a>
Description	When configured to <b>true</b> , EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.  When configured to <b>false</b> , EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.
Default	false
Introduced	19.5.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string bgp group string advertise-ipv6-next-hops ipv4 boolean</i>
Tree	<a href="#">ipv4</a>
Description	When configured to <b>true</b> , IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.  When configured to <b>false</b> , IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.
Default	false
Introduced	19.5.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv4 boolean</i>
Tree	<a href="#">label-ipv4</a>
Description	<p>When configured to <b>true</b>, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>label-ipv6 boolean</i>
Tree	<a href="#">label-ipv6</a>
Description	<p>When configured to <b>true</b>, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>advertise-ipv6-next-hops</i> <i>vpn-ipv4 boolean</i>
Tree	<a href="#">vpn-ipv4</a>

Description	<p>When configured to <b>true</b>, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">advertise-ipv6-next-hops</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Description	<p>When configured to <b>true</b>, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **aggregator-id-zero** *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">aggregator-id-zero</a> <i>boolean</i>
Tree	<a href="#">aggregator-id-zero</a>
Introduced	16.0.R1
Platforms	All

### **aigp** *boolean*

Synopsis	Add AIGP attribute to advertised routes
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Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>aigp boolean</i>
Tree	<i>aigp</i>
Description	When configured to <b>true</b> , this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance. When configured to <b>false</b> , the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.
Default	false
Introduced	16.0.R1
Platforms	All

### **as-override** *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>as-override boolean</i>
Tree	<i>as-override</i>
Description	When configured to <b>true</b> , the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute. This command should be used with caution, as it breaks BGP's loop detection mechanism. When configured to <b>false</b> , no AS override is performed.
Default	false
Introduced	19.7.R1
Platforms	All

### **asn-4-byte** *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>asn-4-byte boolean</i>
Tree	<i>asn-4-byte</i>
Description	When this command inherits a value of <b>true</b> , the use of 4-byte ASNs is supported. When unconfigured, the command inherits the value of the global-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>true</b> . When configured to <b>false</b> , this command disables the use of 4-byte ASNs.
Introduced	16.0.R1
Platforms	All

**authentication-key** *string*

Synopsis	BGP authentication key for peers in the group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the <b>configure system security hash-control management-interface md-cli hash-algorithm</b> setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

**authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BFD is removed from the associated protocol adjacency.</p>
Introduced	16.0.R1
Platforms	All

## bfd-strict-mode

Synopsis	Enter the <b>bfd-strict-mode</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>bfd-strict-mode</b>
Tree	<b>bfd-strict-mode</b>
Introduced	23.7.R1
Platforms	All

## advertise

Synopsis	Enable the <b>advertise</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>bfd-strict-mode</b> <b>advertise</b>
Tree	<b>advertise</b>
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none"> <li>• The inherited or configured value for the <b>bfd-liveness</b> command that applies to the peer is <b>true</b>.</li> <li>• The interface associated with the peer has a valid BFD configuration.</li> </ul> <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.</p> <p>When unconfigured, BGP does not advertise the Strict-BFD capability to peers.</p>
Introduced	23.7.R1
Platforms	All

## holdtime *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>bfd-strict-mode</b> <b>advertise</b> <b>holdtime</b> <i>number</i>
Tree	<b>holdtime</b>
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds

Default	30
Introduced	23.7.R1
Platforms	All

### **next-hop-reachability** *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>bfd-strict-mode</b> <b>next-hop-reachability</b> <i>boolean</i>
Tree	<b>next-hop-reachability</b>
Description	<p>When configured to <b>true</b>, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:</p> <ul style="list-style-type: none"> <li>• The BFD session to the peer is in a down state.</li> <li>• There is a valid interface BFD configuration that applies to the peer.</li> <li>• There is a valid BFD liveness configuration that applies to the peer.</li> </ul> <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p> <p>Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.</p> <p>The behavior of the router when this command is <b>true</b> does not depend on whether Strict-BFD is used, as both features are independent.</p> <p>Configuring this command to <b>true</b> only affects routes belonging to the following address families:</p> <ul style="list-style-type: none"> <li>• IPv4</li> <li>• IPv6</li> <li>• IPv4 VPN</li> <li>• IPv6 VPN</li> <li>• labeled unicast IPv4</li> <li>• labeled unicast IPv6</li> <li>• EVPN</li> <li>• IPv4 multicast</li> <li>• IPv6 multicast</li> <li>• IPv4 VPN multicast</li> <li>• IPv6 VPN multicast</li> </ul> <p>When configured to <b>false</b>, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.</p>

Introduced	23.7.R1
Platforms	All

### **block-prefix-sid** *boolean*

Synopsis	Block the prefix SID attribute
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">block-prefix-sid</a> <i>boolean</i>
Tree	<a href="#">block-prefix-sid</a>
Description	<p>When configured to <b>true</b>, all prefix SID attributes are removed from all routes exchanged between EBGP and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.</p> <p>When configured to <b>false</b>, all prefix SID attributes are propagated without restriction.</p> <p>A change of this configuration causes the affected BGP sessions to flap.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **capability-negotiation** *boolean*

Synopsis	Enable capability negotiation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">capability-negotiation</a> <i>boolean</i>
Tree	<a href="#">capability-negotiation</a>
Description	<p>When configured to <b>true</b>, this command enables the exchange of capabilities.</p> <p>When configured to <b>false</b> and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.</p>
Default	true
Introduced	16.0.R1
Platforms	All

### **client-reflect** *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">client-reflect</a> <i>boolean</i>
Tree	<a href="#">client-reflect</a>
Description	When unconfigured, this command inherits the value of the global-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>true</b> .

When the command inherits a value of **true**, client reflection of routes is enabled.  
 When configured to **false**, this command disables client reflection of routes.

Introduced 16.0.R1  
 Platforms All

## cluster

Synopsis Enter the **cluster** context  
 Context **configure router string bgp group string cluster**  
 Tree **cluster**  
 Introduced 16.0.R1  
 Platforms All

## allow-local-fallback *boolean*

Synopsis Allow fallback to RR topology location  
 Context **configure router string bgp group string cluster allow-local-fallback boolean**  
 Tree **allow-local-fallback**  
 Description When configured to **true**, this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to **true**.  
 When configured to **false**, no route is advertised to the client.  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## cluster-id *string*

Synopsis Route reflector cluster ID  
 Context **configure router string bgp group string cluster cluster-id string**  
 Tree **cluster-id**  
 Introduced 16.0.R1  
 Platforms All

**orr-location** *number*

Synopsis	Optimal route reflection location for the cluster
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>cluster</b> <b>orr-location</b> <i>number</i>
Tree	<b>orr-location</b>
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.  With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs are calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**connect-retry** *number*

Synopsis	BGP connect retry timer value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>connect-retry</b> <i>number</i>
Tree	<b>connect-retry</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**damp-peer-oscillations**

Synopsis	Enable the <b>damp-peer-oscillations</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>damp-peer-oscillations</b>
Tree	<b>damp-peer-oscillations</b>
Description	Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.  When unconfigured, command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

**error-interval** *number*

Synopsis	Time after a reset that the session must be error-free
Context	<b>configure</b> <i>router string bgp group string damp-peer-oscillations error-interval number</i>
Tree	<a href="#">error-interval</a>
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

**idle-hold-time**

Synopsis	Enter the <b>idle-hold-time</b> context
Context	<b>configure</b> <i>router string bgp group string damp-peer-oscillations idle-hold-time</i>
Tree	<a href="#">idle-hold-time</a>
Introduced	16.0.R1
Platforms	All

**initial-wait** *number*

Synopsis	Time session remains in idle state after stabilization
Context	<b>configure</b> <i>router string bgp group string damp-peer-oscillations idle-hold-time initial-wait number</i>
Tree	<a href="#">initial-wait</a>
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

**max-wait** *number*

Synopsis	Maximum session idle time after repeated instability
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Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>damp-peer-oscillations</i> <i>idle-hold-time</i> <i>max-wait number</i>
Tree	<a href="#">max-wait</a>
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

### **second-wait** *number*

Synopsis	Time that doubles after each repeated session failure
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>damp-peer-oscillations</i> <i>idle-hold-time</i> <i>second-wait number</i>
Tree	<a href="#">second-wait</a>
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

### **damping** *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>damping</i> <i>boolean</i>
Tree	<a href="#">damping</a>
Introduced	16.0.R1
Platforms	All

### **def-recv-evpn-encap** *keyword*

Synopsis	Default EVPN encapsulation type
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>def-recv-evpn-encap</i> <i>keyword</i>
Tree	<a href="#">def-recv-evpn-encap</a>
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.

When unconfigured, the setting for this command is inherited from the BGP global-level configuration.

Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

## default-label-preference

Synopsis	Enter the <b>default-label-preference</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-label-preference</a>
Tree	<a href="#">default-label-preference</a>
Introduced	19.5.R1
Platforms	All

## ebgp *number*

Synopsis	Default preference for EBGp
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-label-preference</a> <a href="#">ebgp</a> <i>number</i>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

## ibgp *number*

Synopsis	Default preference for IBGP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-label-preference</a> <a href="#">ibgp</a> <i>number</i>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

## default-preference

Synopsis	Enter the <b>default-preference</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-preference</a>

Tree	<a href="#">default-preference</a>
Introduced	19.5.R1
Platforms	All

**ebgp number**

Synopsis	Default preference for EBGp
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-preference</a> <a href="#">ebgp</a> <i>number</i>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-preference</a> <a href="#">ibgp</a> <i>number</i>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**default-route-target boolean**

Synopsis	Send default RTC route (zero prefix length) to peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">default-route-target</a> <i>boolean</i>
Tree	<a href="#">default-route-target</a>
Description	When configured to <b>true</b> , this command sends the default RTC route (zero prefix length) toward the selected peers. When configured to <b>false</b> , a default RTC route is not sent.
Default	false
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dynamic-neighbor**

Synopsis	Enter the <b>dynamic-neighbor</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>dynamic-neighbor</b>
Tree	<b>dynamic-neighbor</b>
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	16.0.R1
Platforms	All

**interface** [*interface-name*] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>dynamic-neighbor</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Description	Commands in this context configure an unnumbered base router network interface for dynamic neighbors.

If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.

The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.

When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.

Introduced	22.10.R1
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Platforms All

### **[interface-name]** *string*

Synopsis Name of the dynamic neighbor interface

Context **configure** [router](#) *string* [bgp group](#) *string* [dynamic-neighbor](#) [interface](#) *string*

Tree [interface](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

### **allowed-peer-as** *string*

Synopsis Allowed peer AS value or range of acceptable values

Context **configure** [router](#) *string* [bgp group](#) *string* [dynamic-neighbor](#) [interface](#) *string* [allowed-peer-as](#) *string*

Tree [allowed-peer-as](#)

Description This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1..n2*.  
  
All values greater than or equal to *n1* and less than or equal to *n2* are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].

Max. Instances 32

Notes This element is ordered by the user.

Introduced 22.10.R1

Platforms All

### **max-sessions** *number*

Synopsis Maximum number of dynamic sessions allowed

Context **configure** [router](#) *string* [bgp group](#) *string* [dynamic-neighbor](#) [interface](#) *string* [max-sessions](#) *number*

Tree [max-sessions](#)

Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	22.10.R1
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor</b> <b>match</b>
Tree	<b>match</b>
Description	Commands in this context configure match conditions for the dynamic neighbors.
Introduced	19.5.R1
Platforms	All

## prefix [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor</b> <b>match</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>prefix</b>
Introduced	19.5.R1
Platforms	All

## [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Dynamic peer prefix for the group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor</b> <b>match</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>prefix</b>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**allowed-peer-as** *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor</b> <b>match</b> <b>prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>allowed-peer-as</b> <i>string</i>
Tree	<a href="#">allowed-peer-as</a>
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> .  All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

**dynamic-neighbor-limit** *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>dynamic-neighbor-limit</b> <i>number</i>
Tree	<a href="#">dynamic-neighbor-limit</a>
Description	This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.  When unconfigured, the setting is inherited from the BGP global-level configuration.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

**ebgp-default-reject-policy**

Synopsis	Enable the <b>ebgp-default-reject-policy</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>ebgp-default-reject-policy</b>
Tree	<a href="#">ebgp-default-reject-policy</a>
Introduced	19.5.R1

Platforms All

### **export** *boolean*

Synopsis Enable default reject export policy for external peers  
 Context **configure** [router](#) *string* [bgp group](#) *string* [ebgp-default-reject-policy](#) [export](#) *boolean*  
 Tree [export](#)  
 Default true  
 Introduced 19.5.R1  
 Platforms All

### **import** *boolean*

Synopsis Enable default reject import policy for external peers  
 Context **configure** [router](#) *string* [bgp group](#) *string* [ebgp-default-reject-policy](#) [import](#) *boolean*  
 Tree [import](#)  
 Default true  
 Introduced 19.5.R1  
 Platforms All

### **egress-engineering**

Synopsis Enable the **egress-engineering** context  
 Context **configure** [router](#) *string* [bgp group](#) *string* [egress-engineering](#)  
 Tree [egress-engineering](#)  
 Introduced 21.7.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of BGP egress engineering  
 Context **configure** [router](#) *string* [bgp group](#) *string* [egress-engineering](#) [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Description This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.



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Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

### **egress-peer-engineering-label-unicast** *boolean*

Synopsis	Generate EPE label-unicast routes for group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">egress-peer-engineering-label-unicast</a> <i>boolean</i>
Tree	<a href="#">egress-peer-engineering-label-unicast</a>
Description	When configured to <b>true</b> , BGP generates a label-unicast route for each /32 or /128 prefix that corresponds to the BGP group address in the scope of the command. These routes can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. They support the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1
Platforms	All

### **enforce-first-as** *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">enforce-first-as</a> <i>boolean</i>
Tree	<a href="#">enforce-first-as</a>
Introduced	16.0.R1
Platforms	All

### **error-handling**

Synopsis	Enter the <b>error-handling</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">error-handling</a>
Tree	<a href="#">error-handling</a>
Introduced	16.0.R1
Platforms	All

**update-fault-tolerance** *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>error-handling</i> <i>update-fault-tolerance</i> <i>boolean</i>
Tree	<i>update-fault-tolerance</i>
Description	<p>When configured to <b>true</b>, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, all errors trigger a session reset.</p>
Introduced	16.0.R1
Platforms	All

**export**

Synopsis	Enable the <b>export</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>export</i>
Tree	<i>export</i>
Description	<p>Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the <b>configure policy-options</b> context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	BGP export policy name
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>export policy</i> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<i>policy</i>
Description	<p>This command specifies route policies that control the handling of outbound routes transmitted to certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p>

Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).

Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or "start@variable@".

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### extended-nh-encoding

Synopsis	Enable the <b>extended-nh-encoding</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">extended-nh-encoding</a>
Tree	<a href="#">extended-nh-encoding</a>
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

### ipv4 boolean

Synopsis	Advertise encoding capability for IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">extended-nh-encoding</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.5.R1

Platforms All

### **label-ipv4** *boolean*

Synopsis Advertise encoding capability for label-IPv4 routes  
Context **configure** [router](#) *string* [bgp](#) *group* *string* [extended-nh-encoding](#) [label-ipv4](#) *boolean*  
Tree [label-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **vpn-ipv4** *boolean*

Synopsis Advertise encoding capability for VPN-IPv4 routes  
Context **configure** [router](#) *string* [bgp](#) *group* *string* [extended-nh-encoding](#) [vpn-ipv4](#) *boolean*  
Tree [vpn-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **family**

Synopsis Enable the **family** context  
Context **configure** [router](#) *string* [bgp](#) *group* *string* [family](#)  
Tree [family](#)  
Introduced 16.0.R1  
Platforms All

### **bgp-ls** *boolean*

Synopsis Advertise MP-BGP support for the BGP-LS address family  
Context **configure** [router](#) *string* [bgp](#) *group* *string* [family](#) [bgp-ls](#) *boolean*  
Tree [bgp-ls](#)  
Default false  
Introduced 16.0.R1

Platforms All

### **evpn boolean**

Synopsis Advertise MP-BGP support for the EVPN address family  
Context **configure** *router string bgp group string family evpn boolean*  
Tree [evpn](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **flow-ipv4 boolean**

Synopsis Advertise support for the flowspec-IPv4 address family  
Context **configure** *router string bgp group string family flow-ipv4 boolean*  
Tree [flow-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **flow-ipv6 boolean**

Synopsis Advertise support for the flowspec-IPv6 address family  
Context **configure** *router string bgp group string family flow-ipv6 boolean*  
Tree [flow-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **flow-vpn-ipv4 boolean**

Synopsis Advertise support for FlowSpec-VPN IPv4 address family  
Context **configure** *router string bgp group string family flow-vpn-ipv4 boolean*  
Tree [flow-vpn-ipv4](#)  
Default false

Introduced 22.7.R1  
Platforms All

### **flow-vpn-ipv6** *boolean*

Synopsis Advertise support for FlowSpec-VPN IPv6 address family  
Context **configure** *router string bgp group string family flow-vpn-ipv6 boolean*  
Tree [flow-vpn-ipv6](#)  
Default false  
Introduced 22.7.R1  
Platforms All

### **ipv4** *boolean*

Synopsis Add support for the IPv4 address family  
Context **configure** *router string bgp group string family ipv4 boolean*  
Tree [ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ipv6** *boolean*

Synopsis Advertise MP-BGP support for the IPv6 address family  
Context **configure** *router string bgp group string family ipv6 boolean*  
Tree [ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **l2-vpn** *boolean*

Synopsis Advertise MP-BGP support for the L2-VPN address family  
Context **configure** *router string bgp group string family l2-vpn boolean*  
Tree [l2-vpn](#)

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Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	<b>configure</b> <i>router string bgp group string family label-ipv4 boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Advertise support for the label-IPv6 address family
Context	<b>configure</b> <i>router string bgp group string family label-ipv6 boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv4** *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	<b>configure</b> <i>router string bgp group string family mcast-ipv4 boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv6** *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	<b>configure</b> <i>router string bgp group string family mcast-ipv6 boolean</i>

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Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">family mcast-vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">family mcast-vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">mcast-vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mdt-safi** *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">family mdt-safi</a> <i>boolean</i>
Tree	<a href="#">mdt-safi</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ms-pw** *boolean*

Synopsis	Advertise support for multi-segment PW address family
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Context	<b>configure</b> <i>router string bgp group string family ms-pw boolean</i>
Tree	<a href="#">ms-pw</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	<b>configure</b> <i>router string bgp group string family mvpn-ipv4 boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	<b>configure</b> <i>router string bgp group string family mvpn-ipv6 boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **route-target** *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	<b>configure</b> <i>router string bgp group string family route-target boolean</i>
Tree	<a href="#">route-target</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-policy-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>sr-policy-ipv4</b> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv4</a>
Description	This command allows the router to advertise the capability for AF11/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-policy-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>sr-policy-ipv6</b> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv6</a>
Description	This command allows the router to advertise the capability for AF12/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>family</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **fast-external-failover** *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	<b>configure</b> <i>router string bgp group string fast-external-failover boolean</i>
Tree	<a href="#">fast-external-failover</a>
Description	<p>When this command inherits a value of <b>true</b>, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When configured to <b>false</b>, the BGP session remains up until the hold time expires.</p>
Introduced	16.0.R1
Platforms	All

### **graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <i>router string bgp group string graceful-restart</i>
Tree	<a href="#">graceful-restart</a>
Description	<p>Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.</p> <p>When the context is unconfigured, the command settings are inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

### **gr-notification** *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	<b>configure</b> <i>router string bgp group string graceful-restart gr-notification boolean</i>
Tree	<a href="#">gr-notification</a>
Description	When configured to <b>true</b> , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the

session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.

When configured to **false**, NOTIFICATION messages are not supported.

Default	false
Introduced	16.0.R1
Platforms	All

## long-lived

Synopsis	Enable the <b>long-lived</b> context
Context	<b>configure router string bgp group string graceful-restart long-lived</b>
Tree	<a href="#">long-lived</a>
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p> <p>The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.</p>
Introduced	16.0.R1
Platforms	All

## advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	<b>configure router string bgp group string graceful-restart long-lived advertise-stale-to-all-neighbors boolean</b>
Tree	<a href="#">advertise-stale-to-all-neighbors</a>
Default	false
Introduced	16.0.R1
Platforms	All

## advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	<b>configure router string bgp group string graceful-restart long-lived advertised-stale-time number</b>

Tree	<a href="#">advertised-stale-time</a>
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

### **family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertised-stale-time** *number*

Synopsis	LLGR stale routes time for family override
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i> <a href="#">advertised-stale-time</a> <i>number</i>
Tree	<a href="#">advertised-stale-time</a>
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215

Default	86400
Introduced	16.0.R1
Platforms	All

### **helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>graceful-restart</b> <b>long-lived</b> <b>family</b> <i>keyword</i> <b>helper-override-stale-time</b> <i>number</i>
Tree	<b>helper-override-stale-time</b>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

### **forwarding-bits-set** *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>graceful-restart</b> <b>long-lived</b> <b>forwarding-bits-set</b> <i>keyword</i>
Tree	<b>forwarding-bits-set</b>
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

### helper-override-restart-time *number*

Synopsis	Locally-configured override for restart time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>graceful-restart long-lived helper-override-restart-time</b> <i>number</i>
Tree	<a href="#">helper-override-restart-time</a>
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

### helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>graceful-restart long-lived helper-override-stale-time</b> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

### without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>graceful-restart long-lived without-no-export</b> <i>boolean</i>
Tree	<a href="#">without-no-export</a>
Description	When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.

When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO\_EXPORT standard community is automatically added to the routes.

Default	false
Introduced	16.0.R1
Platforms	All

### **restart-time** *number*

Synopsis	Restart time advertised by GR capability
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>graceful-restart restart-time number</i>
Tree	<a href="#">restart-time</a>
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

### **stale-routes-time** *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>graceful-restart stale-routes-time number</i>
Tree	<a href="#">stale-routes-time</a>
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>hold-time</i>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	All



**minimum-hold-time** *number*

Synopsis	Minimum hold time between successive messages
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>hold-time</i> <b>minimum-hold-time</b> <i>number</i>
Tree	<b>minimum-hold-time</b>
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected. When unconfigured, the command value is inherited from the BGP global-level setting.
Range	0   3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Maximum time BGP waits between successive messages
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>hold-time</i> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection. Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances. <ul style="list-style-type: none"> <li>• If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li> <li>• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> When unconfigured, the command setting is inherited from the BGP global-level configuration.
Range	0   3 to 65535
Introduced	16.0.R1
Platforms	All

**import**

Synopsis	Enable the <b>import</b> context
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Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>import</b>
Tree	<b>import</b>
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the <b>configure policy-options</b> context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

### **policy** (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	<p>This command specifies route policies that control the handling of inbound routes received from certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or"start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **initial-send-delay-zero** *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>initial-send-delay-zero</b> <i>boolean</i>

Tree	<a href="#">initial-send-delay-zero</a>
Description	<p>When configured to <b>true</b>, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	16.0.R1
Platforms	All

### **keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">keepalive</a> <i>number</i>
Tree	<a href="#">keepalive</a>
Description	<p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the <b>hold-time seconds</b> context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none"> <li>• If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value.</li> <li>• If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval.</li> <li>• If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> <p>When unconfigured, the command inherits the BGP global-level setting.</p>
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

### **label-preference** *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">label-preference</a> <i>number</i>
Tree	<a href="#">label-preference</a>

Range	1 to 255
Introduced	16.0.R1
Platforms	All

## link-bandwidth

Synopsis	Enter the <b>link-bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a>
Tree	<a href="#">link-bandwidth</a>
Description	<p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p>
Introduced	16.0.R3
Platforms	All

## accept-from-ebgp

Synopsis	Enter the <b>accept-from-ebgp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">accept-from-ebgp</a>
Tree	<a href="#">accept-from-ebgp</a>
Introduced	16.0.R4
Platforms	All

## ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">accept-from-ebgp</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **ipv6 *boolean***

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>link-bandwidth</b> <b>accept-from-ebgp</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv4 *boolean***

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>link-bandwidth</b> <b>accept-from-ebgp</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv6 *boolean***

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>link-bandwidth</b> <b>accept-from-ebgp</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **vpn-ipv4 *boolean***

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>link-bandwidth</b> <b>accept-from-ebgp</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R4

Platforms All

### **vpn-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes

Context **configure** *router string bgp group string link-bandwidth accept-from-ebgp vpn-ipv6 boolean*

Tree [vpn-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **add-to-received-ebgp**

Synopsis Enter the **add-to-received-ebgp** context

Context **configure** *router string bgp group string link-bandwidth add-to-received-ebgp*

Tree [add-to-received-ebgp](#)

Introduced 16.0.R3

Platforms All

### **ipv4** *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure** *router string bgp group string link-bandwidth add-to-received-ebgp ipv4 boolean*

Tree [ipv4](#)

Default false

Introduced 16.0.R3

Platforms All

### **ipv6** *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** *router string bgp group string link-bandwidth add-to-received-ebgp ipv6 boolean*

Tree [ipv6](#)

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Default	false
Introduced	16.0.R3
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <i>router string bgp group string link-bandwidth add-to-received-ebgp label-ipv4 boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <i>router string bgp group string link-bandwidth add-to-received-ebgp label-ipv6 boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <i>router string bgp group string link-bandwidth add-to-received-ebgp vpn-ipv4 boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>link-bandwidth</b> <b>add-to-received-ebgp</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

**aggregate-used-paths**

Synopsis	Enter the <b>aggregate-used-paths</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>link-bandwidth</b> <b>aggregate-used-paths</b>
Tree	<a href="#">aggregate-used-paths</a>
Introduced	16.0.R4
Platforms	All

**ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>link-bandwidth</b> <b>aggregate-used-paths</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>link-bandwidth</b> <b>aggregate-used-paths</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All



**label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">vpn-ipv4</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">aggregate-used-paths</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>

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Default	false
Introduced	16.0.R4
Platforms	All

### **send-to-ebgp**

Synopsis	Enter the <b>send-to-ebgp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a>
Tree	<a href="#">send-to-ebgp</a>
Introduced	16.0.R4
Platforms	All

### **ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>

Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>link-bandwidth</b> <b>send-to-ebgp</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>link-bandwidth</b> <b>send-to-ebgp</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>link-bandwidth</b> <b>send-to-ebgp</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <i>group</i> <i>string</i> <b>local-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>interface-name</i> )

Tree	<a href="#">local-address</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

## local-as

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">local-as</a>
Tree	<a href="#">local-as</a>
Introduced	16.0.R1
Platforms	All

## as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">local-as</a> <i>as-number</i> <i>number</i>
Tree	<a href="#">as-number</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## prepend-global-as *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">local-as</a> <a href="#">prepend-global-as</a> <i>boolean</i>
Tree	<a href="#">prepend-global-as</a>
Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to <b>false</b> , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

**private** *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-as</b> <b>private</b> <i>boolean</i>
Tree	<b>private</b>
Description	When configured to <b>true</b> , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

**local-preference** *number*

Synopsis	Default local preference if not in incoming routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>local-preference</b> <i>number</i>
Tree	<b>local-preference</b>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

**loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>loop-detect</b> <i>keyword</i>
Tree	<b>loop-detect</b>
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

**loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>loop-detect-threshold</b> <i>number</i>
Tree	<b>loop-detect-threshold</b>

Range	0 to 15
Introduced	16.0.R6
Platforms	All

### **med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <b>med-out</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">med-out</a>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

### **min-route-advertisement** *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <b>min-route-advertisement</b> <i>number</i>
Tree	<a href="#">min-route-advertisement</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **monitor**

Synopsis	Enable the <b>monitor</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <b>monitor</b>
Tree	<a href="#">monitor</a>
Description	Commands in this context specify BMP-related configurations at the BGP group level. When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of BMP monitoring
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**all-stations** *boolean*

Synopsis	Send BMP messages to all configured stations
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor</b> <b>all-stations</b> <i>boolean</i>
Tree	<a href="#">all-stations</a>
Description	<p>When configured to <b>true</b>, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to <b>false</b>, the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**route-monitoring**

Synopsis	Enter the <b>route-monitoring</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor</b> <b>route-monitoring</b>
Tree	<a href="#">route-monitoring</a>
Introduced	16.0.R1
Platforms	All

**post-policy** *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>monitor</b> <b>route-monitoring</b> <b>post-policy</b> <i>boolean</i>
Tree	<a href="#">post-policy</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **pre-policy** *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">monitor route-monitoring pre-policy</a> <i>boolean</i>
Tree	<a href="#">pre-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **station** [[station-name](#)] *reference*

Synopsis	Add a list entry for <b>station</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Description	This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[station-name]** *reference*

Synopsis	BMP monitoring station
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Reference	<b>configure</b> <a href="#">bmp station</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



### **multihop** *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>multihop</b> <i>number</i>
Tree	<b>multihop</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **multipath-eligible** *boolean*

Synopsis	Allow routes from group peers in multipath eligibility
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>multipath-eligible</b> <i>boolean</i>
Tree	<b>multipath-eligible</b>
Default	false
Introduced	19.5.R1
Platforms	All

### **next-hop-self** *boolean*

Synopsis	Advertise routes with local address as next-hop address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>next-hop-self</b> <i>boolean</i>
Tree	<b>next-hop-self</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **next-hop-unchanged**

Synopsis	Enter the <b>next-hop-unchanged</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>next-hop-unchanged</b>
Tree	<b>next-hop-unchanged</b>
Description	Commands in this context specify the IP address families that allow unchanged BGP next-hops when sending BGP routes to peers in the group.
Introduced	16.0.R1
Platforms	All

**evpn boolean**

Synopsis	Advertise EVPN routes with unchanged BGP next hop
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>next-hop-unchanged evpn boolean</i>
Tree	<a href="#">evpn</a>
Default	false
Introduced	20.2.R1
Platforms	All

**label-ipv4 boolean**

Synopsis	Advertise label-IPv4 routes with unchanged BGP next hop
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>next-hop-unchanged label-ipv4 boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6 boolean**

Synopsis	Advertise label-IPv6 routes with unchanged BGP next hop
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>next-hop-unchanged label-ipv6 boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4 boolean**

Synopsis	Advertise VPN IPv4 routes with unchanged BGP next hop
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>next-hop-unchanged vpn-ipv4 boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	20.2.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">next-hop-unchanged</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	20.2.R1
Platforms	All

### **origin-validation**

Synopsis	Enter the <b>origin-validation</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">origin-validation</a>
Tree	<a href="#">origin-validation</a>
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">origin-validation</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">origin-validation</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv4** *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>origin-validation</i> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6** *boolean*

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <i>origin-validation</i> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**outbound-route-filtering**

Synopsis	Enable the <b>outbound-route-filtering</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <b>outbound-route-filtering</b>
Tree	<a href="#">outbound-route-filtering</a>
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).  When this context is unconfigured, the group command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

**extended-community**

Synopsis	Enable the <b>extended-community</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp group</i> <i>string</i> <b>outbound-route-filtering</b> <b>extended-community</b>
Tree	<a href="#">extended-community</a>

Description	Commands in this context configure the ORF send and receive capabilities based on Extended Communities.  When this context is unconfigured, the command settings are inherited from the global-level configuration.
Introduced	16.0.R1
Platforms	All

### **accept-orf** *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	<b>configure</b> <i>router string bgp group string outbound-route-filtering extended-community accept-orf boolean</i>
Tree	<a href="#">accept-orf</a>
Description	When configured to <b>true</b> , the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.  When unconfigured, the command inherits the value of the global-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> .  When this command inherits a value of <b>false</b> , the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.
Introduced	16.0.R1
Platforms	All

### **send-orf**

Synopsis	Enable the <b>send-orf</b> context
Context	<b>configure</b> <i>router string bgp group string outbound-route-filtering extended-community send-orf</i>
Tree	<a href="#">send-orf</a>
Description	Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.  When this context is unconfigured, the command settings are inherited from the BGP global-level configuration.
Introduced	16.0.R1
Platforms	All

**route-target** [**community-name**] *string*

Synopsis	Add a list entry for <b>route-target</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>outbound-route-filtering</b> <b>extended-community</b> <b>send-orf</b> <b>route-target</b> <i>string</i>
Tree	<b>route-target</b>
Introduced	16.0.R1
Platforms	All

**[community-name]** *string*

Synopsis	Route target community name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>outbound-route-filtering</b> <b>extended-community</b> <b>send-orf</b> <b>route-target</b> <i>string</i>
Tree	<b>route-target</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**passive** *boolean*

Synopsis	Enable passive mode for BGP communication
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Default	false
Introduced	16.0.R1
Platforms	All

**path-mtu-discovery** *boolean*

Synopsis	Enable Path MTU Discovery
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>path-mtu-discovery</b> <i>boolean</i>
Tree	<b>path-mtu-discovery</b>
Description	When configured to <b>true</b> , Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced	16.0.R1
Platforms	All

### **peer-as** *number*

Synopsis	Peer AS number
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>peer-as number</i>
Tree	<a href="#">peer-as</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **peer-ip-tracking** *boolean*

Synopsis	Enable BGP peer tracking
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>peer-ip-tracking boolean</i>
Tree	<a href="#">peer-ip-tracking</a>
Description	<p>When configured to <b>true</b>, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Route preference for routes learned from all peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**prefix-limit** [**family**] *keyword*

Synopsis	Enter the <b>prefix-limit</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i>
Tree	<b>prefix-limit</b>
Description	Commands in this context limit the number of BGP routes per address family received from a BGP peer and define the actions when crossing the configured maximum.
Introduced	16.0.R1
Platforms	All

**[family]** *keyword*

Synopsis	Address family to which the limit applies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i>
Tree	<b>prefix-limit</b>
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**hold-excess** *number*

Synopsis	Percentage of maximum routes to install in route table
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>prefix-limit</b> <i>keyword</i> <b>hold-excess</b> <i>number</i>
Tree	<b>hold-excess</b>



Description	<p>This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the <b>post-import</b> command is configured to <b>true</b>, only routes not rejected by import policies count toward the limit.</p> <p>A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.</p> <p>This command is mutually exclusive with the <b>idle-timeout</b> and <b>log-only</b> commands.</p>
Range	1 to 100
Introduced	23.7.R1
Platforms	All

### **idle-timeout** *number*

Synopsis	Time BGP peering remains idle before reconnecting
Context	<b>configure</b> <i>router string bgp group string prefix-limit keyword idle-timeout number</i>
Tree	<a href="#">idle-timeout</a>
Description	<p>This command configures the time in minutes before a BGP peer is automatically re-established after reaching the prefix limit.</p> <p>When unconfigured, the BGP peer stays down until the operator performs a reset. This command and <b>log-only</b> cannot be configured simultaneously.</p>
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	<b>configure</b> <i>router string bgp group string prefix-limit keyword log-only boolean</i>
Tree	<a href="#">log-only</a>
Description	<p>When configured to <b>true</b>, the router disables the BGP session from being taken down upon reaching the prefix limit. Instead, only a warning message is sent when the limit is reached. A warning message is also sent when the configured threshold percentage of the limit is reached.</p> <p>This command and <b>idle-timeout</b> cannot be configured simultaneously.</p> <p>When configured to <b>false</b>, the router generates a log event and takes the BGP session down upon reaching the prefix limit.</p>
Default	false

Introduced	16.0.R1
Platforms	All

### **maximum** *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	<b>configure</b> <i>router string bgp group string prefix-limit keyword maximum number</i>
Tree	<a href="#">maximum</a>
Description	This command configures the maximum number of BGP routes of the specified address family that can be received from a peer before administrative action is taken.  When <b>log-only</b> is unconfigured, the BGP session is taken down whenever the limit of any family is exceeded even if the limits of the other family has not been exceeded.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

### **post-import** *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	<b>configure</b> <i>router string bgp group string prefix-limit keyword post-import boolean</i>
Tree	<a href="#">post-import</a>
Description	When configured to <b>true</b> , the system limits the number of routes that are accepted by import policies. Routes rejected by import policies are not counted against the configured limit.  When configured to <b>false</b> , the system limits the number of routes to all routes received from the peer.
Default	false
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Percentage threshold that triggers a warning message
Context	<b>configure</b> <i>router string bgp group string prefix-limit keyword threshold number</i>
Tree	<a href="#">threshold</a>

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Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

### **remove-private**

Synopsis	Enable the <b>remove-private</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>remove-private</b>
Tree	<b>remove-private</b>
Introduced	16.0.R1
Platforms	All

### **limited** *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>remove-private limited</b> <i>boolean</i>
Tree	<b>limited</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **replace** *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>remove-private replace</b> <i>boolean</i>
Tree	<b>replace</b>
Default	false
Introduced	19.10.R1
Platforms	All

### **skip-peer-as** *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <b>remove-private skip-peer-as</b> <i>boolean</i>

Tree	<a href="#">skip-peer-as</a>
Default	false
Introduced	16.0.R1
Platforms	All

## segment-routing-v6

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">segment-routing-v6</a>
Tree	<a href="#">segment-routing-v6</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## route-advertisement

Synopsis	Enable the <b>route-advertisement</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">segment-routing-v6</a> <a href="#">route-advertisement</a>
Tree	<a href="#">route-advertisement</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <i>group</i> <i>string</i> <a href="#">segment-routing-v6</a> <a href="#">route-advertisement</a> <a href="#">drop-routes-with-srv6-tlvs</a> <i>boolean</i>
Tree	<a href="#">drop-routes-with-srv6-tlvs</a>
Description	When configured to <b>true</b> , the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to <b>false</b> , the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**family** [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement family keyword</i>
Tree	<i>family</i>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[family-type]** *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement family keyword</i>
Tree	<i>family</i>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**strip-srv6-tlvs** *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>segment-routing-v6 route-advertisement family keyword strip-srv6-tlvs boolean</i>
Tree	<i>strip-srv6-tlvs</i>
Description	When configured to <b>true</b> , BGP routes that belong to the address family specified using the <b>family</b> command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed.  When configured to <b>false</b> , SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**selective-label-ipv4-install** *boolean*

Synopsis	Enable selective download for bgp label-ipv4 routes
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Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>selective-label-ipv4-install boolean</i>
Tree	<a href="#">selective-label-ipv4-install</a>
Introduced	19.10.R1
Platforms	All

## send-communities

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>send-communities</i>
Tree	<a href="#">send-communities</a>
Introduced	16.0.R1
Platforms	All

## extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>send-communities extended boolean</i>
Tree	<a href="#">extended</a>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to <b>false</b>, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

## large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>send-communities large boolean</i>
Tree	<a href="#">large</a>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP large communities are sent to peers in the Large Communities attribute.</p>

When configured to **false**, all large communities are removed from all routes advertised to BGP peers.

Introduced 16.0.R1  
 Platforms All

### **standard** *boolean*

Synopsis Advertise the Communities attribute to peers  
 Context **configure** *router string bgp group string send-communities standard boolean*  
 Tree [standard](#)  
 Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.  
 When this command inherits a value of **true**, BGP standard communities are sent to peers in the Communities attribute.  
 When configured to **false**, all standard communities are removed from all routes advertised to BGP peers.  
 Introduced 16.0.R1  
 Platforms All

### **send-default**

Synopsis Enable the **send-default** context  
 Context **configure** *router string bgp group string send-default*  
 Tree [send-default](#)  
 Introduced 19.7.R1  
 Platforms All

### **export-policy** *reference*

Synopsis Export policy name  
 Context **configure** *router string bgp group string send-default export-policy reference*  
 Tree [export-policy](#)  
 Reference **configure** *policy-options policy-statement string*  
 Introduced 19.7.R1  
 Platforms All

**ipv4 boolean**

Synopsis	Generate and advertise an IPv4 default route (0/0)
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>send-default</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.7.R1
Platforms	All

**ipv6 boolean**

Synopsis	Generate and advertise an IPv6 default route (::/0)
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>send-default</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.7.R1
Platforms	All

**split-horizon boolean**

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>split-horizon</b> <i>boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All



**static-group *boolean***

Synopsis	Use group for static peers
Context	<b>configure</b> <i>router string bgp group string static-group boolean</i>
Tree	<i>static-group</i>
Default	true
Introduced	16.0.R1
Platforms	All

**tcp-mss (*number | keyword*)**

Synopsis	TCP maximum segment size override
Context	<b>configure</b> <i>router string bgp group string tcp-mss (number   keyword)</i>
Tree	<i>tcp-mss</i>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

**third-party-nexthop *boolean***

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	<b>configure</b> <i>router string bgp group string third-party-nexthop boolean</i>
Tree	<i>third-party-nexthop</i>
Description	<p>When configured to <b>true</b>, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p>

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.

Introduced	16.0.R1
Platforms	All

### **ttl-security** *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>ttl-security number</i>
Tree	<a href="#">ttl-security</a>
Description	This command configures the minimum TTL value that BGP accepts from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	BGP peer type
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>type keyword</i>
Tree	<a href="#">type</a>
Options	no-type, internal, external
Default	no-type
Introduced	16.0.R1
Platforms	All

### **vpn-apply-export** *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	<b>configure</b> <i>router string</i> <i>bgp group string</i> <i>vpn-apply-export boolean</i>
Tree	<a href="#">vpn-apply-export</a>
Description	When configured to <b>true</b> , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the export policies are not applied.

Introduced 16.0.R1

Platforms All

### **vpn-apply-import** *boolean*

Synopsis Apply base-instance BGP import policies to VPN routes

Context **configure** *router string* *bgp group string* **vpn-apply-import** *boolean*

Tree [vpn-apply-import](#)

Description When configured to **true**, base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced 16.0.R1

Platforms All

### **hold-time**

Synopsis Enter the **hold-time** context

Context **configure** *router string* *bgp* **hold-time**

Tree [hold-time](#)

Introduced 16.0.R1

Platforms All

### **minimum-hold-time** *number*

Synopsis Minimum hold time between successive messages

Context **configure** *router string* *bgp* **hold-time** **minimum-hold-time** *number*

Tree [minimum-hold-time](#)

Description This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.

Range 0 | 3 to 65535

Default 0

Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Maximum time BGP waits between successive messages
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp hold-time</b> <i>seconds</i> <i>number</i>
Tree	<b>seconds</b>
Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> <li>• If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li> <li>• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul>
Range	0   3 to 65535
Default	90
Introduced	16.0.R1
Platforms	All

### **ibgp-multipath** *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp ibgp-multipath</b> <i>boolean</i>
Tree	<b>ibgp-multipath</b>
Description	<p>When configured to <b>true</b>, this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops.</p> <p>When configured to <b>false</b>, this command disables IBGP multipath load balancing.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## import

Synopsis	Enable the <b>import</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>import</b>
Tree	<b>import</b>
Description	<p>Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the <b>configure policy-options</b> context.</p> <p>When no import policies are specified in this context, BGP routes are accepted by default.</p>
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	BGP import policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>import</b> <b>policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	<p>This command specifies a list of objects, where each object is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by this command is allowed to be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## initial-send-delay-zero *boolean*

Synopsis	Send BGP updates as soon as session comes up
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Context	<b>configure router</b> <i>string</i> <b>bgp initial-send-delay-zero</b> <i>boolean</i>
Tree	<b>initial-send-delay-zero</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **inter-as-vpn** *boolean*

Synopsis	Allow advertisement of VPN routes across AS boundaries
Context	<b>configure router</b> <i>string</i> <b>bgp inter-as-vpn</b> <i>boolean</i>
Tree	<b>inter-as-vpn</b>
Description	When configured to <b>true</b> , VPNs can exchange routes across AS boundaries, providing model B connectivity. When configured to <b>false</b> , ASBRs are prevented from advertising VPN routes to peers in other ASs.
Default	false
Introduced	16.0.R1
Platforms	All

### **keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	<b>configure router</b> <i>string</i> <b>bgp keepalive</b> <i>number</i>
Tree	<b>keepalive</b>
Range	0 to 21845
Default	30
Introduced	16.0.R1
Platforms	All

### **label-allocation**

Synopsis	Enter the <b>label-allocation</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp label-allocation</b>
Tree	<b>label-allocation</b>
Introduced	20.10.R1

Platforms All

## label-ipv6

Synopsis Enter the **label-ipv6** context

Context **configure router string** *bgp label-allocation label-ipv6*

Tree [label-ipv6](#)

Description This command controls the label allocation behavior for labeled unicast IPv6 routes. The label options are **explicit-null** and **normal**.

Introduced 20.10.R1

Platforms All

## explicit-null *boolean*

Synopsis Apply advertised label and associated programming rules

Context **configure router string** *bgp label-allocation label-ipv6 explicit-null boolean*

Tree [explicit-null](#)

Description When configured to **true**, this command uses the advertised label and associated programming rules on this instance of BGP. The following applies:

- The router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising. It sets the BGP label value to IPv6 explicit null (value 2), forcing a POP behavior for received packets.
- The received label-unicast IPv6 routes never create tunnels in TTM that can be used to resolve other BGP routes (with an IPv6 next-hop).
- A received label-unicast IPv6 route can be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP).

When configured to **false**, advertised label IPv6 programming rules are not used. The following applies

- When the router is required to act as the BGP next-hop of a label-unicast IPv6 route that it is advertising, it sets the BGP label value to a proper value in the dynamic label range and programs a POP or SWAP operation for that label, depending on the origin of the route and various import policy actions that could apply to the route.
- Received label-unicast IPv6 routes that have a prefix length of 128 bits are automatically installed in TTM so that they can be used to resolve other (non-labeled-unicast) BGP routes (with an IPv6 next-hop).
- A received label-unicast IPv6 route cannot be resolved by a label-ipv4 BGP tunnel that is transported over a stacked tunnel (SR-TE LSP or LDPoRSVP LSP).
- The label-ipv6 routes used for ECMP toward an IPv6 destination cannot be a mix of routes with regular label values and routes with special (IPv6 explicit null) label values.

Changes in the value of this leaf do not cause the BGP sessions of the base router to reset.

Default	true
Introduced	20.10.R1
Platforms	All

### **label-preference** *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>label-preference</b> <i>number</i>
Tree	<b>label-preference</b>
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

### **link-state-route-export** *boolean*

Synopsis	Allow the export of the TED NLRI database
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>link-state-route-export</b> <i>boolean</i>
Tree	<b>link-state-route-export</b>
Description	When configured to <b>true</b> , this command allows BGP to export link-state information to BGP neighbors. When configured to <b>false</b> , link-state information is not exported.
Default	false
Introduced	16.0.R1
Platforms	All

### **link-state-route-import** *boolean*

Synopsis	Allow the import of the TED NLRI database
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>link-state-route-import</b> <i>boolean</i>
Tree	<b>link-state-route-import</b>
Description	When configured to <b>true</b> , this command enables the import of link-state information into the BGP-LS address family for advertisement to other BGP neighbors. When configured to <b>false</b> , this command disables the import of link-state information.



Default	false
Introduced	16.0.R1
Platforms	All

## local-as

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">local-as</a>
Tree	<a href="#">local-as</a>
Introduced	16.0.R1
Platforms	All

## as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">local-as</a> <a href="#">as-number</a> <i>number</i>
Tree	<a href="#">as-number</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## prepend-global-as *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">local-as</a> <a href="#">prepend-global-as</a> <i>boolean</i>
Tree	<a href="#">prepend-global-as</a>
Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer.  When configured to <b>false</b> , the global ASN is hidden in paths announced to the EBGP peer.
Default	true
Introduced	16.0.R1
Platforms	All

**private** *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp local-as private boolean</i>
Tree	<a href="#">private</a>
Description	When configured to <b>true</b> , the local ASN is hidden in paths learned from the peering. When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

**local-preference** *number*

Synopsis	Default local preference if not in incoming routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp local-preference number</i>
Tree	<a href="#">local-preference</a>
Max. Range	0 to 4294967295
Default	100
Introduced	16.0.R1
Platforms	All

**loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp loop-detect keyword</i>
Tree	<a href="#">loop-detect</a>
Options	drop-peer, ignore-loop, off, discard-route
Default	ignore-loop
Introduced	16.0.R1
Platforms	All

**loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp loop-detect-threshold number</i>

Tree	<a href="#">loop-detect-threshold</a>
Range	0 to 15
Default	0
Introduced	16.0.R6
Platforms	All

### **med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp med-out</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">med-out</a>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

### **min-route-advertisement** *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp min-route-advertisement</a> <i>number</i>
Tree	<a href="#">min-route-advertisement</a>
Range	1 to 255
Default	30
Introduced	16.0.R1
Platforms	All

### **monitor**

Synopsis	Enable the <b>monitor</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp monitor</a>
Tree	<a href="#">monitor</a>
Description	Commands in this context specify BMP-related configurations. When this context is unconfigured, the sending of BMP messages to BMP monitoring stations is disabled.
Introduced	16.0.R1

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Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of BMP monitoring

Context **configure** [router](#) *string* [bgp monitor](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **all-stations** *boolean*

Synopsis Send BMP messages to all configured stations

Context **configure** [router](#) *string* [bgp monitor](#) [all-stations](#) *boolean*

Tree [all-stations](#)

Description When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.

When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.

Default false

Introduced 16.0.R1

Platforms All

### **route-monitoring**

Synopsis Enter the **route-monitoring** context

Context **configure** [router](#) *string* [bgp monitor](#) [route-monitoring](#)

Tree [route-monitoring](#)

Introduced 16.0.R1

Platforms All

**post-policy *boolean***

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp monitor route-monitoring post-policy</a> <i>boolean</i>
Tree	<a href="#">post-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

**pre-policy *boolean***

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp monitor route-monitoring pre-policy</a> <i>boolean</i>
Tree	<a href="#">pre-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

**station [[station-name](#)] *reference***

Synopsis	Add a list entry for <b>station</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Description	This command identifies a BMP monitoring station for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[[station-name](#)] *reference***

Synopsis	BMP monitoring station
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Reference	<b>configure</b> <a href="#">bmp station</a> <i>string</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **mp-bgp-keep** *boolean*

Synopsis	Keep rejected VPN-IP routes in RIB-IN
Context	<b>configure</b> <i>router string bgp mp-bgp-keep boolean</i>
Tree	<a href="#">mp-bgp-keep</a>
Description	When configured to <b>true</b> , the RIB-IN retains all MP-BGP routes, including VPN routes rejected by import policies or not imported by any services. As a result, sending Route Refresh messages is not required when an import policy changes. When configured to <b>false</b> , these VPN routes are deleted from the RIB-IN.
Default	false
Introduced	16.0.R1
Platforms	All

### **multihop** *number*

Synopsis	TTL in IP packet headers for EBGP peers multi-hops away
Context	<b>configure</b> <i>router string bgp multihop number</i>
Tree	<a href="#">multihop</a>
Description	This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **multipath**

Synopsis	Enter the <b>multipath</b> context
Context	<b>configure</b> <i>router string bgp multipath</i>
Tree	<a href="#">multipath</a>
Introduced	16.0.R1
Platforms	All

**ebgp number**

Synopsis	Maximum multipaths per prefix for EBGp learned routes
Context	<b>configure router</b> <i>string</i> <b>bgp multipath ebgp number</b>
Tree	<b>ebgp</b>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

**family [family-type] keyword**

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure router</b> <i>string</i> <b>bgp multipath family keyword</b>
Tree	<b>family</b>
Introduced	19.5.R1
Platforms	All

**[family-type] keyword**

Synopsis	Address family for which multipath selection applies
Context	<b>configure router</b> <i>string</i> <b>bgp multipath family keyword</b>
Tree	<b>family</b>
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**ebgp number**

Synopsis	Maximum multipaths when best path is EBGp learned route
Context	<b>configure router</b> <i>string</i> <b>bgp multipath family keyword ebgp number</b>
Tree	<b>ebgp</b>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the <b>max-paths</b> command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled.

Range	1 to 64
Introduced	19.5.R1
Platforms	All

### **ibgp number**

Synopsis	Maximum multipaths when best path is IBGP learned route
Context	<b>configure router string bgp multipath family keyword ibgp number</b>
Tree	<a href="#">ibgp</a>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the <b>max-paths</b> command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

### **max-paths number**

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	<b>configure router string bgp multipath family keyword max-paths number</b>
Tree	<a href="#">max-paths</a>
Description	<p>This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the <b>family</b> command.</p> <p>Consider the following when configuring this command:</p> <ul style="list-style-type: none"> <li>• If the best path is an EBGP-learned route and the <b>ebgp</b> command is configured, the limit configured in the <b>ebgp</b> command overrides the limit configured in this command.</li> <li>• If the best path is an IBGP-learned route and the <b>ibgp</b> command is configured, the limit configured in the <b>ibgp</b> command overrides the limit configured in this command.</li> <li>• If the best path is an EBGP-learned route and the <b>ebgp</b> command is not configured, and this command is configured to 1, multipaths are disabled.</li> <li>• If the best path is an IBGP-learned route and the <b>ibgp</b> command is not configured, and this command is configured to 1, multipaths are disabled.</li> </ul>
Range	1 to 64
Introduced	19.5.R1
Platforms	All



**restrict** *keyword*

Synopsis	AS path restriction for the non-best path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>multipath</b> <b>family</b> <i>keyword</i> <b>restrict</b> <i>keyword</i>
Tree	<b>restrict</b>
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	19.5.R1
Platforms	All

**unequal-cost** *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>multipath</b> <b>family</b> <i>keyword</i> <b>unequal-cost</b> <i>boolean</i>
Tree	<b>unequal-cost</b>
Description	When configured to <b>true</b> , BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	19.5.R1
Platforms	All

**ibgp** *number*

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>multipath</b> <b>ibgp</b> <i>number</i>
Tree	<b>ibgp</b>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

**max-paths** *number*

Synopsis	Maximum multipaths per prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>multipath</b> <b>max-paths</b> <i>number</i>
Tree	<b>max-paths</b>

Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

**restrict** *keyword*

Synopsis	AS path restriction for the non-best path
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp multipath restrict</b> <i>keyword</i>
Tree	<b>restrict</b>
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	16.0.R1
Platforms	All

**unequal-cost** *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp multipath unequal-cost</b> <i>boolean</i>
Tree	<b>unequal-cost</b>
Default	false
Introduced	19.5.R1
Platforms	All

**mvpn-vrf-import-subtype-new** *boolean*

Synopsis	Encode the IANA value of 0x010b in advertised routes
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp mvpn-vrf-import-subtype-new</b> <i>boolean</i>
Tree	<b>mvpn-vrf-import-subtype-new</b>
Description	When configured to <b>true</b> , this command encodes the value of 0x010b for the type or subtype in advertised routes.  When configured to <b>false</b> , BGP encodes the extended community type or subtype as 0x010a to preserve backwards compatibility.
Default	false
Introduced	16.0.R1

Platforms All

### **neighbor** [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Enter the **neighbor** list instance

Context **configure** [router](#) *string* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Tree [neighbor](#)

Introduced 16.0.R1

Platforms All

### **[ip-address]** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis IP address of the BGP peer router

Context **configure** [router](#) *string* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Tree [neighbor](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **add-paths**

Synopsis Enable the **add-paths** context

Context **configure** [router](#) *string* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
[add-paths](#)

Tree [add-paths](#)

Description Commands in this context allow the add-paths node to be configured for the specified families for configuration of the BGP group or neighbor. The BGP add-paths capability allows the router to send or receive multiple paths per prefix to and from a peer.

When unconfigured, command settings are inherited from a higher level BGP configuration.

Introduced 16.0.R1

Platforms All

### **evpn**

Synopsis Enter the **evpn** context

Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths evpn</b>
Tree	<b>evpn</b>
Description	Commands in this context configure the add-paths capability for EVPN routes. By default, add-paths is not enabled for EVPN routes.
Introduced	21.10.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple EVPN paths per prefix from a peer
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths evpn receive boolean</b>
Tree	<b>receive</b>
Default	false
Introduced	21.10.R1
Platforms	All

### **send (number | keyword)**

Synopsis	Maximum paths per EVPN prefix to Add-Path peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths evpn send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	21.10.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths ipv4</b>
Tree	<b>ipv4</b>
Introduced	16.0.R1

Platforms All

### receive *boolean*

Synopsis Receive multiple labeled-unicast routes per IPv4 prefix

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths ipv4 receive** *boolean*

Tree **receive**

Description When configured to **true**, the router can receive multiple unlabeled IPv4 unicast routes per prefix from a peer.  
When configured to **false**, the ADD-PATH receive capability is not enabled.

Default false

Introduced 16.0.R1

Platforms All

### send (*number* | *keyword*)

Synopsis Maximum paths per unlabeled IPv4 unicast prefix

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths ipv4 send** (*number* | *keyword*)

Tree **send**

Description This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  
When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.

Range 1 to 16

Options multipaths – Number of best multipaths for each NLRI

Introduced 16.0.R1

Platforms All

### ipv6

Synopsis Enter the **ipv6** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**add-paths ipv6**

Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple routes per IPv6 prefix
Context	<b>configure router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">add-paths ipv6 receive boolean</a>
Tree	<a href="#">receive</a>
Description	When configured to <b>true</b> , this command allows multiple unlabeled IPv6 unicast routes per prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send (number | keyword)**

Synopsis	Maximum paths per unlabeled IPv6 unicast prefix
Context	<b>configure router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">add-paths ipv6 send (number   keyword)</a>
Tree	<a href="#">send</a>
Description	This command configures the maximum number of paths per unlabeled IPv4 unicast prefix that are allowed to be advertised to ADD-PATH peers. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for unlabeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

### **label-ipv4**

Synopsis	Enter the <b>label-ipv4</b> context
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Context	<b>configure router string</b> <i>bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) add-paths label-ipv4</i>
Tree	<i>label-ipv4</i>
Introduced	16.0.R1
Platforms	All

### **receive boolean**

Synopsis	Receive multiple labeled-unicast routes per IPv4 prefix
Context	<b>configure router string</b> <i>bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) add-paths label-ipv4 receive boolean</i>
Tree	<i>receive</i>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv4 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **send (number | keyword)**

Synopsis	Maximum paths per labeled IPv4 unicast prefix
Context	<b>configure router string</b> <i>bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) add-paths label-ipv4 send (number   keyword)</i>
Tree	<i>send</i>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv4 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for labeled IPv4 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

## label-ipv6

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths label-ipv6</b>
Tree	<b>label-ipv6</b>
Introduced	16.0.R1
Platforms	All

## receive boolean

Synopsis	Receive multiple labeled-unicast routes per IPv6 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths label-ipv6 receive boolean</b>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple labeled-unicast routes per IPv6 prefix to be received from a peer.  When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send (*number* | *keyword*)

Synopsis	Maximum paths per labeled IPv6 unicast prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths label-ipv6 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per labeled IPv6 unicast prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for labeled IPv6 unicast routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All



## mcast-vpn-ipv4

Synopsis	Enter the <b>mcast-vpn-ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>mcast-vpn-ipv4</b>
Tree	<b>mcast-vpn-ipv4</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple multicast routes per IPv4 VPN prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>mcast-vpn-ipv4</b> <b>receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv4 VPN prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send *number*

Synopsis	Maximum paths per multicast IPv4 VPN prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths</b> <b>mcast-vpn-ipv4</b> <b>send</b> <i>number</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv4 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv4 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

## mcast-vpn-ipv6

Synopsis	Enter the <b>mcast-vpn-ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv6</b>
Tree	<b>mcast-vpn-ipv6</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple multicast routes per IPv6 VPN prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv6 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast routes per IPv6 VPN prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send *number*

Synopsis	Maximum paths per multicast IPv6 VPN prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mcast-vpn-ipv6 send</b> <i>number</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast IPv6 VPN prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast IPv6 VPN routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

## mvpn-ipv4

Synopsis	Enter the <b>mvpn-ipv4</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv4</b>
Tree	<b>mvpn-ipv4</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv4 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv4 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast VPN routes per IPv4 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send *number*

Synopsis	Maximum paths per multicast VPN IPv4 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv4 send</b> <i>number</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv4 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

## mvpn-ipv6

Synopsis	Enter the <b>mvpn-ipv6</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv6</b>
Tree	<b>mvpn-ipv6</b>
Introduced	16.0.R1
Platforms	All

## receive *boolean*

Synopsis	Receive multiple multicast VPN routes per IPv6 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv6 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple multicast VPN routes per IPv6 prefix to be received from a peer. When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## send *number*

Synopsis	Maximum paths per multicast VPN IPv6 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths mvpn-ipv6 send</b> <i>number</i>
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per multicast VPN IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules. When not configured, ADD-PATH send capability is not enabled for multicast VPN IPv6 routes.
Range	1 to 16
Introduced	16.0.R1
Platforms	All

**vpn-ipv4**

Synopsis	Enter the <b>vpn-ipv4</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv4</b>
Tree	<b>vpn-ipv4</b>
Introduced	16.0.R1
Platforms	All

**receive boolean**

Synopsis	Receive multiple routes per VPN-IPv4 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv4 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple VPN-IPv4 routes per prefix to be received from a peer.  When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**send (number | keyword)**

Synopsis	Maximum paths per VPN-IPv4 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv4 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv4 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for VPN-IPv4 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

**vpn-ipv6**

Synopsis	Enter the <b>vpn-ipv6</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv6</b>
Tree	<b>vpn-ipv6</b>
Introduced	16.0.R1
Platforms	All

**receive boolean**

Synopsis	Receive multiple routes per VPN-IPv6 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv6 receive</b> <i>boolean</i>
Tree	<b>receive</b>
Description	When configured to <b>true</b> , this command allows multiple VPN-IPv6 routes per prefix to be received from a peer.  When configured to <b>false</b> , the ADD-PATH receive capability is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**send (number | keyword)**

Synopsis	Maximum paths per VPN-IPv6 prefix
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>add-paths vpn-ipv6 send</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send</b>
Description	This command configures the maximum number of paths that are allowed to be advertised to add-paths peers per VPN-IPv6 prefix. The actual number of advertised routes may be less depending on the next-hop diversity requirement, other configuration options, route policies, or route advertisement rules.  When not configured, ADD-PATH send capability is not enabled for VPN-IPv6 routes.
Range	1 to 16
Options	multipaths – Number of best multipaths for each NLRI
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the BGP neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**advertise-inactive** *boolean*

Synopsis	Advertise an inactive BGP route to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-inactive</b> <i>boolean</i>
Tree	<b>advertise-inactive</b>
Description	<p>When configured to <b>true</b>, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.</p> <ul style="list-style-type: none"> <li>• If the active route for the IP prefix is a BGP route, that route is advertised.</li> <li>• If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> <li>• If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.</li> </ul> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the advertisement of inactive BGP routes to other BGP peers is disabled.</p>
Introduced	16.0.R1
Platforms	All

**advertise-ipv6-next-hops**

Synopsis	Enable the <b>advertise-ipv6-next-hops</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b>

Tree	<a href="#">advertise-ipv6-next-hops</a>
Description	<p>Commands in this context allow specified IP family routes to be advertised to IPv6 transport peers with a true IPv6 address when originated or when a configured or automatic next-hop-self action is applied.</p> <p>When unconfigured, command settings are inherited from a higher level BGP configuration.</p>
Introduced	16.0.R1
Platforms	All

### **evpn boolean**

Synopsis	Advertise EVPN route with IPv6 next-hop address
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">advertise-ipv6-next-hops evpn boolean</a>
Tree	<a href="#">evpn</a>
Description	<p>When configured to <b>true</b>, EVPN routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, EVPN routes are advertised with IPv4 next-hop addresses to IPv6 transport peers.</p>
Default	false
Introduced	19.5.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Advertise IPv4 route with IPv6 next-hop address
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">advertise-ipv6-next-hops ipv4 boolean</a>
Tree	<a href="#">ipv4</a>
Description	<p>When configured to <b>true</b>, IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, IPv4 routes are advertised with IPv4 next-hop addresses to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false



Introduced	19.5.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Advertise label IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Description	<p>When configured to <b>true</b>, label IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, label IPv4 routes are advertised with the system IPv4 address as the next hop to IPv6 transport peers. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Advertise label IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Description	<p>When configured to <b>true</b>, label IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, label IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Advertise VPN IPv4 route with IPv6 next-hop address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Description	<p>When configured to <b>true</b>, VPN IPv4 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers. The appropriate extended NH encoding capability must also be received from the remote peer before the route can be advertised with an IPv6 address instead of the IPv4 system address as the next hop.</p> <p>When configured to <b>false</b>, VPN IPv4 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop. If the route matches a BGP export policy entry that tries to change the next hop to an IPv6 address and an appropriate extended NH encoding capability was not received by the remote peer, the route is handled as though it was rejected by the policy entry.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 route with IPv6 next-hop address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Description	<p>When configured to <b>true</b>, VPN IPv6 routes are advertised with IPv6 next-hop addresses to IPv6 transport peers.</p> <p>When configured to <b>false</b>, VPN IPv6 routes are advertised toward IPv6 transport peers with the system IPv4 address as the BGP next hop, encoded as an IPv4-mapped IPv6 address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**advertise-ldp-prefix** *boolean*

Synopsis	Advertise active /32 LDP FEC prefixes to BGP peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>advertise-ldp-prefix</b> <i>boolean</i>
Tree	<a href="#">advertise-ldp-prefix</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **aggregator-id-zero** *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>aggregator-id-zero</b> <i>boolean</i>
Tree	<a href="#">aggregator-id-zero</a>
Introduced	16.0.R1
Platforms	All

### **aigp** *boolean*

Synopsis	Add AIGP attribute to advertised routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>aigp</b> <i>boolean</i>
Tree	<a href="#">aigp</a>
Description	<p>When configured to <b>true</b>, this command enables Accumulated IGP (AIGP) path attribute support with one or more BGP peers. BGP path selection among routes with an associated AIGP metric is based on the end-to-end IGP metrics of the different BGP paths, even when these BGP paths span more than one AS and IGP instance.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the AIGP attribute is removed from advertised routes, if present, and is ignored in received routes.</p>
Introduced	16.0.R1
Platforms	All

### **as-override** *boolean*

Synopsis	Replace the peer's ASN with the local ASN in AS Path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>as-override</b> <i>boolean</i>
Tree	<a href="#">as-override</a>
Description	When configured to <b>true</b> , the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.

This command should be used with caution, as it breaks BGP's loop detection mechanism.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). This command cannot be explicitly configured to **false**.

When configured to **false**, no AS override is performed.

Introduced	19.7.R1
Platforms	All

### **asn-4-byte** *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>asn-4-byte</b> <i>boolean</i>
Tree	<a href="#">asn-4-byte</a>
Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	BGP authentication key
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>authentication-keychain</b> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	<b>configure</b> <b>system</b> <b>security</b> <b>keychains</b> <b>keychain</b> <i>string</i>
Introduced	16.0.R3

Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**bfd-liveness** *boolean*

Tree **bfd-liveness**

Description When configured to **true**, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, BFD is removed from the associated protocol adjacency.

Introduced 16.0.R1

Platforms All

### **bfd-strict-mode**

Synopsis Enter the **bfd-strict-mode** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**bfd-strict-mode**

Tree **bfd-strict-mode**

Introduced 23.7.R1

Platforms All

### **advertise**

Synopsis Enable the **advertise** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**bfd-strict-mode advertise**

Tree **advertise**

Description Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:

- The inherited or configured value for the **bfd-liveness** command that applies to the peer is **true**.
- The interface associated with the peer has a valid BFD configuration.

When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.

When unconfigured, BGP does not advertise the Strict-BFD capability to peers.

Introduced	23.7.R1
Platforms	All

### **holdtime** *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>bfd-strict-mode advertise holdtime</b> <i>number</i>
Tree	<b>holdtime</b>
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds
Default	30
Introduced	23.7.R1
Platforms	All

### **next-hop-reachability** *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>bfd-strict-mode next-hop-reachability</b> <i>boolean</i>
Tree	<b>next-hop-reachability</b>
Description	When configured to <b>true</b> , the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met: <ul style="list-style-type: none"> <li>• The BFD session to the peer is in a down state.</li> <li>• There is a valid interface BFD configuration that applies to the peer.</li> <li>• There is a valid BFD liveness configuration that applies to the peer.</li> </ul> <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p>

Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer. The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent.

Configuring this command to **true** only affects routes belonging to the following address families:

- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Introduced	23.7.R1
Platforms	All

### **block-prefix-sid** *boolean*

Synopsis	Block the prefix SID attribute
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>block-prefix-sid</b> <i>boolean</i>
Tree	<b>block-prefix-sid</b>
Description	When configured to <b>true</b> , all prefix SID attributes are removed from all routes exchanged between EBGp and IBGP peers covered by the scope of the command. Locally-imposed prefix SID attributes are also removed.  When configured to <b>false</b> , all prefix SID attributes are propagated without restriction.  A change of this configuration causes the affected BGP sessions to flap.
Default	false
Introduced	19.10.R1
Platforms	All

**capability-negotiation** *boolean*

Synopsis	Enable capability negotiation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>capability-negotiation</b> <i>boolean</i>
Tree	<b>capability-negotiation</b>
Introduced	16.0.R1
Platforms	All

**client-reflect** *boolean*

Synopsis	Allow cluster RR to advertise routes to its clients
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>client-reflect</b> <i>boolean</i>
Tree	<b>client-reflect</b>
Introduced	16.0.R1
Platforms	All

**cluster**

Synopsis	Enter the <b>cluster</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cluster</b>
Tree	<b>cluster</b>
Introduced	16.0.R1
Platforms	All

**allow-local-fallback** *boolean*

Synopsis	Allow fallback to RR topology
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cluster</b> <b>allow-local-fallback</b> <i>boolean</i>
Tree	<b>allow-local-fallback</b>
Description	When configured to <b>true</b> , this command allows the RR to advertise the best BGP path from its own topology location when there are no reachable routes from the client's ORR location. The ORR location must be specified before this command can be set to <b>true</b> .  When configured to <b>false</b> , this command no route is advertised to the client.
Default	false



Introduced	16.0.R1
Platforms	All

### **cluster-id** *string*

Synopsis	Route reflector cluster ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cluster</b> <b>cluster-id</b> <i>string</i>
Tree	<b>cluster-id</b>
Introduced	16.0.R1
Platforms	All

### **orr-location** *number*

Synopsis	Optimal route reflection location for the cluster
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cluster</b> <b>orr-location</b> <i>number</i>
Tree	<b>orr-location</b>
Description	This command configures an ORR location ID. If a cluster ID is also specified, the clients in that cluster receive routes optimal for that specific location.  With optimal route reflection, the best path advertised to a client takes location ID into account. If the tie-break for best path (or Add-Paths) comes down to next-hop IGP cost, the IGP costs will be calculated relative to the specified location. In the SR OS implementation, the IGP costs from arbitrary ORR locations are calculated using OSPF, OSPFv3, IS-IS, or BGP-LS information in the TE DB.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **connect-retry** *number*

Synopsis	BGP connect retry timer value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>connect-retry</b> <i>number</i>
Tree	<b>connect-retry</b>
Range	1 to 65535
Introduced	16.0.R1

Platforms All

### damp-peer-oscillations

Synopsis Enable the **damp-peer-oscillations** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations**

Tree **damp-peer-oscillations**

Introduced 16.0.R1

Platforms All

### error-interval *number*

Synopsis Time after a reset that the session must be error-free

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations error-interval** *number*

Tree **error-interval**

Description This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.

Range 0 to 2048

Default 30

Introduced 16.0.R1

Platforms All

### idle-hold-time

Synopsis Enter the **idle-hold-time** context

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations idle-hold-time**

Tree **idle-hold-time**

Introduced 16.0.R1

Platforms All

### initial-wait *number*

Synopsis Time session remains in idle state after stabilization

Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations</b> <b>idle-hold-time</b> <b>initial-wait</b> <i>number</i>
Tree	<b>initial-wait</b>
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

**max-wait** *number*

Synopsis	Maximum session idle time after repeated instability
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations</b> <b>idle-hold-time</b> <b>max-wait</b> <i>number</i>
Tree	<b>max-wait</b>
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

**second-wait** *number*

Synopsis	Time that doubles after each repeated session failure
Context	<b>configure</b> <i>router</i> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations</b> <b>idle-hold-time</b> <b>second-wait</b> <i>number</i>
Tree	<b>second-wait</b>
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

**damping** *boolean*

Synopsis	Use BGP route damping to reduce route flap
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damping</b> <i>boolean</i>
Tree	<b>damping</b>
Introduced	16.0.R1
Platforms	All

### **def-recv-evpn-encap** *keyword*

Synopsis	Default EVPN encapsulation type
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>def-recv-evpn-encap</b> <i>keyword</i>
Tree	<b>def-recv-evpn-encap</b>
Description	This command specifies the encapsulation type that BGP uses when an EVPN route is received without the Encapsulation Extended Community.  When unconfigured, the setting for this command is inherited from the BGP group-level configuration.
Options	mpls, vxlan
Introduced	16.0.R1
Platforms	All

### **default-label-preference**

Synopsis	Enter the <b>default-label-preference</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-label-preference</b>
Tree	<b>default-label-preference</b>
Introduced	19.5.R1
Platforms	All

### **ebgp** *number*

Synopsis	Default preference for EBGp
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-label-preference</b> <b>ebgp</b> <i>number</i>
Tree	<b>ebgp</b>
Range	0 to 255
Introduced	19.5.R1

Platforms All

### **ibgp number**

Synopsis Default preference for IBGP

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
**default-label-preference** **ibgp number**

Tree **ibgp**

Range 0 to 255

Introduced 19.5.R1

Platforms All

### **default-preference**

Synopsis Enter the **default-preference** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
**default-preference**

Tree **default-preference**

Introduced 19.5.R1

Platforms All

### **ebgp number**

Synopsis Default preference for EBGP

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
**default-preference** **ebgp number**

Tree **ebgp**

Range 0 to 255

Introduced 19.5.R1

Platforms All

### **ibgp number**

Synopsis Default preference for IBGP

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*)  
**default-preference** **ibgp number**

Tree **ibgp**

Range	0 to 255
Introduced	19.5.R1
Platforms	All

### **default-route-target** *boolean*

Synopsis	Send default RTC route (zero prefix length) to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-route-target</b> <i>boolean</i>
Tree	<b>default-route-target</b>
Description	<p>When configured to <b>true</b>, this command sends the default RTC route (zero prefix length) toward the selected peers.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, a default RTC route is not sent.</p>
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **ebgp-default-reject-policy**

Synopsis	Enable the <b>ebgp-default-reject-policy</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ebgp-default-reject-policy</b>
Tree	<b>ebgp-default-reject-policy</b>
Introduced	19.5.R1
Platforms	All

### **export** *boolean*

Synopsis	Enable default reject export policy for external peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ebgp-default-reject-policy export</b> <i>boolean</i>
Tree	<b>export</b>
Default	true
Introduced	19.5.R1
Platforms	All

### **import** *boolean*

Synopsis	Enable default reject import policy for external peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ebgp-default-reject-policy import</b> <i>boolean</i>
Tree	<b>import</b>
Default	true
Introduced	19.5.R1
Platforms	All

### **egress-engineering**

Synopsis	Enable the <b>egress-engineering</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>egress-engineering</b>
Tree	<b>egress-engineering</b>
Introduced	21.7.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BGP egress engineering
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>egress-engineering admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	This command administratively enables or disables egress engineering for the BGP. If enabled, peer node SIDs and peer adjacency SIDs are advertised in BGP-LS.

Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

### **egress-peer-engineering-label-unicast** *boolean*

Synopsis	Generate EPE label-unicast routes for neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>egress-peer-engineering-label-unicast</b> <i>boolean</i>
Tree	<b>egress-peer-engineering-label-unicast</b>
Description	When configured to <b>true</b> , BGP generates a label-unicast route for the /32 or /128 prefix that corresponds to the BGP neighbor address. This route can be advertised to other routers to recursively resolve unlabeled BGP routes for AS external destinations. This supports the Egress Peer Engineering (EPE) use case.
Default	false
Introduced	22.2.R1
Platforms	All

### **enforce-first-as** *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>enforce-first-as</b> <i>boolean</i>
Tree	<b>enforce-first-as</b>
Description	<p>When configured to <b>true</b> for an EBGP session, all routes received from an EBGP peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the <b>update-fault-tolerance</b> command in the <b>error-handling</b> context is set to <b>false</b>) or the session is left up but the route is treated as withdrawn (if <b>update-fault-tolerance</b> is set to <b>true</b>).</p> <p>This command does not flap an established session because it applies only to routes received after the command is issued.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, received routes are not checked for compliance with the rule.</p>
Introduced	16.0.R1
Platforms	All



## error-handling

Synopsis	Enter the <b>error-handling</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>error-handling</b>
Tree	<b>error-handling</b>
Introduced	16.0.R1
Platforms	All

## update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>error-handling update-fault-tolerance</b> <i>boolean</i>
Tree	<b>update-fault-tolerance</b>
Description	<p>When configured to <b>true</b>, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, all errors trigger a session reset.</p>
Introduced	16.0.R1
Platforms	All

## export

Synopsis	Enable the <b>export</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>export</b>
Tree	<b>export</b>
Description	<p>Commands in this context specify route policies that control the handling of outbound routes transmitted to certain peers. Route policies are configured in the <b>configure policy-options</b> context.</p> <p>When this context is unconfigured, the policy association for the group is inherited from the BGP global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	BGP export policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>export policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	<p>This command specifies route policies that control the handling of outbound routes transmitted to certain peers.</p> <p>Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.</p> <p>Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).</p> <p>Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@", "start@variable@end", "@variable@end", or "start@variable@".</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**extended-nh-encoding**

Synopsis	Enable the <b>extended-nh-encoding</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>extended-nh-encoding</b>
Tree	<b>extended-nh-encoding</b>
Description	<p>Commands in this context specify the address families enabled to advertise the capability to receive label IPv4 routes, VPN IPv4 routes, or IPv6 next hops from peers. The peers should not send such routes unless notification has been received of this capability. If the router receives an enabled address family route from a peer to which it did not advertise the necessary capability, the UPDATE message will be considered malformed. This causes either a session reset or treat-as-withdraw behavior depending on the error handling settings.</p> <p>When the context is unconfigured, command settings are inherited from the higher level BGP configuration.</p>

Introduced 16.0.R1  
Platforms All

### **ipv4** *boolean*

Synopsis Advertise encoding capability for IPv4 routes  
Context **configure** **router** *string* **bgp** **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*extended-nh-encoding* **ipv4** *boolean*  
Tree [ipv4](#)  
Default false  
Introduced 19.5.R1  
Platforms All

### **label-ipv4** *boolean*

Synopsis Advertise encoding capability for label-IPv4 routes  
Context **configure** **router** *string* **bgp** **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*extended-nh-encoding* **label-ipv4** *boolean*  
Tree [label-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **vpn-ipv4** *boolean*

Synopsis Advertise encoding capability for VPN-IPv4 routes  
Context **configure** **router** *string* **bgp** **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*extended-nh-encoding* **vpn-ipv4** *boolean*  
Tree [vpn-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **family**

Synopsis Enable the **family** context

Context	<b>configure</b> <i>router string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>family</b>
Tree	<b>family</b>
Introduced	16.0.R1
Platforms	All

**bgp-ls** *boolean*

Synopsis	Advertise MP-BGP support for the BGP-LS address family
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>family</b> <b>bgp-ls</b> <i>boolean</i>
Tree	<b>bgp-ls</b>
Default	false
Introduced	16.0.R1
Platforms	All

**evpn** *boolean*

Synopsis	Advertise MP-BGP support for the EVPN address family
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>family</b> <b>evpn</b> <i>boolean</i>
Tree	<b>evpn</b>
Default	false
Introduced	16.0.R1
Platforms	All

**flow-ipv4** *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>family</b> <b>flow-ipv4</b> <i>boolean</i>
Tree	<b>flow-ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **flow-ipv6** *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family flow-ipv6</b> <i>boolean</i>
Tree	<a href="#">flow-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **flow-vpn-ipv4** *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv4 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family flow-vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">flow-vpn-ipv4</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **flow-vpn-ipv6** *boolean*

Synopsis	Advertise support for FlowSpec-VPN IPv6 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family flow-vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">flow-vpn-ipv6</a>
Default	false
Introduced	22.7.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Add support for the IPv4 address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false

Introduced 16.0.R1  
Platforms All

### **ipv6** *boolean*

Synopsis Advertise MP-BGP support for the IPv6 address family  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family** **ipv6** *boolean*  
Tree [ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **l2-vpn** *boolean*

Synopsis Advertise MP-BGP support for the L2-VPN address family  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family** **l2-vpn** *boolean*  
Tree [l2-vpn](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **label-ipv4** *boolean*

Synopsis Advertise support for the label-IPv4 address family  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**family** **label-ipv4** *boolean*  
Tree [label-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **label-ipv6** *boolean*

Synopsis Advertise support for the label-IPv6 address family

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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family label-ipv6</b> <i>boolean</i>
Tree	<b>label-ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv4** *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family mcast-ipv4</b> <i>boolean</i>
Tree	<b>mcast-ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv6** *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family mcast-ipv6</b> <i>boolean</i>
Tree	<b>mcast-ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 VPN MCAST address family
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family mcast-vpn-ipv4</b> <i>boolean</i>
Tree	<b>mcast-vpn-ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-vpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 VPN MCAST address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>mcast-vpn-ipv6</b> <i>boolean</i>
Tree	<b>mcast-vpn-ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mdt-safi** *boolean*

Synopsis	Advertise MP-BGP support for MDT-SAFI address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>mdt-safi</b> <i>boolean</i>
Tree	<b>mdt-safi</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **ms-pw** *boolean*

Synopsis	Advertise support for multi-segment PW address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>ms-pw</b> <i>boolean</i>
Tree	<b>ms-pw</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv4** *boolean*

Synopsis	Advertise support for the IPv4 MCAST VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>mvpn-ipv4</b> <i>boolean</i>
Tree	<b>mvpn-ipv4</b>



Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv6** *boolean*

Synopsis	Advertise support for the IPv6 MCAST VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>mvpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **route-target** *boolean*

Synopsis	Advertise MP-BGP support for RT constraint routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>route-target</b> <i>boolean</i>
Tree	<a href="#">route-target</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-policy-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv4 family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family</b> <b>sr-policy-ipv4</b> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv4</a>
Description	This command allows the router to advertise the capability for AFI1/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv4 destination.
Default	false
Introduced	16.0.R1
Platforms	All

**sr-policy-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the SR-policy-IPv6 family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family sr-policy-ipv6</b> <i>boolean</i>
Tree	<a href="#">sr-policy-ipv6</a>
Description	This command allows the router to advertise the capability for AFI2/SAFI73, which corresponds to BGP routes that encode a segment routing policy to an IPv6 destination.
Default	false
Introduced	19.10.R1
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Advertise MP-BGP support for IPv4 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Advertise MP-BGP support for IPv6 VPN address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**fast-external-failover** *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>fast-external-failover</b> <i>boolean</i>

Tree	<a href="#">fast-external-failover</a>
Description	<p>When this command inherits a value of <b>true</b>, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When configured to <b>false</b>, the BGP session remains up until the hold time expires.</p>
Introduced	16.0.R1
Platforms	All

## graceful-restart

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Description	<p>Commands in this context configure BGP graceful restart helper procedures for address families included in the GR capabilities of both peers.</p> <p>When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.</p>
Introduced	16.0.R1
Platforms	All

## gr-notification *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">graceful-restart</a> <a href="#">gr-notification</a> <i>boolean</i>
Tree	<a href="#">gr-notification</a>
Description	<p>When configured to <b>true</b>, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.</p> <p>When configured to <b>false</b>, NOTIFICATION messages are not supported.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## long-lived

Synopsis	Enable the <b>long-lived</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived</b>
Tree	<b>long-lived</b>
Description	<p>Commands in this context configure the BGP Long-Lived Graceful-Restart (LLGR) procedures.</p> <p>LLGR, known informally as BGP persistence, is an extension of BGP GR that allows a session to stay down for a longer period of time. During this time, learned routes are marked and re-advertised as stale but they can continue to be used as routes of last resort.</p> <p>The LLGR handling of a session failure can be invoked immediately or it can be delayed until the end of the traditional GR restart window.</p>
Introduced	16.0.R1
Platforms	All

## advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived advertise-stale-to-all-neighbors</b> <i>boolean</i>
Tree	<b>advertise-stale-to-all-neighbors</b>
Default	false
Introduced	16.0.R1
Platforms	All

## advertised-stale-time *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived advertised-stale-time</b> <i>number</i>
Tree	<b>advertised-stale-time</b>
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

**family** [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family keyword</b>
Tree	<b>family</b>
Introduced	16.0.R1
Platforms	All

**[family-type]** *keyword*

Synopsis	Family type for family-specific LLGR configuration
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family keyword</b>
Tree	<b>family</b>
Options	ipv4, vpn-ipv4, ipv6, vpn-ipv6, l2-vpn, flow-ipv4, route-target, flow-ipv6, label-ipv4, label-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertised-stale-time** *number*

Synopsis	LLGR stale routes time for family override
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family keyword advertised-stale-time number</b>
Tree	<b>advertised-stale-time</b>
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

**helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family</b> <i>keyword</i> <b>helper-override-stale-time</b> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

**forwarding-bits-set** *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived forwarding-bits-set</b> <i>keyword</i>
Tree	<a href="#">forwarding-bits-set</a>
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

**helper-override-restart-time** *number*

Synopsis	Locally-configured override for restart time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived helper-override-restart-time</b> <i>number</i>
Tree	<a href="#">helper-override-restart-time</a>

Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

### helper-override-stale-time *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived helper-override-stale-time</b> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

### without-no-export *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived without-no-export</b> <i>boolean</i>
Tree	<a href="#">without-no-export</a>
Description	When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.  When configured to <b>false</b> , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false

Introduced	16.0.R1
Platforms	All

**restart-time** *number*

Synopsis	Restart time advertised by GR capability
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart restart-time</b> <i>number</i>
Tree	<b>restart-time</b>
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

**stale-routes-time** *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart stale-routes-time</b> <i>number</i>
Tree	<b>stale-routes-time</b>
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

**group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	BGP peer group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>group</b> <i>reference</i>
Tree	<b>group</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>bgp group</b> <i>string</i>
Notes	This element is mandatory.



Introduced	16.0.R1
Platforms	All

## hold-time

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b>
Tree	<b>hold-time</b>
Introduced	16.0.R1
Platforms	All

## minimum-hold-time *number*

Synopsis	Minimum time BGP waits between successive messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b> <b>minimum-hold-time</b> <i>number</i>
Tree	<b>minimum-hold-time</b>
Range	0   3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

## seconds *number*

Synopsis	Maximum hold time between successive messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Description	<p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p> <ul style="list-style-type: none"><li>• If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li></ul>

- If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.

When unconfigured, the command setting is inherited from the BGP group-level configuration.

Range	0   3 to 65535
Introduced	16.0.R1
Platforms	All

## import

Synopsis	Enable the <b>import</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>import</b>
Tree	<b>import</b>
Description	Commands in this context specify route policies that control the handling of inbound routes received from certain peers. Route policies are configured in the <b>configure policy-options</b> context.  When this context is unconfigured, the policy association is inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Names of the BGP import policies
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	This command specifies route policies that control the handling of inbound routes received from certain peers.  Each object in this command is either a policy logical expression or the name of a single policy. The objects are evaluated in the specified order to determine the modifications of each route and the final action to accept or reject the route.  Only one of the objects referenced by the command can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).  Policy parameters must be enclosed by at-signs (@) and may be midstring; for example, "@variable@," "start@variable@end"," @variable@end", or "start@variable@".

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **initial-send-delay-zero** *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>initial-send-delay-zero</b> <i>boolean</i>
Tree	<b>initial-send-delay-zero</b>
Description	When configured to <b>true</b> , BGP updates are sent as soon as the session comes up. When unconfigured, the command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> . When this command inherits a value of <b>false</b> , BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.
Introduced	16.0.R1
Platforms	All

### **keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>keepalive</b> <i>number</i>
Tree	<b>keepalive</b>
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

### **l2vpn-cisco-interop** *boolean*

Synopsis	Allow translation from Cisco non-compliant NLRI format
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>l2vpn-cisco-interop</b> <i>boolean</i>
Tree	<b>l2vpn-cisco-interop</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-preference** *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>label-preference</b> <i>number</i>
Tree	<b>label-preference</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **link-bandwidth**

Synopsis	Enter the <b>link-bandwidth</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b>
Tree	<b>link-bandwidth</b>
Introduced	16.0.R3
Platforms	All

### **accept-from-ebgp**

Synopsis	Enable the <b>accept-from-ebgp</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> <b>accept-from-ebgp</b>
Tree	<b>accept-from-ebgp</b>
Introduced	16.0.R4
Platforms	All

### **ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth accept-from-ebgp</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false

Introduced 16.0.R4  
Platforms All

### **vpn-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*link-bandwidth accept-from-ebgp vpn-ipv4 boolean*  
Tree [vpn-ipv4](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **vpn-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv6 routes  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*link-bandwidth accept-from-ebgp vpn-ipv6 boolean*  
Tree [vpn-ipv6](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **add-to-received-ebgp**

Synopsis Enable the **add-to-received-ebgp** context  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*link-bandwidth add-to-received-ebgp*  
Tree [add-to-received-ebgp](#)  
Introduced 16.0.R3  
Platforms All

### **ipv4** *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes  
Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
*link-bandwidth add-to-received-ebgp ipv4 boolean*

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Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

**vpn-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

**vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth add-to-received-ebgp vpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

**aggregate-used-paths**

Synopsis	Enable the <b>aggregate-used-paths</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth aggregate-used-paths</b>
Tree	<a href="#">aggregate-used-paths</a>
Introduced	16.0.R4
Platforms	All

**ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth aggregate-used-paths ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4



Platforms All

### **ipv6** *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**link-bandwidth aggregate-used-paths** **ipv6** *boolean*

Tree [ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **label-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**link-bandwidth aggregate-used-paths** **label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R4

Platforms All

### **label-ipv6** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv6 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**link-bandwidth aggregate-used-paths** **label-ipv6** *boolean*

Tree [label-ipv6](#)

Default false

Introduced 16.0.R4

Platforms All

### **vpn-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in VPN-IPv4 routes

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**link-bandwidth aggregate-used-paths** **vpn-ipv4** *boolean*

---

Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">link-bandwidth aggregate-used-paths</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **send-to-ebgp**

Synopsis	Enable the <b>send-to-ebgp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a>
Tree	<a href="#">send-to-ebgp</a>
Introduced	16.0.R4
Platforms	All

### **ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**ipv6 *boolean***

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp ipv6 boolean</b>
Tree	<b>ipv6</b>
Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv4 *boolean***

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp label-ipv4 boolean</b>
Tree	<b>label-ipv4</b>
Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv6 *boolean***

Synopsis	Support Link Bandwidth EC in label-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp label-ipv6 boolean</b>
Tree	<b>label-ipv6</b>
Default	false
Introduced	16.0.R4
Platforms	All

**vpn-ipv4 *boolean***

Synopsis	Support Link Bandwidth EC in VPN-IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp vpn-ipv4 boolean</b>
Tree	<b>vpn-ipv4</b>
Default	false

Introduced	16.0.R4
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in VPN-IPv6 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> <b>send-to-ebgp</b> <b>vpn-ipv6</b> <i>boolean</i>
Tree	<b>vpn-ipv6</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>interface-name</i> )
Tree	<b>local-address</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **local-as**

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-as</b>
Tree	<b>local-as</b>
Introduced	16.0.R1
Platforms	All

### **as-number** *number*

Synopsis	Local (or virtual) BGP AS number
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-as</b> <b>as-number</b> <i>number</i>

Tree	<a href="#">as-number</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **prepend-global-as** *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as</a> <a href="#">prepend-global-as</a> <i>boolean</i>
Tree	<a href="#">prepend-global-as</a>
Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to <b>false</b> , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

### **private** *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-as</a> <a href="#">private</a> <i>boolean</i>
Tree	<a href="#">private</a>
Description	When configured to <b>true</b> , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

### **local-preference** *number*

Synopsis	Default local preference if not in incoming routes
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">local-preference</a> <i>number</i>

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Tree	<a href="#">local-preference</a>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>loop-detect</b> <i>keyword</i>
Tree	<a href="#">loop-detect</a>
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

### **loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>loop-detect-threshold</b> <i>number</i>
Tree	<a href="#">loop-detect-threshold</a>
Range	0 to 15
Introduced	16.0.R6
Platforms	All

### **med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>med-out</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">med-out</a>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

**min-route-advertisement** *number*

Synopsis	Minimum interval between successive prefix updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>min-route-advertisement</b> <i>number</i>
Tree	<b>min-route-advertisement</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**monitor**

Synopsis	Enable the <b>monitor</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor</b>
Tree	<b>monitor</b>
Description	Commands in this context specify BMP-related configurations at the BGP neighbor level.  When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of BMP monitoring
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**all-stations** *boolean*

Synopsis	Send BMP messages to all configured stations
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor all-stations</b> <i>boolean</i>
Tree	<b>all-stations</b>
Description	When configured to <b>true</b> , this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.  When configured to <b>false</b> , the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.
Default	false
Introduced	16.0.R1
Platforms	All

## route-monitoring

Synopsis	Enter the <b>route-monitoring</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring</b>
Tree	<b>route-monitoring</b>
Introduced	16.0.R1
Platforms	All

## post-policy *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring post-policy</b> <i>boolean</i>
Tree	<b>post-policy</b>
Default	false
Introduced	16.0.R1
Platforms	All

## pre-policy *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring pre-policy</b> <i>boolean</i>
Tree	<b>pre-policy</b>



Default	false
Introduced	16.0.R1
Platforms	All

### **station** [[station-name](#)] *reference*

Synopsis	Add a list entry for <b>station</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Description	This command configures the set of BMP monitoring stations for which BMP messages are to be sent.
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[station-name]** *reference*

Synopsis	BMP monitoring station
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Reference	<b>configure</b> <a href="#">bmp station</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **multihop** *number*

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">multihop</a> <i>number</i>
Tree	<a href="#">multihop</a>
Range	1 to 255
Introduced	16.0.R1

Platforms All

### **multipath-eligible** *boolean*

Synopsis Allow routes from this peer in multipath eligibility

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **multipath-eligible** *boolean*

Tree **multipath-eligible**

Introduced 19.5.R1

Platforms All

### **next-hop-self** *boolean*

Synopsis Advertise routes with local address as next-hop address

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **next-hop-self** *boolean*

Tree **next-hop-self**

Description When configured to **true**, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.

Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the **configure router bgp rr-vpn-forwarding** command should also be configured.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, protocol standard behavior is applied to determine whether to set **next-hop-self** in advertised routes.

Introduced 16.0.R1

Platforms All

### **next-hop-unchanged**

Synopsis Enable the **next-hop-unchanged** context

Context **configure router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **next-hop-unchanged**

Tree **next-hop-unchanged**

Description Commands in this context specify the IP address families where the next hop remains unchanged when sending BGP routes to peers of the neighbor.

Introduced 16.0.R1

Platforms All

### **evpn** *boolean*

Synopsis Advertise EVPN routes with unchanged BGP next hop

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**next-hop-unchanged evpn** *boolean*

Tree **evpn**

Default false

Introduced 20.2.R1

Platforms All

### **label-ipv4** *boolean*

Synopsis Advertise label-IPv4 routes with unchanged BGP next hop

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**next-hop-unchanged label-ipv4** *boolean*

Tree **label-ipv4**

Default false

Introduced 16.0.R1

Platforms All

### **label-ipv6** *boolean*

Synopsis Advertise label-IPv6 routes with unchanged BGP next hop

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**next-hop-unchanged label-ipv6** *boolean*

Tree **label-ipv6**

Default false

Introduced 16.0.R1

Platforms All

### **vpn-ipv4** *boolean*

Synopsis Advertise VPN IPv4 routes with unchanged BGP next hop

Context **configure** **router** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
**next-hop-unchanged vpn-ipv4** *boolean*

Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	20.2.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Advertise VPN IPv6 routes with unchanged BGP next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">next-hop-unchanged</a> <a href="#">vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	20.2.R1
Platforms	All

### **origin-validation**

Synopsis	Enable the <b>origin-validation</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-validation</a>
Tree	<a href="#">origin-validation</a>
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">origin-validation</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6 *boolean***

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv4 *boolean***

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**label-ipv6 *boolean***

Synopsis	Enable support for labeled-unicast IPv6 routes
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**outbound-route-filtering**

Synopsis	Enable the <b>outbound-route-filtering</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>outbound-route-filtering</b>
Tree	<a href="#">outbound-route-filtering</a>
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF).

When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.

Introduced 16.0.R1  
Platforms All

### extended-community

Synopsis Enable the **extended-community** context

Context **configure** [router](#) *string* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [outbound-route-filtering](#) [extended-community](#)

Tree [extended-community](#)

Description Commands in this context configure the ORF send and receive capabilities based on Extended Communities.

When this context is unconfigured, the command settings are inherited from the group-level configuration.

Introduced 16.0.R1  
Platforms All

### accept-orf *boolean*

Synopsis Negotiate with peer to accept BGP ORF filters

Context **configure** [router](#) *string* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [outbound-route-filtering](#) [extended-community](#) [accept-orf](#) *boolean*

Tree [accept-orf](#)

Description When configured to **true**, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.

Introduced 16.0.R1  
Platforms All

### send-orf

Synopsis Enable the **send-orf** context

Context **configure** [router](#) *string* [bgp neighbor](#) (*ipv4-address-with-zone* | *ipv6-address-with-zone*) [outbound-route-filtering](#) [extended-community](#) [send-orf](#)

Tree	<a href="#">send-orf</a>
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, the command settings are inherited from the BGP group-level configuration.</p>
Introduced	16.0.R1
Platforms	All

### **route-target** [[community-name](#)] *string*

Synopsis	Add a list entry for <b>route-target</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">outbound-route-filtering</a> <a href="#">extended-community</a> <a href="#">send-orf</a> <a href="#">route-target</a> <i>string</i>
Tree	<a href="#">route-target</a>
Introduced	16.0.R1
Platforms	All

### **[community-name]** *string*

Synopsis	Route target community name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">outbound-route-filtering</a> <a href="#">extended-community</a> <a href="#">send-orf</a> <a href="#">route-target</a> <i>string</i>
Tree	<a href="#">route-target</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **passive** *boolean*

Synopsis	Use passive mode for BGP communication
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">passive</a> <i>boolean</i>
Tree	<a href="#">passive</a>
Introduced	16.0.R1

Platforms All

### **path-mtu-discovery** *boolean*

Synopsis	Enable path MTU discovery
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>path-mtu-discovery</b> <i>boolean</i>
Tree	<b>path-mtu-discovery</b>
Description	<p>When configured to <b>true</b>, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to <b>true</b>, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to <b>false</b> and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.</p>
Introduced	16.0.R1
Platforms	All

### **peer-as** *number*

Synopsis	Peer AS number
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-as</b> <i>number</i>
Tree	<b>peer-as</b>
Description	<p>This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.</p> <p>For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.</p> <p>For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All



**peer-creation-type** *keyword*

Synopsis	Peer creation type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-creation-type</b> <i>keyword</i>
Tree	<b>peer-creation-type</b>
Options	static, dynamic, dynamic-if-remote, dynamic-if-local
Default	static
Introduced	16.0.R1
Platforms	All

**peer-ip-tracking** *boolean*

Synopsis	Enable BGP peer tracking
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-ip-tracking</b> <i>boolean</i>
Tree	<b>peer-ip-tracking</b>
Description	<p>When configured to <b>true</b>, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Route preference for routes learned from all peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Description	This command configures the route preference for routes learned from the configured peers.

The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

When unconfigured, the command setting is inherited from the group-level configuration.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **prefix-limit** [*family*] *keyword*

Synopsis	Enter the <b>prefix-limit</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i>
Tree	<a href="#">prefix-limit</a>
Introduced	16.0.R1
Platforms	All

### **[family]** *keyword*

Synopsis	Address family to which the limit applies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i>
Tree	<a href="#">prefix-limit</a>
Options	ipv4, vpn-ipv4, ipv6, mcast-ipv4, vpn-ipv6, l2-vpn, mvpn-ipv4, mdt-safi, ms-pw, flow-ipv4, route-target, mcast-vpn-ipv4, mvpn-ipv6, flow-ipv6, evpn, mcast-ipv6, label-ipv4, label-ipv6, bgp-ls, mcast-vpn-ipv6, sr-policy-ipv4, sr-policy-ipv6, flow-vpn-ipv4, flow-vpn-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **hold-excess** *number*

Synopsis	Percentage of maximum routes to install in route table
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>hold-excess</b> <i>number</i>
Tree	<a href="#">hold-excess</a>

Description	<p>This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the <b>post-import</b> command is configured to <b>true</b>, only routes not rejected by import policies count toward the limit.</p> <p>A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.</p> <p>This command is mutually exclusive with the <b>idle-timeout</b> and <b>log-only</b> commands.</p>
Range	1 to 100
Introduced	23.7.R1
Platforms	All

### **idle-timeout** *number*

Synopsis	Time which BGP peering remains idle before reconnecting
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>idle-timeout</b> <i>number</i>
Tree	<a href="#">idle-timeout</a>
Description	<p>This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer.</p> <p>When unconfigured, the command inherits the value from the group-level configuration.</p>
Range	1 to 1024
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>log-only</b> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **maximum** *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>maximum</b> <i>number</i>
Tree	<b>maximum</b>
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

### **post-import** *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>post-import</b> <i>boolean</i>
Tree	<b>post-import</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Percentage threshold that triggers a warning message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

### **remove-private**

Synopsis	Enable the <b>remove-private</b> context
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private</b>
Tree	<b>remove-private</b>
Introduced	16.0.R1
Platforms	All

**limited** *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private limited</b> <i>boolean</i>
Tree	<b>limited</b>
Default	false
Introduced	16.0.R1
Platforms	All

**replace** *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private replace</b> <i>boolean</i>
Tree	<b>replace</b>
Default	false
Introduced	19.10.R1
Platforms	All

**skip-peer-as** *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private skip-peer-as</b> <i>boolean</i>
Tree	<b>skip-peer-as</b>
Default	false
Introduced	16.0.R1
Platforms	All

## segment-routing-v6

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6</b>
Tree	<b>segment-routing-v6</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## route-advertisement

Synopsis	Enable the <b>route-advertisement</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement</b>
Tree	<b>route-advertisement</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## drop-routes-with-srv6-tlvs *boolean*

Synopsis	Drop BGP routes with SRv6 TLVs
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement drop-routes-with-srv6-tlvs</b> <i>boolean</i>
Tree	<b>drop-routes-with-srv6-tlvs</b>
Description	When configured to <b>true</b> , the router drops and does not advertise BGP routes (that belong to any address family) with SRv6 TLVs. When configured to <b>false</b> , the router advertises BGP routes with SRv6 TLVs.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## family [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement family</b> <i>keyword</i>
Tree	<b>family</b>

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[family-type]** *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement family</b> <i>keyword</i>
Tree	<b>family</b>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **strip-srv6-tlvs** *boolean*

Synopsis	Strip SRv6 TLVs from BGP routes advertised to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>segment-routing-v6 route-advertisement family</b> <i>keyword</i> <b>strip-srv6-tlvs</b> <i>boolean</i>
Tree	<b>strip-srv6-tlvs</b>
Description	When configured to <b>true</b> , BGP routes that belong to the address family specified using the <b>family</b> command are advertised to peers with SRv6 TLVs removed. Locally or remotely added SRv6 TLVs can be removed.  When configured to <b>false</b> , SRv6 TLVs are not stripped from BGP routes advertised to peers.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **selective-label-ipv4-install** *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>selective-label-ipv4-install</b> <i>boolean</i>
Tree	<b>selective-label-ipv4-install</b>
Introduced	19.10.R1
Platforms	All

## send-communities

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities</b>
Tree	<b>send-communities</b>
Introduced	16.0.R1
Platforms	All

## extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities extended</b> <i>boolean</i>
Tree	<b>extended</b>
Description	<p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to <b>false</b>, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

## large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities large</b> <i>boolean</i>
Tree	<b>large</b>
Description	<p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to <b>false</b>, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All



**standard** *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities</b> <b>standard</b> <i>boolean</i>
Tree	<b>standard</b>
Description	When unconfigured, this command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>true</b> .  When this command inherits a value of <b>true</b> , BGP standard communities are sent to peers in the Communities attribute.  When configured to <b>false</b> , all standard communities are removed from all routes advertised to BGP peers.
Introduced	16.0.R1
Platforms	All

**send-default**

Synopsis	Enable the <b>send-default</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default</b>
Tree	<b>send-default</b>
Introduced	19.7.R1
Platforms	All

**export-policy** *reference*

Synopsis	Export policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default</b> <b>export-policy</b> <i>reference</i>
Tree	<b>export-policy</b>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Introduced	19.7.R1
Platforms	All

**ipv4** *boolean*

Synopsis	Enable IPv4 family type
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Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default ipv4</b> <i>boolean</i>
Tree	<b>ipv4</b>
Default	false
Introduced	19.7.R1
Platforms	All

**ipv6** *boolean*

Synopsis	Enable IPv6 family type
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default ipv6</b> <i>boolean</i>
Tree	<b>ipv6</b>
Default	false
Introduced	19.7.R1
Platforms	All

**split-horizon** *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>split-horizon</b> <i>boolean</i>
Tree	<b>split-horizon</b>
Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

**tcp-mss** (*number | keyword*)

Synopsis	TCP maximum segment size override
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>tcp-mss</b> ( <i>number   keyword</i> )
Tree	<b>tcp-mss</b>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

**third-party-nexthop** *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>third-party-nexthop</b> <i>boolean</i>
Tree	<b>third-party-nexthop</b>
Introduced	16.0.R1
Platforms	All

**ttl-security** *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>ttl-security</b> <i>number</i>
Tree	<b>ttl-security</b>
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.

When unconfigured, the command inherits the value of the group-level setting.

Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	BGP peer type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	All

### **vpn-apply-export** *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>vpn-apply-export</b> <i>boolean</i>
Tree	<b>vpn-apply-export</b>
Description	When configured to <b>true</b> , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When unconfigured, the command inherits the value of the group-level setting ( <b>true</b> or <b>false</b> ). The command cannot be explicitly configured to <b>false</b> . When this command inherits a value of <b>false</b> , the export policies are not applied.
Introduced	16.0.R1
Platforms	All

### **vpn-apply-import** *boolean*

Synopsis	Apply base-instance BGP import policies to VPN routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>vpn-apply-import</b> <i>boolean</i>
Tree	<b>vpn-apply-import</b>
Description	When configured to <b>true</b> , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the import policies are not applied.

Introduced	16.0.R1
Platforms	All

## neighbor-trust

Synopsis	Enter the <b>neighbor-trust</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor-trust</b>
Tree	<b>neighbor-trust</b>
Description	<p>Commands in this context enable a label security feature at an inter-AS boundary for the specified IP families.</p> <p>This label security feature allows the configuration of a router, acting in a PE or in an ASBR role, to accept packets of VPN-IP or EVPN prefixes only from direct EBGP neighbors to which it advertised a service label.</p> <p>The untrusted state identifies the participating interfaces. The router supports a maximum of 15 network interfaces that can participate in this feature.</p> <p>At a high level, BGP tracks each direct EBGP neighbor over an untrusted interface and to which it sent a prefix label. For each of those prefixes, BGP programs a bit map in the ILM record that indicates, on a per-untrusted interface basis, whether the matching received packets must be forwarded or dropped.</p>
Introduced	16.0.R4
Platforms	All

## evpn boolean

Synopsis	Enable inter-AS label security for the EVPN family
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor-trust evpn boolean</b>
Tree	<b>evpn</b>
Default	false
Introduced	23.3.R1
Platforms	All

## vpn-ipv4 boolean

Synopsis	Enable inter-AS label security for the VPN-IPv4 family
Context	<b>configure</b> <i>router string</i> <b>bgp neighbor-trust vpn-ipv4 boolean</b>

Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Enable inter-AS label security for the VPN-IPv6 family
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp neighbor-trust vpn-ipv6</a> <i>boolean</i>
Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **next-hop-resolution**

Synopsis	Enter the <b>next-hop-resolution</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a>
Tree	<a href="#">next-hop-resolution</a>
Introduced	16.0.R1
Platforms	All

### **allow-unresolved-leaking** *boolean*

Synopsis	Allow unresolved BGP routes to be leaked to VPRN routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution allow-unresolved-leaking</a> <i>boolean</i>
Tree	<a href="#">allow-unresolved-leaking</a>
Description	When configured to <b>true</b> , this command instructs BGP in the base router instance to allow its routes to be leaked to other (VPRN) BGP instances even if the routes to be leaked do not have a BGP next-hop that can be resolved by the base instance. When configured to <b>false</b> , VPRN cannot import a route.
Default	false
Introduced	19.10.R1
Platforms	All

## labeled-routes

Synopsis	Enter the <b>labeled-routes</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a>
Tree	<a href="#">labeled-routes</a>
Introduced	16.0.R1
Platforms	All

## allow-static *boolean*

Synopsis	Allow static routes to resolve BGP next-hop
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">allow-static</a> <i>boolean</i>
Tree	<a href="#">allow-static</a>
Description	<p>When configured to <b>true</b>, the BGP next-hop of label-IPv4, label-IPv6, VPN-IPv4, and VPN-IPv6 routes received from any EBGP or IBGP peer can be resolved using static routes, except for static default routes (0/0 and ::/0).</p> <p>A static route is less preferred than a local or interface route for resolving the BGP next-hop of labeled route but is more preferred than other IGP routes or tunnels.</p> <p>When configured to <b>false</b>, BGP next-hop resolution using static routes is not allowed.</p> <p>A label-IPv4 or label-IPv6 route can be resolved by a static blackhole route, even when this command is configured to <b>false</b>, but only if the static blackhole route is the longest prefix match (LPM) static route for the BGP next-hop address.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## rr-use-route-table *boolean*

Synopsis	Use RTM to resolve BGP next-hop if TTM resolution fails
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">rr-use-route-table</a> <i>boolean</i>
Tree	<a href="#">rr-use-route-table</a>
Description	<p>When configured to <b>true</b>, this command enables BGP to perform a lookup of IGP routes in the route table to resolve the BGP next-hop of label-IPv4 and label-IPv6 routes. This is useful for a Route Reflector (RR) that does not participate in tunnel signaling protocols such as LDP and RSVP and therefore, does not have tunnels to resolve the BGP next-hops of label-unicast routes.</p> <p>Disable route table installation (via the <b>route-table-install</b> command) before setting this command to <b>true</b>; otherwise, forwarding of label routes resolved in this way will be incorrect.</p>

When configured to **false**, RTM next-hop resolution is not enabled.

Default	false
Introduced	16.0.R1
Platforms	All

## transport-tunnel

Synopsis	Enter the <b>transport-tunnel</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a>
Tree	<a href="#">transport-tunnel</a>
Description	Commands in this context configure options for the next-hop resolution of BGP labeled routes (VPN-IP and labeled-unicast) using tunnels in TTM.
Introduced	16.0.R1
Platforms	All

## family [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

## [[family-type](#)] *keyword*

Synopsis	Address family type for tunnel selection
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	vpn, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**allow-flex-algo-fallback** *boolean*

Synopsis	Enable flexible algorithm fallback
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i> <i>allow-flex-algo-fallback</i> <i>boolean</i>
Tree	<a href="#">allow-flex-algo-fallback</a>
Description	When configured to <b>true</b> , a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.  When configured to <b>false</b> , the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R1
Platforms	All

**enforce-strict-tunnel-tagging** *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i> <i>enforce-strict-tunnel-tagging</i> <i>boolean</i>
Tree	<a href="#">enforce-strict-tunnel-tagging</a>
Description	When configured to <b>true</b> , the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered.  When configured to <b>false</b> , matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

**resolution** *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>labeled-routes</i> <i>transport-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution</i> <i>keyword</i>
Tree	<a href="#">resolution</a>
Options	none, filter, any

Default	filter
Introduced	16.0.R1
Platforms	All

## resolution-filter

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a>
Tree	<a href="#">resolution-filter</a>
Introduced	16.0.R1
Platforms	All

## bgp *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">bgp</a> <i>boolean</i>
Tree	<a href="#">bgp</a>
Description	When configured to <b>true</b> , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes.  When configured to <b>false</b> , BGP tunneling for next-hop resolution is not enabled.
Introduced	16.0.R1
Platforms	All

## ldp *boolean*

Synopsis	Use LDP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">ldp</a> <i>boolean</i>
Tree	<a href="#">ldp</a>
Description	When configured to <b>true</b> , this command enables the selection of LDP tunneling for next-hop resolution and specifies the LDP tunnels in the tunnel table corresponding to /32 IPv4 FECs and /128 IPv6 FECs.  When configured to <b>false</b> , LDP tunneling for next-hop resolution is not enabled.
Default	true

Introduced	16.0.R1
Platforms	All

### **mpls-fwd-policy** *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">mpls-fwd-policy</a> <i>boolean</i>
Tree	<a href="#">mpls-fwd-policy</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **rib-api** *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">rib-api</a> <i>boolean</i>
Tree	<a href="#">rib-api</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **rsvp** *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">rsvp</a> <i>boolean</i>
Tree	<a href="#">rsvp</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations. This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to <b>false</b>, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false

Introduced	16.0.R1
Platforms	All

### **sr-isis** *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">sr-isis</a> <i>boolean</i>
Tree	<a href="#">sr-isis</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf** *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family</a> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">sr-ospf</a> <i>boolean</i>
Tree	<a href="#">sr-ospf</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-ospf3** *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family keyword</a> <a href="#">resolution-filter</a> <b>sr-ospf3</b> <i>boolean</i>
Tree	<a href="#">sr-ospf3</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R6
Platforms	All

**sr-policy** *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes</a> <a href="#">transport-tunnel</a> <a href="#">family keyword</a> <a href="#">resolution-filter</a> <b>sr-policy</b> <i>boolean</i>
Tree	<a href="#">sr-policy</a>
Description	<p>When configured to <b>true</b>, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context).</p> <p>The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy. Next hop resolution of VPN-IP routes by SR policies is not supported.</p> <p>When configured to <b>false</b>, segment routing policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-te** *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution labeled-routes transport-tunnel family</b> <i>keyword</i> <b>resolution-filter sr-te</b> <i>boolean</i>
Tree	<b>sr-te</b>
Description	When configured to <b>true</b> , this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.  In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.  When configured to <b>false</b> , the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.
Default	false
Introduced	16.0.R1
Platforms	All

**udp** *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution labeled-routes transport-tunnel family</b> <i>keyword</i> <b>resolution-filter udp</b> <i>boolean</i>
Tree	<b>udp</b>
Default	false
Introduced	16.0.R1
Platforms	All

**use-bgp-routes**

Synopsis	Enter the <b>use-bgp-routes</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution labeled-routes use-bgp-routes</b>
Tree	<b>use-bgp-routes</b>
Introduced	21.2.R1
Platforms	All

**label-ipv6-explicit-null** *boolean*

Synopsis	Use BGP routes to resolve address family routes
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">labeled-routes use-bgp-routes label-ipv6-explicit-null</a> <i>boolean</i>
Tree	<a href="#">label-ipv6-explicit-null</a>
Description	<p>When configured to <b>true</b>, a labeled IPv6 route with the explicit-null label can be resolved by other routes, and also by unlabeled IPv4 routes and unlabeled IPv6 routes that are resolved by static routes, interface routes, or tunnels. Up to four levels of recursive resolution are supported when the top route is a labeled IPv6 route with an explicit-null label. When disabled, a labeled IPv6 route cannot be resolved by other labeled IPv6 routes.</p> <p>A labeled IPv6 route with a regular label (not explicit-null) is never resolved by other labeled IPv6 routes.</p>
Default	false
Introduced	21.2.R1
Platforms	All

### policy reference

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">policy reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### shortcut-tunnel

Synopsis	Enter the <b>shortcut-tunnel</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp next-hop-resolution</a> <a href="#">shortcut-tunnel</a>
Tree	<a href="#">shortcut-tunnel</a>
Description	Commands in this context configure the tunnel types that can be used to resolve unlabeled IPv4 and IPv6 BGP routes.
Introduced	16.0.R1
Platforms	All

### family [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Address family type for shortcut tunnel selection
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **allow-flex-algo-fallback** *boolean*

Synopsis	Enable flexible algorithm fallback
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword allow-flex-algo-fallback boolean</i>
Tree	<a href="#">allow-flex-algo-fallback</a>
Description	<p>When configured to <b>true</b>, a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to <b>false</b>, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false
Introduced	20.10.R1
Platforms	All

### **disallow-igp** *boolean*

Synopsis	Do not perform route table lookup to resolve BGP route
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution shortcut-tunnel family keyword disallow-igp boolean</i>
Tree	<a href="#">disallow-igp</a>



Description	When configured to <b>true</b> , no attempt is made to resolve the IPv4 or IPv6 BGP route using route table lookup if no resolving tunnel can be found in the tunnel table. When configured to <b>false</b> , route table lookup can be performed if no resolving tunnel is found in the tunnel table.
Default	false
Introduced	16.0.R1
Platforms	All

### **enforce-strict-tunnel-tagging** *boolean*

Synopsis	Consider only LSPs with an admin-tag for next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>enforce-strict-tunnel-tagging</b> <i>boolean</i>
Tree	<b>enforce-strict-tunnel-tagging</b>
Description	When configured to <b>true</b> , the system only considers LSPs marked with an administrative tag for next-hop resolution. Untagged LSPs are not considered. When configured to <b>false</b> , matching admin-tagged RSVP or SR-TE LSPs are used in preference to other LSP types, whether tagged or untagged. If no eligible RSVP or SR-TE LSP exists, the system falls back to using tagged LSPs that are not explicitly excluded by a route admin tag policy and untagged LSPs of other types.
Default	false
Introduced	16.0.R1
Platforms	All

### **resolution** *keyword*

Synopsis	Resolution mode for binding BGP routes to tunnel types
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution</b> <i>keyword</i>
Tree	<b>resolution</b>
Options	none, filter, any
Default	none
Introduced	16.0.R1
Platforms	All

## resolution-filter

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution-filter</b>
Tree	<b>resolution-filter</b>
Introduced	16.0.R1
Platforms	All

## bgp boolean

Synopsis	Use BGP tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution-filter</b> <b>bgp</b> <i>boolean</i>
Tree	<b>bgp</b>
Description	When configured to <b>true</b> , this command enables the selection of BGP tunneling for next-hop resolution and specifies the IPv4 tunnels created by receiving BGP label-unicast IPv4 routes for /32 IPv4 prefixes.  When configured to <b>false</b> , BGP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

## ldp boolean

Synopsis	Use LDP tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution-filter</b> <b>ldp</b> <i>boolean</i>
Tree	<b>ldp</b>
Description	When configured to <b>true</b> , BGP selects the LDP FEC that is the longest prefix match to the BGP next-hop address.  When configured to <b>false</b> , LDP tunneling for next-hop resolution is not enabled.
Default	false
Introduced	16.0.R1
Platforms	All

**mpls-fwd-policy** *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>mpls-fwd-policy</i> <i>boolean</i>
Tree	<i>mpls-fwd-policy</i>
Default	false
Introduced	16.0.R4
Platforms	All

**rib-api** *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>rib-api</i> <i>boolean</i>
Tree	<i>rib-api</i>
Default	false
Introduced	16.0.R4
Platforms	All

**rsvp** *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp</i> <i>next-hop-resolution</i> <i>shortcut-tunnel</i> <i>family</i> <i>keyword</i> <i>resolution-filter</i> <i>rsvp</i> <i>boolean</i>
Tree	<i>rsvp</i>
Description	<p>When configured to <b>true</b>, this command enables the selection of RSVP tunneling for next-hop resolution and specifies RSVP tunnels in a tunnel table to IPv4 destinations.</p> <p>This option allows BGP to use the best metric RSVP LSP to the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface of the remote BGP router. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.</p> <p>When configured to <b>false</b>, this command disables the selection of RSVP tunneling for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-isis boolean**

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	<b>configure</b> <i>router string</i> <b>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-isis boolean</b>
Tree	<a href="#">sr-isis</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment-routing tunnel in the tunnel table submitted by the lowest preference IS-IS instance or, in case of a tie, the lowest numbered IS-IS instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an IS-IS instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-ospf boolean**

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	<b>configure</b> <i>router string</i> <b>bgp next-hop-resolution shortcut-tunnel family keyword resolution-filter sr-ospf boolean</b>
Tree	<a href="#">sr-ospf</a>
Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by an OSPF instance in the TTM for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPF instance or, in case of a tie, the lowest numbered OSPF instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an OSPF instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-ospf3 boolean**

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
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Context	<b>configure router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution-filter sr-ospf3</b> <i>boolean</i>
Tree	<b>sr-ospf3</b>
Description	<p>When configured to <b>true</b>, this command enables the selection of the IPv6 Segment Routing (SR) tunnel type programmed by an OSPFv3 instance in the TTMv6 for next-hop resolution of BGP routes and labeled routes.</p> <p>This command allows BGP to use the segment routing tunnel in the tunnel table submitted by the lowest preference OSPFv3 instance or, in case of a tie, the lowest numbered OSPFv3 instance.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by an OSPFv3 instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R6
Platforms	All

### **sr-policy** *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	<b>configure router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution-filter sr-policy</b> <i>boolean</i>
Tree	<b>sr-policy</b>
Description	<p>When configured to <b>true</b>, this command enables the use of segment routing policies to resolve the BGP next hop of certain BGP routes (depending on the context).</p> <p>The segment routing policies that are considered are statically configured in the local router or learned by BGP routes (AFI 1/SAFI 73). For a BGP route to be resolved by an SR policy, the highest numbered color extended community attached to BGP route must match the color of the SR policy.</p> <p>When configured to <b>false</b>, segment routing policies are not enabled for next-hop resolution.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-te** *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure router</b> <i>string</i> <b>bgp next-hop-resolution shortcut-tunnel family</b> <i>keyword</i> <b>resolution-filter sr-te</b> <i>boolean</i>
Tree	<b>sr-te</b>

Description	<p>When configured to <b>true</b>, this command enables the selection of the Segment Routing (SR) tunnel type programmed by a traffic engineered (TE) instance in the TTM for next-hop resolution.</p> <p>In the case of multiple SR-TE tunnels with the same lowest metric, BGP selects the tunnel with the lowest tunnel ID.</p> <p>When configured to <b>false</b>, the SR tunnel type programmed by a TE instance in the TTM for next-hop resolution is not enabled for selection.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **use-bgp-routes** *boolean*

Synopsis	Use BGP routes to resolve BGP next hops
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution use-bgp-routes</a> <i>boolean</i>
Tree	<a href="#">use-bgp-routes</a>
Description	<p>This command enables the use of BGP routes to resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **use-leaked-routes**

Synopsis	Enter the <b>use-leaked-routes</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp next-hop-resolution use-leaked-routes</a>
Tree	<a href="#">use-leaked-routes</a>
Introduced	23.7.R1
Platforms	All

### **static** *boolean*

Synopsis	Use leaked static routes to resolve BGP next hop
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution use-leaked-routes static</i> <i>boolean</i>
Tree	<a href="#">static</a>
Description	<p>When configured to <b>true</b>, the router allows any non-leaked unlabeled unicast IPv4 or IPv6 route in the BGP RIB to be resolved by a leaked static route with direct next hops. A BGP route resolved this way cannot resolve other routes (including BGP routes) and cannot be redistributed into non-BGP protocols, such as IGP.</p> <p>When configured to <b>false</b>, the router prevents the use of leaked static routes to resolve BGP routes.</p>
Default	false
Introduced	23.7.R1
Platforms	All

### **vpn-family-policy** *reference*

Synopsis	Policy to filter routes for next-hop resolution
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution vpn-family-policy</i> <i>reference</i>
Tree	<a href="#">vpn-family-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

### **weighted-ecmp** *boolean*

Synopsis	Use weighted ECMP for next-hop tunnel selection for 6PE
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp next-hop-resolution weighted-ecmp</i> <i>boolean</i>
Tree	<a href="#">weighted-ecmp</a>
Description	<p>When configured to <b>true</b>, this command enables weighted ECMP for next-hop tunnel selection for 6PE. When weighted ECMP is enabled, the RSVP-TE tunnel used to forward 6PE packets to the ECMP next hop that is chosen according to the outcome of the hash on the packet at the normalized load-balancing weight of the tunnel.</p> <p>When configured to <b>false</b>, weighted ECMP is disabled for next-hop tunnel selection for 6PE.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## optimal-route-reflection

Synopsis	Enter the <b>optimal-route-reflection</b> context
Context	<b>configure</b> <i>router string</i> <b>bgp optimal-route-reflection</b>
Tree	<b>optimal-route-reflection</b>
Introduced	16.0.R1
Platforms	All

## location [*location-id*] *number*

Synopsis	Enter the <b>location</b> list instance
Context	<b>configure</b> <i>router string</i> <b>bgp optimal-route-reflection location</b> <i>number</i>
Tree	<b>location</b>
Description	<p>Commands in this context configure the location ID for the route reflector. A BGP neighbor can be associated with a location if it is a route-reflector client.</p> <p>Up to three IPv4 addresses and three IPv6 addresses can be specified per location.</p> <p>If the TE DB is unable find a node in its topology database that matches a primary address of the location, it tries to find a node matching a secondary address. If this attempt also fails, the TE DB tries to find a node matching a tertiary address.</p> <p>The IP addresses specified for a location should be topologically “close” to a set of clients that should all receive the same optimal path for that location.</p>
Introduced	16.0.R1
Platforms	All

## [*location-id*] *number*

Synopsis	Optimal route reflection location ID
Context	<b>configure</b> <i>router string</i> <b>bgp optimal-route-reflection location</b> <i>number</i>
Tree	<b>location</b>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## primary-ip-address *string*

Synopsis	Primary IPv4 address of the reference location for ORR
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Context	<b>configure</b> <i>router string</i> <a href="#">bgp optimal-route-reflection location number</a> <a href="#">primary-ip-address string</a>
Tree	<a href="#">primary-ip-address</a>
Introduced	16.0.R1
Platforms	All

### **primary-ipv6-address** *string*

Synopsis	Primary IPv6 address of the reference location for ORR
Context	<b>configure</b> <i>router string</i> <a href="#">bgp optimal-route-reflection location number</a> <a href="#">primary-ipv6-address string</a>
Tree	<a href="#">primary-ipv6-address</a>
Introduced	16.0.R4
Platforms	All

### **secondary-ip-address** *string*

Synopsis	Secondary IPv4 address of reference location for ORR
Context	<b>configure</b> <i>router string</i> <a href="#">bgp optimal-route-reflection location number</a> <a href="#">secondary-ip-address string</a>
Tree	<a href="#">secondary-ip-address</a>
Introduced	16.0.R1
Platforms	All

### **secondary-ipv6-address** *string*

Synopsis	Secondary IPv6 address of reference location for ORR
Context	<b>configure</b> <i>router string</i> <a href="#">bgp optimal-route-reflection location number</a> <a href="#">secondary-ipv6-address string</a>
Tree	<a href="#">secondary-ipv6-address</a>
Introduced	16.0.R4
Platforms	All

### **tertiary-ip-address** *string*

Synopsis	Tertiary IPv4 address of the reference location for ORR
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Context	<b>configure</b> <i>router string</i> <i>bgp optimal-route-reflection location number tertiary-ip-address string</i>
Tree	<i>tertiary-ip-address</i>
Introduced	16.0.R1
Platforms	All

### **tertiary-ipv6-address** *string*

Synopsis	Tertiary IPv6 address of the reference location for ORR
Context	<b>configure</b> <i>router string</i> <i>bgp optimal-route-reflection location number tertiary-ipv6-address string</i>
Tree	<i>tertiary-ipv6-address</i>
Introduced	16.0.R4
Platforms	All

### **spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure</b> <i>router string</i> <i>bgp optimal-route-reflection spf-wait</i>
Tree	<i>spf-wait</i>
Description	Commands in this context specify the interval between consecutive SPF calculations performed by the TE DB in support of BGP optimal route reflection. The time components implement an exponential back-off algorithm.
Introduced	16.0.R1
Platforms	All

### **initial-wait** *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	<b>configure</b> <i>router string</i> <i>bgp optimal-route-reflection spf-wait initial-wait number</i>
Tree	<i>initial-wait</i>
Range	1 to 300
Default	5
Introduced	16.0.R1
Platforms	All

### **max-wait** *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	<b>configure</b> <i>router string</i> <a href="#">bgp optimal-route-reflection spf-wait max-wait</a> <i>number</i>
Tree	<a href="#">max-wait</a>
Range	1 to 600
Default	60
Introduced	16.0.R1
Platforms	All

### **second-wait** *number*

Synopsis	Delay between first and second SPF calculation
Context	<b>configure</b> <i>router string</i> <a href="#">bgp optimal-route-reflection spf-wait second-wait</a> <i>number</i>
Tree	<a href="#">second-wait</a>
Range	1 to 300
Default	15
Introduced	16.0.R1
Platforms	All

### **outbound-route-filtering**

Synopsis	Enable the <b>outbound-route-filtering</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp outbound-route-filtering</a>
Tree	<a href="#">outbound-route-filtering</a>
Description	Commands in this context configure the send and receive capabilities for Outbound Route Filtering (ORF). When unconfigured, the ORF capabilities are not enabled.
Introduced	16.0.R1
Platforms	All

### **extended-community**

Synopsis	Enable the <b>extended-community</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp outbound-route-filtering extended-community</a>

Tree	<a href="#">extended-community</a>
Description	<p>Commands in this context configure the ORF send and receive capabilities based on Extended Communities.</p> <p>When this context is unconfigured, the ORF capabilities for Extended Communities is not enabled.</p>
Introduced	16.0.R1
Platforms	All

### **accept-orf** *boolean*

Synopsis	Negotiate with peer to accept BGP ORF filters
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">outbound-route-filtering</a> <a href="#">extended-community</a> <b>accept-orf</b> <i>boolean</i>
Tree	<a href="#">accept-orf</a>
Description	<p>When configured to <b>true</b>, the receive capability in the BGP ORF is negotiated with a peer and ORF filters can be accepted from peers.</p> <p>When configured to <b>false</b>, the accept capability in the BGP ORF is removed and any existing ORF filters that are currently in place are cleared.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **send-orf**

Synopsis	Enable the <b>send-orf</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">outbound-route-filtering</a> <a href="#">extended-community</a> <b>send-orf</b>
Tree	<a href="#">send-orf</a>
Description	<p>Commands in this context allow BGP to negotiate the send capability in the ORF negotiation with a peer. The send capability also causes the router to send a community filter, prefix filter, or AS path filter configured as an inbound filter on the BGP session to its peer as an ORF Action ADD.</p> <p>When this context is unconfigured, ORF send capability is not enabled.</p>
Introduced	16.0.R1
Platforms	All

**route-target** [**community-name**] *string*

Synopsis	Add a list entry for <b>route-target</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>outbound-route-filtering</b> <b>extended-community</b> <b>send-orf</b> <b>route-target</b> <i>string</i>
Tree	<b>route-target</b>
Introduced	16.0.R1
Platforms	All

**[community-name]** *string*

Synopsis	Route target community name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>outbound-route-filtering</b> <b>extended-community</b> <b>send-orf</b> <b>route-target</b> <i>string</i>
Tree	<b>route-target</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**override-tunnel-elc** *boolean*

Synopsis	Enable entropy label capability on BGP tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>override-tunnel-elc</b> <i>boolean</i>
Tree	<b>override-tunnel-elc</b>
Description	<p>When configured to <b>true</b>, this command renders all far ends for BGP tunnels as entropy-label-capable, regardless of any received capability signaling. This ensures that the entropy label will be inserted on BGP tunnels in the absence of capability signaling support by the far end.</p> <p>This is a system-wide configuration, since efficient entropy label operation requires that all LSRs in a network support entropy labels. This command should be used with care, particularly in inter-AS use cases, as entropy label capability may differ between domains.</p> <p>When configured to <b>false</b>, this command disables all far ends for BGP tunnels as entropy-label-capable.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**path-mtu-discovery** *boolean*

Synopsis	Enable Path MTU Discovery
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp path-mtu-discovery</i> <i>boolean</i>
Tree	<a href="#">path-mtu-discovery</a>
Description	<p>When configured to <b>true</b>, Path MTU Discovery (PMTUD) is activated toward an IPv4 BGP neighbor. The Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, the device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value to accommodate the IP MTU constraint.</p> <p>When configured to <b>false</b>, PMTUD is disabled and there is no TCP MSS configuration to associate with a BGP neighbor (in either the BGP configuration or the first-hop IP interface configuration). The router advertises a TCP MSS option of only 1024 bytes, limiting the received TCP segments to that size.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**peer-ip-tracking** *boolean*

Synopsis	Enable BGP peer tracking
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp peer-ip-tracking</i> <i>boolean</i>
Tree	<a href="#">peer-ip-tracking</a>
Default	false
Introduced	16.0.R1
Platforms	All

**peer-tracking-policy** *reference*

Synopsis	Policy for BGP peer tracking on router instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>bgp peer-tracking-policy</i> <i>reference</i>
Tree	<a href="#">peer-tracking-policy</a>
Description	<p>This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.</p> <p>When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.</p>

Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Route preference for routes learned from all peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Description	This command configures the route preference for routes learned from the configured peers.  The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

### **purge-timer** *number*

Synopsis	Maximum time before stale routes are purged
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">purge-timer</a> <i>number</i>
Tree	<a href="#">purge-timer</a>
Description	This command configures the maximum time before stale routes are purged.  When a route refresh request is sent to a peer for VPN-IP routes received from that peer (in the RIB-IN), the routes are set to stale and the purge timer is started. If the routes are not updated (refreshed) before the purge timer expires, the routes are removed.
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

## rapid-update

Synopsis	Enter the <b>rapid-update</b> context
Context	<b>configure router string bgp rapid-update</b>
Tree	<a href="#">rapid-update</a>
Description	Commands in this context specify the address families that are configured to support the rapid update functionality.  The rapid update functionality overrides the remaining time on a peer's MRAI timer and immediately sends routes belonging to the specified address families (and all other pending updates) to the peers receiving these routes.
Introduced	16.0.R1
Platforms	All

## evpn *boolean*

Synopsis	Include EVPN address family routes
Context	<b>configure router string bgp rapid-update evpn boolean</b>
Tree	<a href="#">evpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

## l2-vpn *boolean*

Synopsis	Include L2 VPN address family routes
Context	<b>configure router string bgp rapid-update l2-vpn boolean</b>
Tree	<a href="#">l2-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

## label-ipv4 *boolean*

Synopsis	Include labeled IPv4 address family routes
Context	<b>configure router string bgp rapid-update label-ipv4 boolean</b>
Tree	<a href="#">label-ipv4</a>
Default	false



Introduced 16.0.R1  
Platforms All

### **label-ipv6** *boolean*

Synopsis Include labeled IPv6 address family routes  
Context **configure** *router* *string* [bgp rapid-update label-ipv6](#) *boolean*  
Tree [label-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mcast-vpn-ipv4** *boolean*

Synopsis Include multicast VPN IPv4 address family routes  
Context **configure** *router* *string* [bgp rapid-update mcast-vpn-ipv4](#) *boolean*  
Tree [mcast-vpn-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mcast-vpn-ipv6** *boolean*

Synopsis Include multicast VPN IPv6 address family routes  
Context **configure** *router* *string* [bgp rapid-update mcast-vpn-ipv6](#) *boolean*  
Tree [mcast-vpn-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mdt-safi** *boolean*

Synopsis Include MDT SAFI address family routes  
Context **configure** *router* *string* [bgp rapid-update mdt-safi](#) *boolean*  
Tree [mdt-safi](#)

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Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv4** *boolean*

Synopsis	Include MVPN IPv4 address family routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp rapid-update</b> <b>mvpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">mvpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mvpn-ipv6** *boolean*

Synopsis	Include MVPN IPv6 address family routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp rapid-update</b> <b>mvpn-ipv6</b> <i>boolean</i>
Tree	<a href="#">mvpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv4** *boolean*

Synopsis	Include VPN IPv4 address family routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp rapid-update</b> <b>vpn-ipv4</b> <i>boolean</i>
Tree	<a href="#">vpn-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-ipv6** *boolean*

Synopsis	Include VPN IPv6 address family routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp rapid-update</b> <b>vpn-ipv6</b> <i>boolean</i>

Tree	<a href="#">vpn-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **rapid-withdrawal** *boolean*

Synopsis	Send BGP withdrawal UPDATE messages immediately
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">rapid-withdrawal</a> <i>boolean</i>
Tree	<a href="#">rapid-withdrawal</a>
Description	When configured to <b>true</b> , UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.  When configured to <b>false</b> , withdrawal processing continues with the normal behavior.
Default	false
Introduced	16.0.R1
Platforms	All

### **remove-private**

Synopsis	Enable the <b>remove-private</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">remove-private</a>
Tree	<a href="#">remove-private</a>
Introduced	16.0.R1
Platforms	All

### **limited** *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">remove-private</a> <a href="#">limited</a> <i>boolean</i>
Tree	<a href="#">limited</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **replace** *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>remove-private</b> <b>replace</b> <i>boolean</i>
Tree	<a href="#">replace</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **skip-peer-as** *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>remove-private</b> <b>skip-peer-as</b> <i>boolean</i>
Tree	<a href="#">skip-peer-as</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **rib-management**

Synopsis	Enter the <b>rib-management</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rib-management</b>
Tree	<a href="#">rib-management</a>
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rib-management</b> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## leak-import

Synopsis	Enter the <b>leak-import</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management ipv4 leak-import</a>
Tree	<a href="#">leak-import</a>
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management ipv4 leak-import policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## route-table-import

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management ipv4 route-table-import</a>
Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp rib-management ipv4 route-table-import policy-name reference</a>
Tree	<a href="#">policy-name</a>
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp rib-management ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

**leak-import**

Synopsis	Enter the <b>leak-import</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp rib-management ipv6 leak-import</a>
Tree	<a href="#">leak-import</a>
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the unlabeled-IPv6 RIB of the base router. To leak a route from one routing instance to another, the origin and

destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.

Introduced	16.0.R1
Platforms	All

### **policy** (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp rib-management ipv6 leak-import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **route-table-import**

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp rib-management ipv6 route-table-import</b>
Tree	<a href="#">route-table-import</a>
Description	This command enables the context to specify the name of a route to control the importation of active routes from the IP route table into one of the BGP RIBs.  If this command is configured, then routes dropped or rejected by the configured policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by this command then the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.  Aggregate routes are always imported into each RIB, independent of this command's policy.  Route modifications specified in the actions of this command's policy are ignored and have no effect on the imported routes.

If this command is not configured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management ipv6 route-table-import policy-name reference</a>

Tree	<a href="#">policy-name</a>
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Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.
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When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **label-ipv4**

Synopsis	Enter the <b>label-ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management label-ipv4</a>
Tree	<a href="#">label-ipv4</a>
Introduced	16.0.R1
Platforms	All



## leak-import

Synopsis	Enter the <b>leak-import</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management label-ipv4 leak-import</a>
Tree	<a href="#">leak-import</a>
Description	Commands in this context specify route policies that control the importation of leak-eligible routes from the BGP RIB of another routing instance into the labeled-IPv4 RIB of the base router. To leak a route from one routing instance to another, the origin and destination RIB types must be the same; for example, it is not possible to leak a route from an unlabeled-IPv4 RIB of a VPRN into the labeled-IPv4 RIB of the base router.
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management label-ipv4 leak-import policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## route-table-import

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp rib-management label-ipv4 route-table-import</a>
Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp rib-management label-ipv4 route-table-import policy-name reference</a>
Tree	<a href="#">policy-name</a>
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**label-ipv6**

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp rib-management label-ipv6</a>
Tree	<a href="#">label-ipv6</a>
Introduced	16.0.R1
Platforms	All

**route-table-import**

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp rib-management label-ipv6 route-table-import</a>
Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>rib-management</b> <b>label-ipv6</b> <b>route-table-import</b> <b>policy-name</b> <i>reference</i>
Tree	<b>policy-name</b>
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**route-table-install** *boolean*

Synopsis	Install all IPv4 and IPv6 BGP routes in FIB and RTM
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>route-table-install</b> <i>boolean</i>
Tree	<b>route-table-install</b>
Default	true
Introduced	16.0.R1
Platforms	All

**route-target-list** [*community-name*] *string*

Synopsis	Add a list entry for <b>route-target-list</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>bgp</b> <b>route-target-list</b> <i>string</i>
Tree	<b>route-target-list</b>
Description	This command specifies a route target to be accepted from or advertised to peers.

This command is only applicable if the router is a route-reflector server.

Introduced 16.0.R1  
 Platforms All

### **[community-name] string**

Synopsis Route target community name  
 Context **configure router string bgp route-target-list string**  
 Tree [route-target-list](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **router-id string**

Synopsis Router ID for the BGP instance in the AS  
 Context **configure router string bgp router-id string**  
 Tree [router-id](#)  
 Description This command specifies the router ID to be used with the BGP instance.  
 Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.  
 When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.  
 Introduced 16.0.R1  
 Platforms All

### **rr-vpn-forwarding boolean**

Synopsis Allow route reflector to forward VPN-IP routes  
 Context **configure router string bgp rr-vpn-forwarding boolean**  
 Tree [rr-vpn-forwarding](#)  
 Description When configured to **true**, the route reflector resolves VPN-IPv4 and VPN-IPv6 routes, sets itself as the next hop, and generates new labels for all the resolved routes.  
 During this process, all received VPN-IP routes, regardless of route target, are imported into the dummy VRF, where the BGP next hops are resolved. The routes are resolved to

next-hop-self, and BGP allocates new VPRN service-label values for the routes, which are then advertised to peers.

The **transport-tunnel** command under the **configure router bgp next-hop-resolution labeled-routes** context determines what types of tunnels are eligible to resolve the next hops. If a received VPN-IP route from IBGP peer X is resolved and selected as the best path so that it can be re-advertised to an IBGP peer Y, and the BGP next-hop is modified toward peer Y (by using the **next-hop-self** command in Y's group or neighbor context or by using a next-hop action in an export policy applied to Y), BGP allocates a new VPRN service label value for the route, signals that new label value to Y, and programs the IOM to do the corresponding label swap operation. The supported combinations of X and Y are outlined below:

- from X (client) to Y (client)
- from X (client) to Y (non-client)
- from X (non-client) to Y (client)

When configured to **false**, the routes are re-advertised without signaling new VPRN labels, even if the BGP next hop is changed.

Nokia recommends setting this command to **false** for scaling and convergence reasons.

Default	false
Introduced	16.0.R1
Platforms	All

## segment-routing

Synopsis	Enter the <b>segment-routing</b> context
Context	<b>configure router</b> <i>string</i> <b>bgp segment-routing</b>
Tree	<a href="#">segment-routing</a>
Description	Commands in this context configure options related to BGP segment routing (including prefix SID support).
Introduced	19.10.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	<b>configure router</b> <i>string</i> <b>bgp segment-routing admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.10.R1

Platforms All

## prefix-sid-range

Synopsis Enable the **prefix-sid-range** context  
 Context **configure** [router](#) *string* [bgp segment-routing prefix-sid-range](#)  
 Tree [prefix-sid-range](#)  
 Introduced 19.10.R1  
 Platforms All

## global

Synopsis Allow label allocation from entire SRBG space  
 Context **configure** [router](#) *string* [bgp segment-routing prefix-sid-range global](#)  
 Tree [global](#)  
 Notes The following elements are part of a choice: **global** or (**max-index** and **start-label**).  
 Introduced 19.10.R1  
 Platforms All

## max-index *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Last label value available in contiguous range  
 Context **configure** [router](#) *string* [bgp segment-routing prefix-sid-range max-index](#) *number*  
 Tree [max-index](#)  
 Range 0 to 524287  
 Default 1  
 Notes The following elements are part of a choice: **global** or (**max-index** and **start-label**).  
 Introduced 19.10.R1  
 Platforms All

**start-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	First label value available in a contiguous range
Context	<b>configure</b> <i>router string</i> <a href="#">bgp segment-routing prefix-sid-range start-label</a> <i>number</i>
Tree	<a href="#">start-label</a>
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	19.10.R1
Platforms	All

**segment-routing-v6**

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">bgp segment-routing-v6</a>
Tree	<a href="#">segment-routing-v6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**family** [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <i>router string</i> <a href="#">bgp segment-routing-v6 family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Description	Commands in this context configure family-specific behavior for processing prefix SID attributes containing SRv6 TLVs.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[family-type]** *keyword*

Synopsis	IP address type that SRv6 route attributes apply to
Context	<b>configure</b> <i>router string</i> <a href="#">bgp segment-routing-v6 family</a> <i>keyword</i>

Tree	<a href="#">family</a>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## add-srv6-tlvs

Synopsis	Enable the <b>add-srv6-tlvs</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp segment-routing-v6 family keyword add-srv6-tlvs</a>
Tree	<a href="#">add-srv6-tlvs</a>
Description	<p>Commands in this context configure locator information for the family.</p> <p>When a locator is specified for the family, a family route that is redistributed from another protocol is advertised to BGP peers with a prefix SID attribute containing an SRv6 TLV.</p> <p>The commands also have the effect of adding a prefix SID attribute with SRv6 TLV to BGP routes received from other peers without the SRv6 TLV and propagating to other peers with next-hop-self applied.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## locator-name *reference*

Synopsis	SRv6 locator name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp segment-routing-v6 family keyword add-srv6-tlvs locator-name reference</a>
Tree	<a href="#">locator-name</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing segment-routing-v6 base-routing-instance locator reference</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## micro-segment-locator-name *reference*

Synopsis	Micro-segment SRv6 locator name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp segment-routing-v6 family keyword add-srv6-tlvs micro-segment-locator-name reference</a>
Tree	<a href="#">micro-segment-locator-name</a>



Description	This command adds a prefix SID attribute containing an SRv6 TLV to routes that belong to the family and that are redistributed from another protocol to BGP. This command also adds a prefix SID attribute with SRv6 TLV to BGP routes that are received from other peers without the SRv6 TLV and that are propagated to other peers with next-hop-self applied.
Reference	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **ignore-received-srv6-tlvs** *boolean*

Synopsis	Ignore SRv6 TLVs for received routes
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp</a> <a href="#">segment-routing-v6</a> <i>family</i> <i>keyword</i> <a href="#">ignore-received-srv6-tlvs</a> <i>boolean</i>
Tree	<a href="#">ignore-received-srv6-tlvs</a>
Description	<p>When configured to <b>true</b>, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is ignored and the route resolution is based on the BGP next-hop only.</p> <p>When configured to <b>false</b>, if a route of the family is received with a prefix SID attribute carrying an SRv6 TLV, the SRv6 TLV is processed. Such a route is resolved only if its BGP next-hop is reachable and the locator prefix is reachable. The datapath programming and IGP cost to reach the next-hop (used by the BGP decision process) is based on the route to the locator prefix.</p>
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **resolution** *keyword*

Synopsis	Resolution options for routes
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp</a> <a href="#">segment-routing-v6</a> <i>family</i> <i>keyword</i> <a href="#">resolution</a> <i>keyword</i>
Tree	<a href="#">resolution</a>
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**source-address *string***

Synopsis	Source address used in SRv6 packet
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp segment-routing-v6</a> <a href="#">source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**selective-label-ip *keyword***

Synopsis	Label IP routes installed for local use on NHS router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp selective-label-ip</a> <i>keyword</i>
Tree	<a href="#">selective-label-ip</a>
Description	<p>This command enables selective installation of labeled unicast routes for resolution by local services and IP shortcuts on a labeled unicast Next-hop=self router.</p> <p>This command is supported for labeled unicast for both IPv4 and IPv6 routes.</p> <p>The <b>no-install</b> option installs labeled IP routes that are required by services. This option conserves labeled route table space in addition to RTM table space on BGP-LU next-hop-self route reflectors. The <b>route-table-install-only</b> option ensures that the labeled unicast routes are installed in the RTM in full. When <b>no-install</b> is specified, the download of labeled unicast routes for NHLFE resolution by services continues.</p>
Options	no-install, route-table-install-only
Introduced	22.10.R1
Platforms	All

**selective-label-ip-prioritization *boolean***

Synopsis	Enable BGP selective prioritization for labeled routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp selective-label-ip-prioritization</a> <i>boolean</i>
Tree	<a href="#">selective-label-ip-prioritization</a>
Description	When this command is set to <b>true</b> , every labeled IPv4 and IPv6 route that is received and potentially usable by a local service is automatically prioritized for fast control plane

reconvergence. When the reachability of a BGP next-hop changes, the labeled IPv4 and IPv6 routes are updated into the route table first, along with other routes manually tagged as high priority by import policies. A /32 or /128 labeled unicast route (and associated BGP-LU tunnel) is determined to be potentially usable by a local service if one of the following conditions applies:

- the route matches the far-end address of a user-provisioned SDP of a Layer 2 service and the SDP is configured to use BGP tunnels as transport
- the route matches the BGP next-hop address of a BGP-EVPN or IP VPN route, and this VPN route is either imported into a local service or readvertised by the router acting as a next-hop-self route reflector or a model-B ASBR

When this command is set to **false**, selective-label IP prioritization for BGP is not used.

Default	false
Introduced	21.10.R1
Platforms	All

### **selective-label-ipv4-install** *boolean*

Synopsis	Enable selective download for BGP label-ipv4 routes
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp selective-label-ipv4-install</a> <i>boolean</i>
Tree	<a href="#">selective-label-ipv4-install</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **send-communities**

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp send-communities</a>
Tree	<a href="#">send-communities</a>
Introduced	16.0.R1
Platforms	All

### **extended** *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">bgp send-communities extended</a> <i>boolean</i>
Tree	<a href="#">extended</a>

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Default	true
Introduced	16.0.R1
Platforms	All

### **large** *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-communities</a> <a href="#">large</a> <i>boolean</i>
Tree	<a href="#">large</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **standard** *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-communities</a> <a href="#">standard</a> <i>boolean</i>
Tree	<a href="#">standard</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **send-default**

Synopsis	Enter the <b>send-default</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a>
Tree	<a href="#">send-default</a>
Introduced	19.7.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Export policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	19.7.R1
Platforms	All

**ipv4** *boolean*

Synopsis	Enable IPv4 family type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.7.R1
Platforms	All

**ipv6** *boolean*

Synopsis	Enable IPv6 family type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.7.R1
Platforms	All

**split-horizon** *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bgp</a> <a href="#">split-horizon</a> <i>boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to <b>false</b>, the use of split-horizon is disabled.</p>
Default	false
Introduced	16.0.R1

Platforms All

### **sr-policy-import** *boolean*

**Synopsis** Import all segment routing policies into the BGP RIB

**Context** **configure** *router string* **bgp sr-policy-import** *boolean*

**Tree** [sr-policy-import](#)

**Description** When configured to **true**, statically-configured non-local segment routing policies from the segment routing database are imported into the BGP RIB so that they can be advertised as originated routes toward BGP peers supporting segment routing policies (**sr-policy-ipv4** IP family type).  
When configured to **false**, the SR policies are not imported into the BGP RIB.

**Default** false

**Introduced** 16.0.R1

**Platforms** All

### **subconfed-vpn-forwarding** *boolean*

**Synopsis** Allow subconfed route resolution, next hop and labels

**Context** **configure** *router string* **bgp subconfed-vpn-forwarding** *boolean*

**Tree** [subconfed-vpn-forwarding](#)

**Description** When this is set to **true**, the base router BGP instance retains all received VPN-IPv4 and VPN-IPv6 routes, including those with route targets not matching any VRF import policy of any locally configured VPRN. In addition, when the base router BGP is configured to apply a **next-hop-self** command to a peer of any type (EBGP, IBGP, or confed-EBGP), VPN-IPv4 and VPN-IPv6 routes are advertised to the peer with a new BGP label, next hop, and label-swap forwarding entry. These behaviors described above are applied when the **enable-inter-as-vpn** or **enable-rr-vpn-forwarding** commands are enabled in the **configure router bgp context**, in the same BGP instance. This applies regardless of whether the base router has a confederation configuration.  
When this command is set to **false**, subconfederation VPN forwarding is not used.

**Default** false

**Introduced** 21.10.R1

**Platforms** All

### **tcp-mss** *number*

**Synopsis** TCP maximum segment size override

Context	<b>configure router</b> <i>string</i> <b>bgp tcp-mss</b> <i>number</i>
Tree	<b>tcp-mss</b>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Introduced	21.2.R1
Platforms	All

### **third-party-nexthop** *boolean*

Synopsis	Apply third-party next-hop processing to EBGp peers
Context	<b>configure router</b> <i>string</i> <b>bgp third-party-nexthop</b> <i>boolean</i>
Tree	<b>third-party-nexthop</b>
Description	<p>When configured to <b>true</b>, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to <b>false</b>, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-apply-export** *boolean*

Synopsis	Apply base-instance BGP export policies to VPN routes
Context	<b>configure router</b> <i>string</i> <b>bgp vpn-apply-export</b> <i>boolean</i>
Tree	<b>vpn-apply-export</b>
Description	When configured to <b>true</b> , base-instance BGP export route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes.

When configured to **false**, the export policies are not applied.

Default	false
Introduced	16.0.R1
Platforms	All

### **vpn-apply-import** *boolean*

Synopsis	Apply base-instance import route policies to VPN routes
Context	<b>configure</b> <i>router string</i> <b>bgp vpn-apply-import</b> <i>boolean</i>
Tree	<a href="#">vpn-apply-import</a>
Description	When configured to <b>true</b> , base-instance BGP import route policies are applied to VPN-IPv4/6, MVPN-IPv4/6, L2-VPN, MDT-SAFI, MCAST-VPN-IPv4, and EVPN routes. When configured to <b>false</b> , the import policies are not applied.
Default	false
Introduced	16.0.R1
Platforms	All

### **bier**

Synopsis	Enable the <b>bier</b> context
Context	<b>configure</b> <i>router string</i> <b>bier</b>
Tree	<a href="#">bier</a>
Introduced	19.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BIER
Context	<b>configure</b> <i>router string</i> <b>bier admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All



**bfd-liveness** *keyword*

Synopsis	BIER next-hops with BFD enabled
Context	<b>configure</b> <i>router string bier bfd-liveness keyword</i>
Tree	<a href="#">bfd-liveness</a>
Options	ipv4
Max. Instances	1
Introduced	21.7.R1
Platforms	All

**fast-reroute** *boolean*

Synopsis	Enable BIER Fast Reroute
Context	<b>configure</b> <i>router string bier fast-reroute boolean</i>
Tree	<a href="#">fast-reroute</a>
Default	false
Introduced	21.7.R1
Platforms	All

**template** [[template-name](#)] *string*

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <i>router string bier template string</i>
Tree	<a href="#">template</a>
Description	Commands in this context create a BIER template to be assigned to IGP.
Introduced	19.5.R1
Platforms	All

**[template-name]** *string*

Synopsis	BIER template name
Context	<b>configure</b> <i>router string bier template string</i>
Tree	<a href="#">template</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the BIER template
Context	<b>configure</b> <b>router</b> <i>string bier template string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**sub-domain** [**start**] *number end number*

Synopsis	Enter the <b>sub-domain</b> list instance
Context	<b>configure</b> <b>router</b> <i>string bier template string sub-domain number end number</i>
Tree	<a href="#">sub-domain</a>
Introduced	19.5.R1
Platforms	All

**[start]** *number*

Synopsis	Lower bound of sub-domain range
Context	<b>configure</b> <b>router</b> <i>string bier template string sub-domain number end number</i>
Tree	<a href="#">sub-domain</a>
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**end** *number*

Synopsis	Upper bound of sub-domain range
Context	<b>configure</b> <b>router</b> <i>string bier template string sub-domain number end number</i>

Tree	<a href="#">sub-domain</a>
Range	0 to 255
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **bfr-id** *number*

Synopsis	BIER ID for the sub-domain
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bier</a> <a href="#">template</a> <i>string</i> <a href="#">sub-domain</a> <i>number</i> <a href="#">end</a> <i>number</i> <a href="#">bfr-id</a> <i>number</i>
Tree	<a href="#">bfr-id</a>
Range	1 to 4096
Introduced	19.5.R1
Platforms	All

### **multi-topology** *keyword*

Synopsis	Multi-topology for the sub-domain
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bier</a> <a href="#">template</a> <i>string</i> <a href="#">sub-domain</a> <i>number</i> <a href="#">end</a> <i>number</i> <a href="#">multi-topology</a> <i>keyword</i>
Tree	<a href="#">multi-topology</a>
Options	ipv4-unicast, ipv6-unicast, ipv4-multicast, ipv6-multicast
Default	ipv4-unicast
Introduced	19.5.R1
Platforms	All

### **prefix** *string*

Synopsis	IP address used as BFR prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">bier</a> <a href="#">template</a> <i>string</i> <a href="#">sub-domain</a> <i>number</i> <a href="#">end</a> <i>number</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Description	This command specifies the IP address to be used as the BFR prefix. The prefix can be a loopback interface or system IP address.
Default	0.0.0.0

Introduced	19.5.R1
Platforms	All

### **class-forwarding** *boolean*

Synopsis	Allow class-based forwarding over IGP shortcuts
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">class-forwarding</a> <i>boolean</i>
Tree	<a href="#">class-forwarding</a>
Description	When configured to <b>true</b> , this command enables class-based forwarding (CBF) over IGP shortcuts.  Weighted ECMP, at the transport-tunnel level of BGP prefixes over IGP shortcuts, and the CBF feature on a per-BGP next-hop basis are mutually exclusive.  When configured to <b>false</b> , class-based forwarding (CBF) over IGP shortcuts is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

### **confederation**

Synopsis	Enter the <b>confederation</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">confederation</a>
Tree	<a href="#">confederation</a>
Description	Commands in this context configure members that are to be part of a confederation.  Creating confederation autonomous systems within as AS can be used to reduce the number of IBGP sessions required within an AS.
Introduced	16.0.R1
Platforms	All

### **confed-as-num** *number*

Synopsis	Confederation AS number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">confederation</a> <a href="#">confed-as-num</a> <i>number</i>
Tree	<a href="#">confed-as-num</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**members** [[as-number](#)] *number*

Synopsis	Add a list entry for <b>members</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">confederation</a> <a href="#">members</a> <i>number</i>
Tree	<a href="#">members</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	All

**[as-number]** *number*

Synopsis	Confederation member AS number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">confederation</a> <a href="#">members</a> <i>number</i>
Tree	<a href="#">members</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dhcp-server**

Synopsis	Enter the <b>dhcp-server</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a>
Tree	<a href="#">dhcp-server</a>
Introduced	16.0.R1

Platforms All

### **dhcpv4** [*name*] *string*

Synopsis Enter the **dhcpv4** list instance  
 Context **configure** *router string dhcp-server dhcpv4 string*  
 Tree [dhcpv4](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis DHCP server name  
 Context **configure** *router string dhcp-server dhcpv4 string*  
 Tree [dhcpv4](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the DHCP server  
 Context **configure** *router string dhcp-server dhcpv4 string admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** *router string dhcp-server dhcpv4 string description string*  
 Tree [description](#)

String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <b>failover</b>
Tree	<a href="#">failover</a>
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ignore-mclt-on-takeover *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">ignore-mclt-on-takeover</a> <i>boolean</i>
Tree	<a href="#">ignore-mclt-on-takeover</a>
Description	<p>When configured to <b>true</b>, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to <b>false</b>, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### maximum-client-lead-time *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover</a> <b>maximum-client-lead-time</b> <i>number</i>
Tree	<a href="#">maximum-client-lead-time</a>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### partner-down-delay *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover</a> <b>partner-down-delay</b> <i>number</i>
Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.



Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Description	<p>Commands in this context define the peer-related parameters for DHCP failover.</p> <p>DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.</p> <p>MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.</p> <p>The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[address]** *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">failover</a> <a href="#">peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>failover</b> <b>peer</b> <i>reference</i> <b>sync-tag</b> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **startup-wait-time** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>failover</b> <b>startup-wait-time</b> <i>number</i>
Tree	<a href="#">startup-wait-time</a>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**force-renews** *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>force-renews</b> <i>boolean</i>
Tree	<a href="#">force-renews</a>
Description	When configured to <b>true</b> , FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lease-hold**

Synopsis	Enter the <b>lease-hold</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>lease-hold</b>
Tree	<a href="#">lease-hold</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**additional-scenarios**

Synopsis	Enter the <b>additional-scenarios</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>lease-hold</b> <b>additional-scenarios</b>
Tree	<a href="#">additional-scenarios</a>
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**internal-lease-ipsec** *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>lease-hold</b> <b>additional-scenarios</b> <b>internal-lease-ipsec</b> <i>boolean</i>
Tree	<a href="#">internal-lease-ipsec</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **solicited-release** *boolean*

Synopsis Apply lease hold timer for solicited releases

Context **configure** *router* *string* **dhcp-server** *dhcpv4* *string* **lease-hold** *additional-scenarios* **solicited-release** *boolean*

Tree **solicited-release**

Description This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **time** *number*

Synopsis Lease hold time

Context **configure** *router* *string* **dhcp-server** *dhcpv4* *string* **lease-hold** *time* *number*

Tree **time**

Range 1 to 631152000

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool** [*pool-name*] *string*

Synopsis Enter the **pool** list instance

Context **configure** *router* *string* **dhcp-server** *dhcpv4* *string* **pool** *string*

Tree **pool**

Description Commands in this context configure a DHCP address pool on the router.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [*pool-name*] *string*

Synopsis DHCP server pool name

Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string failover</i>
Tree	<a href="#">failover</a>
Description	Commands in this context define DHCP failover where two DHCP servers manage the same pool of addresses, enabling them to share the load to assign leases for pool and provide backup for each in the event of network outages.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string failover admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-mclt-on-takeover** *boolean*

**Synopsis** Ignore maximum client lead during takeover from partner

**Context** **configure** *router string dhcp-server dhcpv4 string pool string failover ignore-mclt-on-takeover boolean*

**Tree** [ignore-mclt-on-takeover](#)

**Description** When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.

When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.

**Default** false

**Introduced** 16.0.R1

**Platforms** 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-client-lead-time** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**Synopsis** Maximum time that DHCP server can extend client's lease

**Context** **configure** *router string dhcp-server dhcpv4 string pool string failover maximum-client-lead-time number*

**Tree** [maximum-client-lead-time](#)

**Description** This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.

**Range** 600 to 86399

**Units** seconds

**Default** 600

**Introduced** 16.0.R1

**Platforms** 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**partner-down-delay** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string failover partner-down-delay number</i>
Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string failover peer reference</i>
Tree	<a href="#">peer</a>
Description	<p>Commands in this context configure peer-related parameters for DHCP failover.</p> <p>DHCP leases can be synchronized at the level of the DHCP server or pool. The pair of synchronizing servers or pools is identified by a tag. The synchronization information is carried over the Multi-Chassis Synchronization (MCS) link between the two peers. The MCS link is a logical IP or MPLS link.</p> <p>MCS runs over TCP port 45067, using either data traffic or keepalives to detect failure on the communication link between the two nodes. In the absence of any MCS data traffic for more than 0.5 seconds, MCS sends its own keepalive to the peer. If a reply is not received within 3 seconds, MCS declares its operational state as down and the DB sync state as out-of-sync. MCS consequently notifies its clients, including the DHCP server. It can take up to 3 seconds before the DHCP client realizes that the inter-chassis link has failed.</p> <p>The link failure does not necessarily imply the same failed state for the access links. It is possible, although unlikely, that both access links are operational while the inter-chassis</p>

communication link is broken. In this case, the two redundant nodes can become isolated from each other in the network. For this reason, it is important that the MCS link be highly redundant.

Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [address] *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>peer</b> <i>reference</i>
Tree	<b>peer</b>
Reference	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>peer</b> <i>reference</i> <b>sync-tag</b> <i>string</i>
Tree	<b>sync-tag</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**startup-wait-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>startup-wait-time</b> <i>number</i>
Tree	<a href="#">startup-wait-time</a>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-lease-time** *number*

Synopsis	Maximum lease time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>max-lease-time</b> <i>number</i>
Tree	<a href="#">max-lease-time</a>
Range	10 to 315446399
Units	seconds
Default	864000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**min-lease-time** *number*

Synopsis	Minimum lease time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>min-lease-time</b> <i>number</i>
Tree	<a href="#">min-lease-time</a>
Range	10 to 315446399
Units	seconds

Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### minimum-free

Synopsis	Enter the <b>minimum-free</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string minimum-free</i>
Tree	<i>minimum-free</i>
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### absolute *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string minimum-free absolute number</i>
Tree	<i>absolute</i>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### event-when-depleted *boolean*

Synopsis	Generate notification when addresses are depleted
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string minimum-free event-when-depleted boolean</i>
Tree	<i>event-when-depleted</i>
Description	When configured to <b>true</b> , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.  When configured to <b>false</b> , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**percent** *number*

Synopsis	Minimum free addresses as a percentage
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string minimum-free percent number</i>
Tree	<a href="#">percent</a>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nak-non-matching-subnet** *boolean*

Synopsis	Send NAK if no match for request address pool range
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string nak-non-matching-subnet boolean</i>
Tree	<a href="#">nak-non-matching-subnet</a>
Description	When configured to <b>true</b> , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK.  When configured to <b>false</b> or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**offer-time** *number*

Synopsis	Time interval during which a DHCP offer remains valid
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string offer-time number</i>
Tree	<a href="#">offer-time</a>
Range	10 to 600

Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a>
Tree	<a href="#">options</a>
Description	Commands in this context define DHCPv4 pool options.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Description	This command configures DHCP options at the pool level. The pool options can be overruled by the value of the same option in the local user database.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [\[number\]](#) (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** *router string dhcp-server dhcpv4 string pool string options option (number | keyword) ascii-string string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis DHCP option specified as time duration

Context **configure** *router string dhcp-server dhcpv4 string pool string options option (number | keyword) duration number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis Remove DHCP option from configuration

Context **configure** *router string dhcp-server dhcpv4 string pool string options option (number | keyword) empty*

Tree [empty](#)

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### hex-string *string*

Synopsis DHCP option specified as hexadecimal string

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **options** **option** (*number* | *keyword*) **hex-string** *string*

Tree [hex-string](#)

String Length 1 to 256

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ipv4-address *string*

Synopsis DHCP option specified as a list of IPv4 addresses

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **options** **option** (*number* | *keyword*) **ipv4-address** *string*

Tree [ipv4-address](#)

Max. Instances 4

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.  
This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### netbios-node-type *keyword*

Synopsis DHCP option specified as a NetBIOS node type

Context **configure** **router** *string* **dhcp-server** **dhcpv4** *string* **pool** *string* **options** **option** (*number* | *keyword*) **netbios-node-type** *keyword*

Tree [netbios-node-type](#)

Options b-node, p-node, m-node, h-node

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet** [ipv4-prefix] *string*

Synopsis Enter the **subnet** list instance  
 Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string*  
 Tree [subnet](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv4-prefix]** *string*

Synopsis IPv4 prefix for the subnet  
 Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string*  
 Tree [subnet](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address-range** [start] *string end string*

Synopsis Enter the **address-range** list instance  
 Context **configure** *router string dhcp-server dhcpv4 string pool string subnet string address-range string end string*  
 Tree [address-range](#)  
 Description This command configures the range of IP addresses to be served from the pool subnet. The range includes all the IP addresses between the specified start and end addresses, other than specifically excluded addresses. The start and end addresses must be unique within the subnet.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[start]** *string*

Synopsis Lower bound of the IP address range

Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i>
Tree	<a href="#">address-range</a>
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end string**

Synopsis	Upper bound of the IP address range
Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool string subnet string address-range string end string</i>
Tree	<a href="#">address-range</a>
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover-control-type keyword**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool string subnet string address-range string end string failover-control-type keyword</i>
Tree	<a href="#">failover-control-type</a>
Options	local, remote, access-driven
Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**drain** *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	<b>configure</b> <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool</i> <i>string</i> <i>subnet</i> <i>string</i> <b>drain</b> <i>boolean</i>
Tree	<b>drain</b>
Description	When configured to <b>true</b> , new leases cannot be assigned and existing leases are kept up until they are released. When configured to <b>false</b> , the subnet is active and new leases can be assigned.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**exclude-addresses** [*start*] *string* *end* *string*

Synopsis	Add a list entry for <b>exclude-addresses</b>
Context	<b>configure</b> <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool</i> <i>string</i> <i>subnet</i> <i>string</i> <b>exclude-addresses</b> <i>string</i> <i>end</i> <i>string</i>
Tree	<b>exclude-addresses</b>
Description	This command configures an IP address to be excluded from the pool of IP addresses in the subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[start]** *string*

Synopsis	Lower bound of the IP address range
Context	<b>configure</b> <i>router</i> <i>string</i> <i>dhcp-server</i> <i>dhcpv4</i> <i>string</i> <i>pool</i> <i>string</i> <i>subnet</i> <i>string</i> <b>exclude-addresses</b> <i>string</i> <i>end</i> <i>string</i>
Tree	<b>exclude-addresses</b>
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end string**

Synopsis	Upper bound of the IP address range
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</i>
Tree	<i>exclude-addresses</i>
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-declined number**

Synopsis	Maximum number of declined addresses allowed
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string maximum-declined number</i>
Tree	<i>maximum-declined</i>
Max. Range	0 to 4294967295
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**minimum-free**

Synopsis	Enter the <b>minimum-free</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv4 string pool string subnet string minimum-free</i>
Tree	<i>minimum-free</i>
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**absolute number**

Synopsis	Minimum number of free addresses in this pool or subnet
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Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool string subnet string minimum-free absolute number</i>
Tree	<i>absolute</i>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event-when-depleted** *boolean*

Synopsis	Generate notification when addresses are depleted
Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool string subnet string minimum-free event-when-depleted boolean</i>
Tree	<i>event-when-depleted</i>
Description	When configured to <b>true</b> , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to <b>false</b> , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **percent** *number*

Synopsis	Minimum free addresses as a percentage
Context	<b>configure router</b> <i>string dhcp-server dhcpv4 string pool string subnet string minimum-free percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b>
Tree	<b>options</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option [*number*] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>option</b>
Description	This command configures DHCP options at the pool subnet level. The options can be overruled by the value of the same option in the local user database.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [*number*] (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>option</b>
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string</b> <i>string</i>

Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">subnet</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">duration</a> <a href="#">number</a>
Tree	<a href="#">duration</a>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Empty DHCP option
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">subnet</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">empty</a>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">subnet</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">hex-string</a> <a href="#">string</a>
Tree	<a href="#">hex-string</a>

String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-address** *string*

Synopsis	DHCP option specified as a list of IPv4 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>ipv4-address</b> <i>string</i>
Tree	<a href="#">ipv4-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis	DHCP option specified as a NetBIOS node type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>netbios-node-type</b> <i>keyword</i>
Tree	<a href="#">netbios-node-type</a>
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool-selection**

Synopsis	Enter the <b>pool-selection</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool-selection</b>
Tree	<a href="#">pool-selection</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-gi-address

Synopsis	Enable the <b>use-gi-address</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool-selection</a> <a href="#">use-gi-address</a>
Tree	<a href="#">use-gi-address</a>
Description	<p>Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.</p> <p>A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## scope keyword

Synopsis	GI address-matching scope
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool-selection</a> <a href="#">use-gi-address</a> <a href="#">scope</a> <i>keyword</i>
Tree	<a href="#">scope</a>
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-pool-from-client

Synopsis	Enable the <b>use-pool-from-client</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool-selection</a> <a href="#">use-pool-from-client</a>
Tree	<a href="#">use-pool-from-client</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delimiter** *string*

Synopsis Delimiter to combine primary and secondary pool names

Context **configure** *router string dhcp-server dhcpv4 string pool-selection use-pool-from-client delimiter string*

Tree [delimiter](#)

Description This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.

String Length 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis Local user database for authentication

Context **configure** *router string dhcp-server dhcpv4 string user-db reference*

Tree [user-db](#)

Reference **configure** *subscriber-mgmt local-user-db string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-identification** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis User identification method for the DHCP server

Context **configure** *router string dhcp-server dhcpv4 string user-identification keyword*

Tree [user-identification](#)

Options mac-circuit-id, client-id, mac, circuit-id, remote-id

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**dhcpv6** [*name*] *string*

Synopsis	Enter the <b>dhcpv6</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string</i>
Tree	<i>dhcpv6</i>
Description	Commands in this context configure DHCPv6 parameters.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	DHCP server name
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string</i>
Tree	<i>dhcpv6</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCP server
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**auto-provisioned** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Auto-provision the pools of this server
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">auto-provisioned</a> <i>boolean</i>
Tree	<a href="#">auto-provisioned</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## defaults

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a>
Tree	<a href="#">defaults</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a>
Tree	<a href="#">options</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Description	This command configures DHCP options at the pool level. The pool options defined here can be overruled by the value of the same option in the local user database.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **[number]** (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">domain-string</a> <i>string</i>
Tree	<a href="#">domain-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option specified as time
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">duration</a> <i>number</i>
Tree	<a href="#">duration</a>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### empty

Synopsis	Empty DHCP option
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">empty</a>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">hex-string</a> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
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Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string defaults options option (number   keyword) ipv6-address string</i>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** *number*

Synopsis	Time this lease remains preferred
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string defaults preferred-lifetime number</i>
Tree	<a href="#">preferred-lifetime</a>
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.  Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rebind-time** *number*

Synopsis	Rebind time for the lease
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string defaults rebind-time number</i>
Tree	<a href="#">rebind-time</a>

Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **renew-time** *number*

Synopsis	Renew time for the lease
Context	<b>configure</b> <i>router</i> <i>string</i> <b>dhcp-server</b> <i>dhcpv6</i> <i>string</i> <b>defaults</b> <b>renew-time</b> <i>number</i>
Tree	<b>renew-time</b>
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** *number*

Synopsis Time for the lease to remain valid

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **defaults** **valid-lifetime** *number*

Tree **valid-lifetime**

Description This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.

Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range 300 to 315446399

Units seconds

Default 86400

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover**

Synopsis Enter the **failover** context

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **failover**

Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">failover</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-mclt-on-takeover** *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">failover</a> <a href="#">ignore-mclt-on-takeover</a> <i>boolean</i>
Tree	<a href="#">ignore-mclt-on-takeover</a>
Description	<p>When configured to <b>true</b>, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to <b>false</b>, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-client-lead-time** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
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Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string failover maximum-client-lead-time number</i>
Tree	<a href="#">maximum-client-lead-time</a>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **partner-down-delay** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string failover partner-down-delay number</i>
Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string failover peer reference</i>

Tree	<a href="#">peer</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [address] *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sync-tag *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### startup-wait-time *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>failover</b> <b>startup-wait-time</b> <i>number</i>
Tree	<b>startup-wait-time</b>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-rapid-commit** *boolean*

Synopsis	Ignore Rapid Commit option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>ignore-rapid-commit</b> <i>boolean</i>
Tree	<b>ignore-rapid-commit</b>
Description	When configured to <b>true</b> , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-id-mapping** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>interface-id-mapping</b> <i>boolean</i>
Tree	<b>interface-id-mapping</b>
Description	When configured to <b>true</b> , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based

assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-hold

Synopsis	Enter the <b>lease-hold</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">lease-hold</a>
Tree	<a href="#">lease-hold</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## additional-scenarios

Synopsis	Enter the <b>additional-scenarios</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">lease-hold</a> <a href="#">additional-scenarios</a>
Tree	<a href="#">additional-scenarios</a>
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## internal-lease-ipsec *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">lease-hold</a> <a href="#">additional-scenarios</a> <a href="#">internal-lease-ipsec</a> <i>boolean</i>
Tree	<a href="#">internal-lease-ipsec</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**solicited-release** *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>lease-hold</b> <b>additional-scenarios</b> <b>solicited-release</b> <i>boolean</i>
Tree	<b>solicited-release</b>
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**time** *number*

Synopsis	Lease hold time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>lease-hold</b> <b>time</b> <i>number</i>
Tree	<b>time</b>
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lease-query** *boolean*

Synopsis	Handle and reply to lease query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>lease-query</b> <i>boolean</i>
Tree	<b>lease-query</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool** [*pool-name*] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i>
Tree	<b>pool</b>

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[pool-name]** *string*

Synopsis DHCP server pool name  
 Context **configure** *router string dhcp-server dhcpv6 string pool string*  
 Tree *pool*  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix**

Synopsis Enter the **delegated-prefix** context  
 Context **configure** *router string dhcp-server dhcpv6 string pool string delegated-prefix*  
 Tree *delegated-prefix*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **length** *number*

Synopsis Prefix length for pool if unspecified by client  
 Context **configure** *router string dhcp-server dhcpv6 string pool string delegated-prefix length number*  
 Tree *length*  
 Range 48 to 127  
 Default 64  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum** *number*

Synopsis Maximum delegated prefix length for this pool

Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string delegated-prefix maximum number</i>
Tree	<i>maximum</i>
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **minimum** *number*

Synopsis	Minimum delegated prefix length for this pool
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string delegated-prefix minimum number</i>
Tree	<i>minimum</i>
Range	48 to 127
Default	48
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **exclude-prefix** [*ipv6-prefix*] *string*

Synopsis	Add a list entry for <b>exclude-prefix</b>
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string exclude-prefix string</i>
Tree	<i>exclude-prefix</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ipv6-prefix]** *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>exclude-prefix</b> <i>string</i>
Tree	<a href="#">exclude-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-mclt-on-takeover** *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>ignore-mclt-on-takeover</b> <i>boolean</i>
Tree	<a href="#">ignore-mclt-on-takeover</a>



Description	When configured to <b>true</b> , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.  When configured to <b>false</b> , the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### maximum-client-lead-time *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>maximum-client-lead-time</b> <i>number</i>
Tree	<b>maximum-client-lead-time</b>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### partner-down-delay *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>partner-down-delay</b> <i>number</i>

Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <a href="#">peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[address]** *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <a href="#">peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sync-tag** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string failover peer reference sync-tag string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**startup-wait-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string failover startup-wait-time number</i>
Tree	<a href="#">startup-wait-time</a>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string options</i>

Tree	<a href="#">options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>domain-string</b> <i>string</i>
Tree	<b>domain-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duration** *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<b>duration</b>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**empty**

Synopsis	Empty DHCP option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<b>empty</b>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string options option (number   keyword) hex-string string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string options option (number   keyword) ipv6-address string</i>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix** [[ipv6-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string</i>
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ipv6-prefix]** *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
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Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string</i>
Tree	<i>prefix</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **drain** *boolean*

Synopsis	No new leases can be assigned
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string drain boolean</i>
Tree	<i>drain</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover-control-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string failover-control-type keyword</i>
Tree	<i>failover-control-type</i>
Options	local, remote, access-driven
Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string options</i>
Tree	<i>options</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option** [*number*] (*number* | *keyword*)

Synopsis Enter the **option** list instance

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **pool** *string* **prefix** *string* **options** **option** (*number* | *keyword*)

Tree **option**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis DHCP option to send as identification string

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **pool** *string* **prefix** *string* **options** **option** (*number* | *keyword*)

Tree **option**

Range 1 to 65535

Options dns-server, domain-name

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** **router** *string* **dhcp-server** **dhcpv6** *string* **pool** *string* **prefix** *string* **options** **option** (*number* | *keyword*) **ascii-string** *string*

Tree **ascii-string**

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>domain-string</b> <i>string</i>
Tree	<b>domain-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duration** *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<b>duration</b>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**empty**

Synopsis	Empty DHCP option
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<b>empty</b>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<b>hex-string</b>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ipv6-address</b> <i>string</i>
Tree	<b>ipv6-address</b>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime** *number*

Synopsis	Time this lease remains preferred
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>preferred-lifetime</b> <i>number</i>
Tree	<b>preferred-lifetime</b>
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.  Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue

to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length-threshold** [[prefix-length](#)] *number*

Synopsis	Enter the <b>prefix-length-threshold</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">prefix-length-threshold</a> <i>number</i>
Tree	<a href="#">prefix-length-threshold</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[prefix-length]** *number*

Synopsis	Delegated prefix length for pool thresholds
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">prefix-length-threshold</a> <i>number</i>
Tree	<a href="#">prefix-length-threshold</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **absolute** *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">prefix-length-threshold</a> <i>number</i> <a href="#">absolute</a> <i>number</i>
Tree	<a href="#">absolute</a>

Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event-when-depleted** *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number event-when-depleted boolean</i>
Tree	<a href="#">event-when-depleted</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **percent** *number*

Synopsis	Minimum percentage of free prefixes for prefix length
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number percent number</i>
Tree	<a href="#">percent</a>
Range	1 to 100
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-type**

Synopsis	Enter the <b>prefix-type</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix string prefix-type</i>
Tree	<a href="#">prefix-type</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pd** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-type</b> <b>pd</b> <i>boolean</i>
Tree	<b>pd</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**wan-host** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-type</b> <b>wan-host</b> <i>boolean</i>
Tree	<b>wan-host</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rebind-time** *number*

Synopsis	Rebind time for the lease
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>rebind-time</b> <i>number</i>
Tree	<b>rebind-time</b>
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA.</p>

The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.

Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.

Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **renew-time number**

Synopsis	Renew time for the lease
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>renew-time number</b>
Tree	<b>renew-time</b>
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** *number*

Synopsis	Time for the lease to remain valid
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>valid-lifetime</b> <i>number</i>
Tree	<b>valid-lifetime</b>
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-length-threshold** [**prefix-length**] *number*

Synopsis	Enter the <b>prefix-length-threshold</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i>
Tree	<b>prefix-length-threshold</b>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[prefix-length]** *number*

Synopsis	Delegated prefix length for pool thresholds
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Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix-length-threshold number</i>
Tree	<a href="#">prefix-length-threshold</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event-when-depleted** *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix-length-threshold number event-when-depleted boolean</i>
Tree	<a href="#">event-when-depleted</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **minimum-free-percent** *number*

Synopsis	Percentage of free prefixes for this prefix length
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool string prefix-length-threshold number minimum-free-percent number</i>
Tree	<a href="#">minimum-free-percent</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool-selection**

Synopsis	Enter the <b>pool-selection</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string pool-selection</i>
Tree	<a href="#">pool-selection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## use-link-address

Synopsis	Enable the <b>use-link-address</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool-selection use-link-address</b>
Tree	<a href="#">use-link-address</a>
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## scope *keyword*

Synopsis	Scope of the IP address selection
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool-selection use-link-address scope</b> <i>keyword</i>
Tree	<a href="#">scope</a>
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-pool-from-client

Synopsis	Enable the <b>use-pool-from-client</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool-selection use-pool-from-client</b>
Tree	<a href="#">use-pool-from-client</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>pool-selection use-pool-from-client</b> <b>delimiter</b> <i>string</i>
Tree	<a href="#">delimiter</a>

Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## server-id

Synopsis	Enter the <b>server-id</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string server-id</i>
Tree	<a href="#">server-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## duid-enterprise

Synopsis	Enter the <b>duid-enterprise</b> context
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string server-id duid-enterprise</i>
Tree	<a href="#">duid-enterprise</a>
Notes	The following elements are part of a choice: <b>duid-enterprise</b> or <b>duid-link-local</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis	DUID enterprise server ID specified as an ASCII string
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string server-id duid-enterprise ascii-string string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 58
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hex-string** *string*

Synopsis	DUID enterprise server ID specified as a hex string
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string server-id duid-enterprise hex-string string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 118
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duid-link-local**

Synopsis	Derive DUID server ID from a system link-layer address
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string server-id duid-link-local</i>
Tree	<a href="#">duid-link-local</a>
Notes	The following elements are part of a choice: <b>duid-enterprise</b> or <b>duid-link-local</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-identification** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	<b>configure</b> <i>router string dhcp-server dhcpv6 string user-identification keyword</i>
Tree	<a href="#">user-identification</a>
Options	duid, interface-id, interface-id-link-local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dns**

Synopsis	Enter the <b>dns</b> context
Context	<b>configure</b> <i>router string dns</i>

Tree	<a href="#">dns</a>
Introduced	20.2.R1
Platforms	All

## **redirect-vprn**

Synopsis	Enter the <b>redirect-vprn</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dns</a> <a href="#">redirect-vprn</a>
Tree	<a href="#">redirect-vprn</a>
Description	Commands in this context configure DNS resolution of all packets through the VPRN DNS server.  The VPRN DNS server must be configured before using the commands in this context. If the VPRN DNS server is not configured, all packet resolution fails.
Introduced	20.2.R1
Platforms	All

## **service** [[service-name](#)] *reference*

Synopsis	Enter the <b>service</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dns</a> <a href="#">redirect-vprn</a> <a href="#">service</a> <i>reference</i>
Tree	<a href="#">service</a>
Max. Instances	1
Introduced	20.2.R1
Platforms	All

## **[service-name]** *reference*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dns</a> <a href="#">redirect-vprn</a> <a href="#">service</a> <i>reference</i>
Tree	<a href="#">service</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	All

**preference** *number*

Synopsis	Service preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>dns redirect-vprn service</b> <i>reference</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	0 to 255
Introduced	20.2.R1
Platforms	All

**ecmp** *number*

Synopsis	Maximum equal-cost routes for routing table instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ecmp</b> <i>number</i>
Tree	<b>ecmp</b>
Description	<p>This command configures ECMP and defines the number of routes for path sharing. ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>If available ECMP routes at the best preference exceed the maximum ECMP routes allowed, the system selects the route using the following criteria:</p> <ol style="list-style-type: none"> <li>1. The system selects the lowest next hop router ID.</li> <li>2. If the next hop goes to the same neighbor, the system selects the next hop with the lowest interface index.</li> </ol>
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

**entropy-label** *boolean*

Synopsis	Use entropy label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>entropy-label</b> <i>boolean</i>
Tree	<b>entropy-label</b>
Description	<p>When configured to <b>true</b>, this command enables the use of entropy labels.</p> <p>The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP</p>

or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the **configure router mpls** or **configure router mpls lsp** context.

This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.

The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.

When configured to **false**, the use of entropy labels is disabled.

Default	false
Introduced	16.0.R1
Platforms	All

### **fib-priority** *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	<b>configure router</b> <i>string fib-priority keyword</i>
Tree	<a href="#">fib-priority</a>
Options	standard, high
Default	standard
Introduced	16.0.R1
Platforms	All

### **fib-telemetry** *boolean*

Synopsis	Collect extra state information
Context	<b>configure router</b> <i>string fib-telemetry boolean</i>
Tree	<a href="#">fib-telemetry</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **firewall**

Synopsis	Enter the <b>firewall</b> context
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Context	<b>configure</b> <i>router string</i> <b>firewall</b>
Tree	<b>firewall</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **domain** [*name*] *string*

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure</b> <i>router string</i> <b>firewall domain</b> <i>string</i>
Tree	<b>domain</b>
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Firewall domain name
Context	<b>configure</b> <i>router string</i> <b>firewall domain</b> <i>string</i>
Tree	<b>domain</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the firewall domain
Context	<b>configure</b> <i>router string</i> <b>firewall domain</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcpv6-server

Synopsis	Enter the <b>dhcpv6-server</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">firewall</a> <a href="#">domain</a> <i>string</i> <a href="#">dhcpv6-server</a>
Tree	<a href="#">dhcpv6-server</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### name *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">firewall</a> <a href="#">domain</a> <i>string</i> <a href="#">dhcpv6-server</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### router-instance *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">firewall</a> <a href="#">domain</a> <i>string</i> <a href="#">dhcpv6-server</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



## nat-group *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group for this domain
Context	<b>configure</b> <i>router string firewall domain string nat-group reference</i>
Tree	<a href="#">nat-group</a>
Reference	<b>configure</b> <i>isa nat-group number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix [[ip-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <i>router string firewall domain string prefix string</i>
Tree	<a href="#">prefix</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[ip-prefix](#)] *string*

Synopsis	IP prefix and prefix length for the domain firewall
Context	<b>configure</b> <i>router string firewall domain string prefix string</i>
Tree	<a href="#">prefix</a>
Description	This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wlan-gw-group reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flowspec**

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">flowspec</a>
Tree	<a href="#">flowspec</a>
Description	<p>This command configures the maximum number of flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries are placed in an ingress IP filter policy in this router from the filter range between the configured offset plus 1 (embedding offset plus 1) and the value of this command (embedding offset plus <b>ip-filter-max-size</b> or <b>ipv6-filter-max-size</b>).</p> <p>The sum of the maximum-size value and the highest offset in any IP filter that embeds flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of flowspec rules is greater than the new maximum, the extra rules are removed</p>

immediately but retained in the BGP RIB. If the limit is increased, new rules are embedded only as they are received in new BGP updates.

Introduced	16.0.R1
Platforms	All

### **filter-cam-type** *keyword*

Synopsis	Filter policy type for FlowSpec embedding
Context	<b>configure</b> <b>router</b> <i>string</i> <b>flowspec</b> <b>filter-cam-type</b> <i>keyword</i>
Tree	<a href="#">filter-cam-type</a>
Description	This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.
Options	normal, packet-length
Default	normal
Introduced	20.7.R1
Platforms	All

### **ip-filter-max-size** *number*

Synopsis	Maximum number of flowspec rule entries in IPv4 filter
Context	<b>configure</b> <b>router</b> <i>string</i> <b>flowspec</b> <b>ip-filter-max-size</b> <i>number</i>
Tree	<a href="#">ip-filter-max-size</a>
Description	<p>This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p>
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

**ipv6-filter-max-size** *number*

Synopsis	Maximum number of flowspec rule entries in IPv6 filter
Context	<b>configure</b> <i>router string flowspec ipv6-filter-max-size number</i>
Tree	<a href="#">ipv6-filter-max-size</a>
Description	<p>This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p>
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

**gtm**

Synopsis	Enter the <b>gtm</b> context
Context	<b>configure</b> <i>router string gtm</i>
Tree	<a href="#">gtm</a>
Introduced	19.5.R1
Platforms	All

**mvpn** *boolean*

Synopsis	Enable the configuration of MVPN-related parameters
Context	<b>configure</b> <i>router string gtm mvpn boolean</i>
Tree	<a href="#">mvpn</a>
Default	false
Introduced	19.5.R1
Platforms	All

## provider-tunnel

Synopsis	Enter the <b>provider-tunnel</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a>
Tree	<a href="#">provider-tunnel</a>
Introduced	19.5.R1
Platforms	All

## inclusive

Synopsis	Enter the <b>inclusive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a>
Tree	<a href="#">inclusive</a>
Introduced	19.5.R1
Platforms	All

## rsvp

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">rsvp</a>
Tree	<a href="#">rsvp</a>
Introduced	19.5.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">rsvp</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**lsp-template** *reference*

Synopsis	LSP template name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>inclusive</b> <b>rsvp</b> <b>lsp-template</b> <i>reference</i>
Tree	<a href="#">lsp-template</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i>
Introduced	19.5.R1
Platforms	All

**selective**

Synopsis	Enter the <b>selective</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b>
Tree	<a href="#">selective</a>
Introduced	19.5.R1
Platforms	All

**data-delay-interval** *number*

Synopsis	Delay before a PBR switches traffic to selective tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>data-delay-interval</b> <i>number</i>
Tree	<a href="#">data-delay-interval</a>
Range	3 to 180
Default	3
Introduced	19.5.R1
Platforms	All

**data-threshold**

Synopsis	Enter the <b>data-threshold</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>data-threshold</b>
Tree	<a href="#">data-threshold</a>
Introduced	19.5.R1
Platforms	All

**group-prefix** [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>group-prefix</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-prefix</a>
Introduced	19.5.R1
Platforms	All

**[ip-group-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Multicast group-prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-prefix</a>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**pe-threshold-add** *number*

Synopsis	Number of receiver PBRs to create S-PMSI
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">pe-threshold-add</a> <i>number</i>
Tree	<a href="#">pe-threshold-add</a>
Range	1 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

**pe-threshold-delete** *number*

Synopsis	Number of receiver PBRs to delete S-PMSI
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">pe-threshold-delete</a> <i>number</i>
Tree	<a href="#">pe-threshold-delete</a>
Range	2 to 65535

Default	65535
Introduced	19.5.R1
Platforms	All

### **threshold** *number*

Synopsis	Threshold for a group prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>data-threshold</b> <b>group-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **maximum-p2mp-spmsi** *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>maximum-p2mp-spmsi</b> <i>number</i>
Tree	<a href="#">maximum-p2mp-spmsi</a>
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

### **rsvp**

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtm</b> <b>provider-tunnel</b> <b>selective</b> <b>rsvp</b>
Tree	<a href="#">rsvp</a>
Introduced	19.5.R1
Platforms	All



### **admin-state** *keyword*

Synopsis	Administrative state of P2MP RSVP as provider tunnel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">rsvp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

### **lsp-template** *reference*

Synopsis	LSP template name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtm</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">rsvp</a> <b>lsp-template</b> <i>reference</i>
Tree	<a href="#">lsp-template</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>lsp-template</b> <i>string</i>
Introduced	19.5.R1
Platforms	All

### **gtp**

Synopsis	Enter the <b>gtp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <b>gtp</b>
Tree	<a href="#">gtp</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **s11**

Synopsis	Enter the <b>s11</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <b>s11</b>
Tree	<a href="#">s11</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface** [[interface-name](#)] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp s11</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[interface-name]** *reference*

Synopsis	Name for the S11 interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp s11</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**apn-policy** *reference*

Synopsis	Access point name policy for the S11 interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp s11</a> <a href="#">interface</a> <i>reference</i> <a href="#">apn-policy</a> <i>reference</i>
Tree	<a href="#">apn-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-profile-map**

Synopsis	Enter the <b>peer-profile-map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp s11</a> <a href="#">peer-profile-map</a>
Tree	<a href="#">peer-profile-map</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix** [[peer-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">s11</a> <a href="#">peer-profile-map</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[peer-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the subnet
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">s11</a> <a href="#">peer-profile-map</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-profile** *reference*

Synopsis	GTP peer profile associated with the address prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">s11</a> <a href="#">peer-profile-map</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">peer-profile</a> <i>reference</i>
Tree	<a href="#">peer-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**upf-data-endpoint**

Synopsis	Enable the <b>upf-data-endpoint</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">upf-data-endpoint</a>
Tree	<a href="#">upf-data-endpoint</a>
Description	Commands in this context configure a GTP - User Plane (GTP-U) endpoint used by BNG CUPS FWA sessions.
Introduced	21.2.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fpe reference**

Synopsis FPE used to encapsulate and decapsulate GTP-U traffic  
Context **configure router string gtp upf-data-endpoint fpe reference**  
Tree [fpe](#)  
Reference **configure fwd-path-ext fpe number**  
Notes This element is mandatory.  
Introduced 21.5.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interface reference**

Synopsis Interface on which the GTP-U packets terminate  
Context **configure router string gtp upf-data-endpoint interface reference**  
Tree [interface](#)  
Reference **configure router string interface string**  
Notes This element is mandatory.  
Introduced 21.2.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **uplink**

Synopsis Enable the **uplink** context  
Context **configure router string gtp uplink**  
Tree [uplink](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **apn string**

Synopsis Network identifier part of the APN for the uplink  
Context **configure router string gtp uplink apn string**  
Tree [apn](#)

String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pdn-type** *keyword*

Synopsis	Default PDN to be signaled in GTP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">uplink</a> <a href="#">pdn-type</a> <i>keyword</i>
Tree	<a href="#">pdn-type</a>
Options	ipv4, ipv6, ipv4v6
Default	ipv4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-profile-map**

Synopsis	Enter the <b>peer-profile-map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">uplink</a> <a href="#">peer-profile-map</a>
Tree	<a href="#">peer-profile-map</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix** [[peer-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">uplink</a> <a href="#">peer-profile-map</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[peer-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the subnet
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">gtp</a> <a href="#">uplink</a> <a href="#">peer-profile-map</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-profile** *reference*

Synopsis	GTP peer profile associated with the address prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>gtp uplink peer-profile-map prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>peer-profile reference</b>
Tree	<a href="#">peer-profile</a>
Reference	<b>configure</b> <b>subscriber-mgmt gtp peer-profile</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp-tunneling** *boolean*

Synopsis	Allow tunneling of ICMP reply packets over MPLS LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>icmp-tunneling</b> <i>boolean</i>
Tree	<a href="#">icmp-tunneling</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **igmp**

Synopsis	Enable the <b>igmp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b>
Tree	<a href="#">igmp</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of IGMP
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **forwarding-group-interface** [forwarding-service](#) *string* [group-interface-name](#) *reference*

Synopsis	Enter the <b>forwarding-group-interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **forwarding-service** *string*

Synopsis	Forwarding service for the subscriber interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface-name** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of IGMP

Context **configure** *router* *string* *igmp* *forwarding-group-interface* *forwarding-service* *string* *group-interface-name* *reference* *admin-state* *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy that filters IGMP packets

Context **configure** *router* *string* *igmp* *forwarding-group-interface* *forwarding-service* *string* *group-interface-name* *reference* *import-policy* *reference*

Tree [import-policy](#)

Description This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.

When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).

Reference **configure** *policy-options* *policy-statement* *string*

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis Maximum number of group sources for this interface

Context **configure** *router* *string* *igmp* *forwarding-group-interface* *forwarding-service* *string* *group-interface-name* *reference* *maximum-number-group-sources* *number*

Tree [maximum-number-group-sources](#)

Description This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than



the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range	1 to 32000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>maximum-number-groups</i> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>maximum-number-sources</i> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i>
Tree	<a href="#">mcac</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b>
Tree	<b>bandwidth</b>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b> <b>mandatory</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mandatory</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp forwarding-group-interface forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac interface-policy</i> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <i>mcac interface-policy</i> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp forwarding-group-interface forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac policy</i> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to I PoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <i>mcac policy</i> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <i>router</i> <i>string</i> <i>igmp forwarding-group-interface forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>query-interval</i> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-last-member-interval</b> <i>number</i>
Tree	<b>query-last-member-interval</b>
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-response-interval</b> <i>number</i>
Tree	<b>query-response-interval</b>
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis	Source address for IGMP queries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-source-address</b> <i>string</i>
Tree	<b>query-source-address</b>
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>router-alert-check</b> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-hosts-only** *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>sub-hosts-only</b> <i>boolean</i>
Tree	<a href="#">sub-hosts-only</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subnet-check** *boolean*

Synopsis	Allow subnet checking
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>subnet-check</b> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3

Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-if-query-source-address** *string*

Synopsis	Default query-source address for all group interfaces
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-if-query-source-address</a> <i>string</i>
Tree	<a href="#">group-if-query-source-address</a>
Introduced	16.0.R1
Platforms	All

### **group-interface** [[group-interface-name](#)] *reference*

Synopsis	Enter the <b>group-interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i>
Tree	<a href="#">group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [[group-interface-name](#)] *reference*

Synopsis	Group interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i>
Tree	<a href="#">group-interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-interface</b> <i>reference</i> <b>import-policy</b> <i>reference</i>
Tree	<b>import-policy</b>
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-interface</b> <i>reference</i> <b>maximum-number-group-sources</b> <i>number</i>
Tree	<b>maximum-number-group-sources</b>
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
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Context	<b>configure</b> <i>router string igmp group-interface reference mcac bandwidth mandatory (number   keyword)</i>
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **total** (*number | keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <i>router string igmp group-interface reference mcac bandwidth total (number   keyword)</i>
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <i>router string igmp group-interface reference mcac interface-policy reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <i>mcac interface-policy string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <i>router string igmp group-interface reference mcac policy reference</i>
Tree	<a href="#">policy</a>

Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">router string igmp group-interface reference query-interval number</a>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">router string igmp group-interface reference query-last-member-interval number</a>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-source-address** *string*

Synopsis	Source address for IGMP queries
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">query-source-address</a> <i>string</i>
Tree	<a href="#">query-source-address</a>
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-hosts-only** *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i>
Tree	<a href="#">sub-hosts-only</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subnet-check** *boolean*

Synopsis	Allow subnet checking
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-interface</b> <i>reference</i> <b>subnet-check</b> <i>boolean</i>
Tree	<b>subnet-check</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>group-interface</b> <i>reference</i> <b>version</b> <i>keyword</i>
Tree	<b>version</b>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface** [**ip-interface-name**] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Introduced	16.0.R1
Platforms	All

**[ip-interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Description	This command configures the interface name, which must be unique within the group of defined IP interfaces for the context. If the IP interface name does not exist or does not have an IP address configured, an error message is returned. If the IP interface exists in a different area, it is moved to this area.

An interface name cannot be in the form of an IP address.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <b>maximum-number-group-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>

---

Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <b>router</b> <i>string igmp interface string maximum-number-groups number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <b>router</b> <i>string igmp interface string maximum-number-sources number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

### **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <b>router</b> <i>string igmp interface string mcac</i>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

**bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>bandwidth</b>
Tree	<b>bandwidth</b>
Introduced	16.0.R1
Platforms	All

**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>bandwidth</b> <b>mandatory</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mandatory</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>bandwidth</b> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>interface-policy</b> <i>reference</i>
Tree	<b>interface-policy</b>

Reference	<b>configure</b> <a href="#">mcac interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## mc-constraints

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">mcac mc-constraints</a>
Tree	<a href="#">mc-constraints</a>
Introduced	16.0.R1
Platforms	All

## level [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">mcac mc-constraints level</a> <i>number</i>
Tree	<a href="#">level</a>
Description	Commands in this context configure the amount of bandwidth available within a given bundle for MC traffic for a specified level.
Introduced	16.0.R1
Platforms	All

## [[level-id](#)] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">mcac mc-constraints level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## bandwidth *number*

Synopsis	Bandwidth available for this level
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Context	<b>configure router</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>mcac mc-constraints level</b> <i>number</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **number-down** [**number-lag-port-down**] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure router</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>mcac mc-constraints number-down</b> <i>number</i>
Tree	<b>number-down</b>
Description	Commands in this context configure the number of ports down along with level for the MCAC policy on the interface.
Introduced	16.0.R1
Platforms	All

### [**number-lag-port-down**] *number*

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure router</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>mcac mc-constraints number-down</b> <i>number</i>
Tree	<b>number-down</b>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level** *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure router</b> <i>string</i> <b>igmp interface</b> <i>string</i> <b>mcac mc-constraints number-down</b> <i>number</i> <b>level</b> <i>number</i>
Tree	<b>level</b>

Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **use-lag-port-weight** *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure</b> <i>router string igmp interface string mcac mc-constraints use-lag-port-weight boolean</i>
Tree	<a href="#">use-lag-port-weight</a>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <i>router string igmp interface string mcac policy reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the</p>

policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	<b>configure mcac policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure router</b> <i>string igmp interface string query-interval number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure router</b> <i>string igmp interface string query-last-member-interval number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure router</b> <i>string igmp interface string query-response-interval number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

**redundant-mcast** *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>redundant-mcast</b> <i>boolean</i>
Tree	<b>redundant-mcast</b>
Default	false
Introduced	16.0.R1
Platforms	All

**router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>router-alert-check</b> <i>boolean</i>
Tree	<b>router-alert-check</b>
Default	true
Introduced	16.0.R1
Platforms	All

**ssm-translate**

Synopsis	Enter the <b>ssm-translate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>ssm-translate</b>
Tree	<b>ssm-translate</b>
Description	Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.
Introduced	16.0.R1
Platforms	All

**group-range** *start string end string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>ssm-translate</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i>
Tree	<b>group-range</b>
Description	Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.

Introduced 16.0.R1  
 Platforms All

### **start** *string*

Synopsis Lower bound of the IP address group range  
 Context **configure** *router string igmp interface string ssm-translate group-range start string end string*  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **end** *string*

Synopsis Upper bound of the IP address group range  
 Context **configure** *router string igmp interface string ssm-translate group-range start string end string*  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **source** [[source-address](#)] *string*

Synopsis Add a list entry for **source**  
 Context **configure** *router string igmp interface string ssm-translate group-range start string end string source string*  
 Tree [source](#)  
 Min. Instances 1  
 Introduced 16.0.R1  
 Platforms All

**[source-address] string**

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>ssm-translate</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i> <b>source</b> <i>string</i>
Tree	<b>source</b>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>static</b>
Tree	<b>static</b>
Description	Commands in this context configure the testing of multicast forwarding on an interface without a receiver host.
Introduced	16.0.R1
Platforms	All

**group [group-address] string**

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>static</b> <b>group</b> <i>string</i>
Tree	<b>group</b>
Description	<p>Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records. IGMP static group memberships are used to test multicast forwarding without a receiver host.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p> <p>When the group entries are configured on point-to-point links that connect routers to a rendezvous point (RP), the static IGMP group entries do not generate join messages toward the RP.</p>
Introduced	16.0.R1
Platforms	All

**[group-address]** *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <i>router string igmp interface string static group string</i>
Tree	<i>group</i>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [*source-address*] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <i>router string igmp interface string static group string source string</i>
Tree	<i>source</i>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <i>router string igmp interface string static group string source string</i>
Tree	<i>source</i>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	Add a starg (*,G) address entry for the group range
Context	<b>configure</b> <i>router string igmp interface string static group string starg</i>
Tree	<i>starg</i>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2

Platforms All

### **group-range** *start string end string step string*

Synopsis Enter the **group-range** list instance

Context **configure** *router string igmp interface string static group-range start string end string step string*

Tree [group-range](#)

Description Commands in this context configure the ranges of IP addresses for the static groups.

Introduced 16.0.R1

Platforms All

### **start** *string*

Synopsis IP address for the start of the static group range

Context **configure** *router string igmp interface string static group-range start string end string step string*

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **end** *string*

Synopsis IP address for the end of the static group range

Context **configure** *router string igmp interface string static group-range start string end string step string*

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **step** *string*

Synopsis Step interval in the group-range address



Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i>
Tree	<a href="#">group-range</a>
MD-CLI Default	0.0.0.1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

### **[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **starg**

Synopsis	Add a starg (*,G) address entry for the group range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> <b>starg</b>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .

Introduced	16.0.R2
Platforms	All

**subnet-check** *boolean*

Synopsis	Allow subnet checking
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>subnet-check</b> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>interface</b> <i>string</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>query-interval</b> <i>number</i>
Tree	<a href="#">query-interval</a>
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>query-last-member-interval</b> <i>number</i>
Tree	<b>query-last-member-interval</b>
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>query-response-interval</b> <i>number</i>
Tree	<b>query-response-interval</b>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <b>router</b> <i>string</i> <b>igmp</b> <b>robust-count</b> <i>number</i>
Tree	<b>robust-count</b>
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, this value can be increased.
Range	2 to 10
Default	2
Introduced	16.0.R1

Platforms All

## ssm-translate

Synopsis Enter the **ssm-translate** context

Context **configure** [router](#) *string* [igmp](#) **ssm-translate**

Tree [ssm-translate](#)

Description Commands in this context configure a group range that is translated to SSM (S,G) entries. If a static entry needs to be created, it is translated from an IGMPv1 or v2 request to an SSM join message.

Introduced 16.0.R1

Platforms All

## group-range [start](#) *string* [end](#) *string*

Synopsis Enter the **group-range** list instance

Context **configure** [router](#) *string* [igmp](#) **ssm-translate** [group-range](#) [start](#) *string* [end](#) *string*

Tree [group-range](#)

Description Commands in this context configure the range of IP addresses that is translated to SSM (S,G) entries.

Introduced 16.0.R1

Platforms All

## start *string*

Synopsis Lower bound of the IP address group range

Context **configure** [router](#) *string* [igmp](#) **ssm-translate** [group-range](#) [start](#) *string* [end](#) *string*

Tree [group-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

## end *string*

Synopsis Upper bound of the IP address group range

Context **configure** [router](#) *string* [igmp](#) **ssm-translate** [group-range](#) [start](#) *string* [end](#) *string*

Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

### **[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **tunnel-interface**

Synopsis	Enter the <b>tunnel-interface</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a>
Tree	<a href="#">tunnel-interface</a>
Introduced	16.0.R1
Platforms	All

**ldp-p2mp-root** [p2mp-id] *reference* sender-address *reference*

Synopsis	Enter the <b>ldp-p2mp-root</b> list instance
Context	<b>configure</b> router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Description	Commands in this context configure the LDP parameters for the IGMP P2MP LSP tunnel.
Introduced	16.0.R1
Platforms	All

**[p2mp-id]** *reference*

Synopsis	RSVP P2MP LSP ID
Context	<b>configure</b> router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Reference	<b>configure</b> router <i>string</i> tunnel-interface ldp-p2mp-root <i>number</i> sender-address <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sender-address** *reference*

Synopsis	System address of the ingress LER for the P2MP RSVP LSP
Context	<b>configure</b> router <i>string</i> igmp tunnel-interface ldp-p2mp-root <i>reference</i> sender-address <i>reference</i>
Tree	ldp-p2mp-root
Reference	<b>configure</b> router <i>string</i> tunnel-interface ldp-p2mp-root <i>number</i> sender-address <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IGMP
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## static

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static</a>
Tree	<a href="#">static</a>
Description	<p>Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p>
Introduced	16.0.R1
Platforms	All

## group [group-address] string

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Description	<p>Commands in this context configure a static multicast group as either a starg (*,G), or one or more SSM (S,G) records.</p> <p>Static multicast group joins can be assigned to a tunnel interface associated with an RSVP P2MP LSP.</p> <p>A given &lt;*,G&gt; or &lt;S,G&gt; can only be associated with a single tunnel interface.</p> <p>A multicast packet which is received on an interface and which succeeds the RPF check for the source address will be replicated and forwarded to all OIFs which correspond to the branches of the P2MP LSP. The packet is sent on each OIF with the label stack indicated in the NHLFE of this OIF. The packets will also be replicated and forwarded natively on all OIFs which have received IGMP or PIM joins for this &lt;S,G&gt;.</p> <p>The multicast packet can be received over a PIM or IGMP interface which can be an IES interface, a spoke SDP terminated IES interface, or a network interface.</p>

Introduced	16.0.R1
Platforms	All

### **[group-address]** *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static group</a> <i>string</i>
Tree	<a href="#">group</a>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static group</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

### **[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static group</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All



**starg**

Synopsis	Add a starg (*,G) address entry for the group range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-root</a> <i>reference</i> <a href="#">sender-address</a> <i>reference</i> <a href="#">static</a> <a href="#">group</a> <i>string</i> <b>starg</b>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

**rsvp-p2mp-root** [[lsp-name](#)] *reference*

Synopsis	Enter the <b>rsvp-p2mp-root</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i>
Tree	<a href="#">rsvp-p2mp-root</a>
Description	Commands in this context configure the RSVP parameters for the IGMP P2MP LSP tunnel.
Introduced	16.0.R1
Platforms	All

**[lsp-name]** *reference*

Synopsis	LSP name for the RSVP P2MP LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i>
Tree	<a href="#">rsvp-p2mp-root</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## static

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">static</a>
Tree	<a href="#">static</a>
Description	<p>Commands in this context configure static multicast receiver hosts on a tunnel interface associated with an RSVP P2MP LSP.</p> <p>When a static IGMP group is configured, data is forwarded to an interface without receiving membership reports from host members.</p>
Introduced	16.0.R1
Platforms	All

## group [group-address] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">static</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

## [group-address] *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">igmp</a> <a href="#">tunnel-interface</a> <a href="#">rsvp-p2mp-root</a> <i>reference</i> <a href="#">static</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **source** [[source-address](#)] *string*

Synopsis Add a list entry for **source**

Context **configure** [router](#) *string* [igmp](#) [tunnel-interface](#) [rsvp-p2mp-root](#) *reference* [static](#) [group](#)  
*string* [source](#) *string*

Tree [source](#)

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 16.0.R1

Platforms All

### **[source-address]** *string*

Synopsis Source IP address of multicast channel sending data

Context **configure** [router](#) *string* [igmp](#) [tunnel-interface](#) [rsvp-p2mp-root](#) *reference* [static](#) [group](#)  
*string* [source](#) *string*

Tree [source](#)

Notes This element is part of a list key.

Introduced 16.0.R2

Platforms All

### **starg**

Synopsis Add a starg (\*,G) address entry for the group range

Context **configure** [router](#) *string* [igmp](#) [tunnel-interface](#) [rsvp-p2mp-root](#) *reference* [static](#) [group](#)  
*string* [starg](#)

Tree [starg](#)

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 16.0.R2

Platforms All

### **interface** [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance

Context **configure** [router](#) *string* [interface](#) *string*

Tree	<a href="#">interface</a>
Description	Commands in this context create a logical IP routing or unnumbered MPLS-TP interface. An IP address, port, or system can then be associated with the IP interface.
Introduced	16.0.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	Router interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Description	<p>This command specifies the name of the router interface. When a user enters a new name, the system creates a new logical interface and the context changes to that interface for more command processing.</p> <p>When an existing interface name is entered, the user enters the router interface context for editing and configuration.</p> <p>Nokia recommends using names that are meaningful and unique to remove ambiguity when displaying the state associated with IP interfaces either via show commands or model-driven interfaces.</p> <p>See "Router configuration overview" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about the interface name.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**cflowd-parameters**

Synopsis	Enter the <b>cflowd-parameters</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a>
Tree	<a href="#">cflowd-parameters</a>
Description	Commands in this context configure cflowd parameters for the associated IP interfaces.
Introduced	16.0.R1
Platforms	All

**sampling** [[sampling-type](#)] *keyword*

Synopsis	Enter the <b>sampling</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i>
Tree	<a href="#">sampling</a>
Description	Commands in this context configure cflowd sampling behavior, which configures the collection of traffic flow samples for analysis for this IP interface.
Introduced	16.0.R1
Platforms	All

**[sampling-type]** *keyword*

Synopsis	Traffic sampling type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i>
Tree	<a href="#">sampling</a>
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**direction** *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>

Tree	<a href="#">direction</a>
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R1
Platforms	All

### **sample-profile** (*keyword* | *number*)

Synopsis	Sample profile ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <a href="#">sample-profile</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">sample-profile</a>
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

### **type** *keyword*

Synopsis	Type of cflowd analysis
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **cpu-protection** *reference*

Synopsis	CPU protection policy ID for the interface
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpu-protection</a> <i>reference</i>
Tree	<a href="#">cpu-protection</a>
Description	This command assigns an existing CPU protection policy to the associated interface. For these interface types, the per-source rate limit is not applicable.  If no CPU-protection policy is assigned to an interface, the default policy is used to limit the overall rate.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

### **dist-cpu-protection** *reference*

Synopsis	DCP policy name for interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Description	This command configures a Distributed CPU Protection (DCP) policy for the associated IP interface or SAP. The user can only assign a valid created DCP policy to a SAP or network interface (this rule does not apply to templates such as an MSAP policy).  If the operator does not assign a DCP policy to a router interface, the system uses the default network DCP policy.  See "Distributed CPU protection" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide</i> for more information.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <i>policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <i>router string interface string egress</i>
Tree	<i>egress</i>
Description	Commands in this context configure egress network filter policies for the IP interface. The system does not filter unless an operator defines a filter.
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <i>router string interface string egress filter</i>
Tree	<i>filter</i>
Description	Commands in this context configure the names of the egress IPv4 and IPv6 network filter policies for the interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	16.0.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <i>router string interface string egress filter ip reference</i>
Tree	<i>ip</i>
Reference	<b>configure</b> <i>filter ip-filter string</i>
Introduced	16.0.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <i>router string interface string egress filter ipv6 reference</i>
Tree	<i>ipv6</i>
Reference	<b>configure</b> <i>filter ipv6-filter string</i>



Introduced	16.0.R1
Platforms	All

## eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <i>router string interface string eth-cfm</i>
Tree	<i>eth-cfm</i>
Description	Commands in this context configure the Ethernet CFM parameters for the associated IP interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mep *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Description	Commands in this context configure an 802.1ag Maintenance Endpoint (MEP) instance.
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## md-admin-name *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	<b>configure</b> <i>eth-cfm domain string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm domain string association string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a>
Tree	<a href="#">alarm-notification</a>
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.  Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm** *boolean*

Synopsis	Generate CCM messages
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Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b>) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-tlv-ignore** *keyword*

Synopsis	TLV to ignore on reception
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Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-tlv-ignore keyword</i>
Tree	<a href="#">ccm-tlv-ignore</a>
Description	This command configures the receiving MEP to ignore the specified TLVs in the CCM PDU. The ignored TLVs are reported as absent and have no impact on the MEP state machine.  When unconfigured, the MEP processes all the recognized TLVs.
Options	interface-status, port-status
Max. Instances	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### collect-lmm-fc-stats

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-fc-stats</i>
Tree	<a href="#">collect-lmm-fc-stats</a>
Description	Commands in this context configure per forwarding class (FC) LMM information collection.  The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.  This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number collect-lmm-fc-stats fc keyword</i>
Tree	<a href="#">fc</a>
Description	This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc-in-profile** *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>
Tree	<a href="#">fc-in-profile</a>
Description	This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.  An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.  When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>collect-lmm-stats</b> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	When configured to <b>true</b> , the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.

The **show eth-cfm collect-lmm-stats** command displays entities that have been enabled to collect transit and receive counters.

When configured to **false**, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">bit-error-threshold</a> <i>number</i>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840

Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## test-pattern

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a> <a href="#">pattern</a> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **facility-fault** *boolean*

Synopsis	Allow the facility MEP to generate a network action
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>facility-fault</b> <i>boolean</i>
Tree	<a href="#">facility-fault</a>
Description	When configured to <b>true</b> , the system facility MEP responds to a fault with a network-actionable function instead of just reporting the defect condition.  When configured to <b>false</b> , the system monitors transmissions and reports fault conditions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>grace</b>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>grace</b> <b>eth-ed</b>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace</b> <b>eth-ed</b> <b>max-rx-defect-window</b> <i>number</i>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace</b> <b>eth-ed</b> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace</b> <b>eth-ed</b> <b>rx-eth-ed</b> <i>boolean</i>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
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Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-vsm-grace

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace</i>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>

Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lbm-svc-act-responder** *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number lbm-svc-act-responder boolean</i>
Tree	<a href="#">lbm-svc-act-responder</a>
Description	<p>When configured to <b>true</b>, the router enables the MEP to process service activation streams encapsulated in ETH-CFM LBM frames that are directed to it.</p> <p>When configured to <b>false</b>, this command reverts to MEP LBM standard processing.</p> <p>There is interaction between this command and the <b>tools perform service id loopback eth</b> command. Nokia recommends that either the <b>lbm-svc act-responder</b> or the <b>tools perform service id loopback eth</b> command be used within a service. If both commands must be configured, and the target reflection point is the MAC Swap Loopback function, the inbound stream of data must not include ETH-CFM traffic that is equal to or lower than the domain level of any configured MEP that would otherwise extract and process the ETH-CFM message.</p> <p>See "Promiscuous ETH-LBM mode of operation" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Services Overview Guide</i> for more information.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect for fault alarm generation
Context	<b>configure</b> <i>router string interface string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect keyword</i>

Tree	<a href="#">low-priority-defect</a>
Description	This command specifies the lowest priority defect that generates a fault alarm and also configures the fault state of the MEP that causes a network reaction.
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">one-way-delay-threshold</a> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **external-reference**

Synopsis	Enter the <b>external-reference</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">external-reference</a>

Tree	<a href="#">external-reference</a>
Description	Commands in this context configure the external reference used to map a Nokia vendor-specific configuration and the OpenConfig state.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## openconfig

Synopsis	Enter the <b>openconfig</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">external-reference</a> <a href="#">openconfig</a>
Tree	<a href="#">openconfig</a>
Description	Commands in this context configure the OpenConfig reference key used to map a Nokia vendor-specific configuration and the OpenConfig state.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## subinterface *number*

Synopsis	Reference to the subinterface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">external-reference</a> <a href="#">openconfig</a> <a href="#">subinterface</a> <i>number</i>
Tree	<a href="#">subinterface</a>
Description	<p>This command configures the subinterface used to map a Nokia vendor-specific configuration and the OpenConfig state.</p> <p>This command configures the ability to query the OpenConfig state through NETCONF, gRPC, and the MD-CLI from any configuration mode, without having to add any Open Config model configuration. As part of the configuration, a user must also add a port to the Layer 3 interface.</p>
Range	0 to 4294967295
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## flavor *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Network interface flavor
Context	<b>configure</b> <i>router string interface string flavor keyword</i>
Tree	<i>flavor</i>
Options	regular – Regular network interface pdn – PDN interface unnumbered-mpls-tp – Unnumbered MPLS-TP interface
Default	regular
Introduced	16.0.R1
Platforms	All

### **gre-termination** *boolean*

Synopsis	Terminate GRE packets on primary subnet of interface
Context	<b>configure</b> <i>router string interface string gre-termination boolean</i>
Tree	<i>gre-termination</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <i>router string interface string hold-time</i>
Tree	<i>hold-time</i>
Description	Commands in this context configure the interface-level up and down hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <i>router string interface string hold-time ipv4</i>
Tree	<i>ipv4</i>
Description	Commands in this context configure the interface-level IPv4 hold timers for the associated IP interface.

Introduced	16.0.R1
Platforms	All

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <b>down</b>
Tree	<a href="#">down</a>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <b>down</b> <a href="#">init-only</a> <i>boolean</i>
Tree	<a href="#">init-only</a>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

## seconds *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <b>down</b> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All



## up

Synopsis	Enter the <b>up</b> context
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv4 up</b>
Tree	<b>up</b>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

## seconds *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv4 up seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv6</b>
Tree	<b>ipv6</b>
Description	Commands in this context configure the interface-level IPv6 hold timers for the associated IP interface.
Introduced	16.0.R1
Platforms	All

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv6 down</b>
Tree	<b>down</b>

Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All

### **init-only** *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure</b> <i>router string interface string hold-time ipv6 down</i> <b>init-only</b> <i>boolean</i>
Tree	<b>init-only</b>
Description	When configured to <b>true</b> , the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <i>router string interface string hold-time ipv6 down</i> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

### **up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <i>router string interface string hold-time ipv6</i> <b>up</b>
Tree	<b>up</b>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1

Platforms All

### **seconds** *number*

Synopsis Up hold time for the IP interface

Context **configure** *router string interface string hold-time ipv6 up seconds number*

Tree [seconds](#)

Range 1 to 1200

Units seconds

Introduced 16.0.R1

Platforms All

### **if-attribute**

Synopsis Enter the **if-attribute** context

Context **configure** *router string interface string if-attribute*

Tree [if-attribute](#)

Description Commands in this context configure attributes of the IP interface.

Introduced 16.0.R1

Platforms All

### **admin-group** *reference*

Synopsis Administrative group name for the interface

Context **configure** *router string interface string if-attribute admin-group reference*

Tree [admin-group](#)

Description This command specifies the administrative group membership to an interface.  
The configured administrative group membership is applied in all levels or areas the interface is participating in. The same interface cannot have different memberships in different levels or areas.

Reference **configure** *routing-options if-attribute admin-group string*

Max. Instances 32

Introduced 16.0.R1

Platforms All

**delay**

Synopsis	Enter the <b>delay</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a>
Tree	<a href="#">delay</a>
Introduced	20.7.R1
Platforms	All

**delay-selection** *keyword*

Synopsis	Delay source advertised by IGP for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">delay-selection</a> <i>keyword</i>
Tree	<a href="#">delay-selection</a>
Options	static, dynamic, static-preferred, dynamic-preferred
Default	static-preferred
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dynamic**

Synopsis	Enter the <b>dynamic</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a>
Tree	<a href="#">dynamic</a>
Description	Commands in this context configure dynamic link delay measurement options for the interface.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**measurement-template** *reference*

Synopsis	Link delay measurement template for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a> <a href="#">measurement-template</a> <a href="#">reference</a>
Tree	<a href="#">measurement-template</a>
Reference	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i>

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## twamp-light

Synopsis	Enter the <b>twamp-light</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a> <a href="#">twamp-light</a>
Tree	<a href="#">twamp-light</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a> <a href="#">twamp-light</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of IPv4 TWAMP Light packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">delay</a> <a href="#">dynamic</a> <a href="#">twamp-light</a> <a href="#">ipv4</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command specifies the administrative state of the IPv4 encapsulated TWAMP Light measurement packets.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## destination *string*

Synopsis	TWAMP Light measurement packet destination IPv4 address
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Context	<b>configure</b> <i>router string interface string if-attribute delay dynamic twamp-light ipv4 destination string</i>
Tree	<i>destination</i>
Description	This command specifies the unicast destination address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source string**

Synopsis	TWAMP Light measurement packets source IPv4 address
Context	<b>configure</b> <i>router string interface string if-attribute delay dynamic twamp-light ipv4 source string</i>
Tree	<i>source</i>
Description	This command specifies the unicast source address to be associated with the IPv4 TWAMP Light measurement packet.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <i>router string interface string if-attribute delay dynamic twamp-light ipv6</i>
Tree	<i>ipv6</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state keyword**

Synopsis	Administrative state of IPv6 TWAMP Light packets
Context	<b>configure</b> <i>router string interface string if-attribute delay dynamic twamp-light ipv6 admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **destination string**

Synopsis TWAMP Light measurement packet destination IPv6 address

Context **configure router string interface string if-attribute delay dynamic twamp-light ipv6 destination string**

Tree **destination**

Description This command specifies the unicast destination address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source string**

Synopsis TWAMP Light measurement packets source IPv6 address

Context **configure router string interface string if-attribute delay dynamic twamp-light ipv6 source string**

Tree **source**

Description This command specifies the unicast source address to be associated with the IPv6 TWAMP Light measurement packet. Globally routable and Link Local addressing is supported.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **static number**

Synopsis Unidirectional link delay static information

Context **configure router string interface string if-attribute delay static number**

Tree **static**

Description This command configures the unidirectional link delay. By default there is no configured delay, and the link delay metric TLV is pruned in the IGP.

Range 1 to 16777214

Units microseconds

Introduced 20.7.R1

Platforms All

**srlg-group** [*name*] *reference*

Synopsis	Add a list entry for <b>srlg-group</b>
Context	<b>configure</b> <i>router string interface string if-attribute srlg-group reference</i>
Tree	<i>srlg-group</i>
Description	<p>Commands in this context add a list entry for a Shared Risk Link Group (SRLG) that can be associated with an IP or MPLS interface to tag IP or MPLS interfaces that share a specific outcome with the same identifier. For example, an SRLG group identifier could represent all links that use separate fibers but are carried in the same fiber conduit.</p> <p>The name and identifier of each SRLG group must be configured locally on each router before the user configures the SRLG membership of an interface. A maximum of 1024 SRLGs can be configured per system. The user can apply SRLGs to an IES, VPRN, network IP, or MPLS interface. A maximum of 64 SRLGs can be applied to an interface.</p> <p>See "Shared Risk Link Groups" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i> for more information about SRLGs.</p>
Introduced	16.0.R1
Platforms	All

**[name]** *reference*

Synopsis	SRLG name
Context	<b>configure</b> <i>router string interface string if-attribute srlg-group reference</i>
Tree	<i>srlg-group</i>
Reference	<b>configure</b> <i>routing-options if-attribute srlg-group string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <i>router string interface string ingress</i>
Tree	<i>ingress</i>
Description	Commands in this context configure ingress network filter policies for the IP interface. If an ingress filter is not defined, the system performs no filtering.
Introduced	16.0.R1
Platforms	All



**destination-class-lookup** *boolean*

Synopsis	Enable BGP destination class lookup
Context	<b>configure</b> <i>router string interface string ingress destination-class-lookup boolean</i>
Tree	<a href="#">destination-class-lookup</a>
Description	When configured to <b>true</b> , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the <b>destination-class</b> match criterion for an IP filter policy to filter egress traffic based on BGP destination classes.  When configured to <b>false</b> , destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <i>router string interface string ingress filter</i>
Tree	<a href="#">filter</a>
Description	Commands in this context associate an IP filter policy with an IP interface. Filter policies control packet forwarding and dropping based on IP match criteria.
Introduced	16.0.R1
Platforms	All

**ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <i>router string interface string ingress filter ip reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter string</a>
Introduced	16.0.R1
Platforms	All

**ipv6 reference**

Synopsis	IPv6 filter policy name
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Context	<b>configure</b> <i>router string interface string ingress filter ipv6 reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **policy-accounting** *reference*

Synopsis	Policy accounting template applied to the interface
Context	<b>configure</b> <i>router string interface string ingress policy-accounting reference</i>
Tree	<a href="#">policy-accounting</a>
Reference	<b>configure</b> <a href="#">routing-options policy-accounting policy-acct-template</a> <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **ingress-stats** *boolean*

Synopsis	Collect ingress statistics
Context	<b>configure</b> <i>router string interface string ingress-stats boolean</i>
Tree	<a href="#">ingress-stats</a>
Description	<p>When configured to <b>true</b>, the router configures the collection of IPv4 and IPv6 offered packets and octets. This only applies to IP statistics, not to uRPF statistics.</p> <p>Octet statistics for IPv4 and IPv6 bytes at IP interfaces include the Layer 2 frame overhead.</p> <p>When configured to <b>false</b>, the router does not collect the statistics.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **ip-mtu** *number*

Synopsis	Interface IP MTU
Context	<b>configure</b> <i>router string interface string ip-mtu number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.

The operational IP MTU used for the interface is based on the configured IP MTU and the port MTU of the port bound to this interface; that is, the operational MTU is set to the lesser of the values configured by this command and the port MTU value less the Ethernet header size.

If the interface supports IPv6 packets, this command must be set to at least 1280, in accordance with RFC 2460 *Internet Protocol, Version 6 (IPv6) Specification*.

Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

## ipsec

Synopsis	Enable the <b>ipsec</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ipsec</b>
Tree	<a href="#">ipsec</a>
Description	Commands in this context configure an IPsec secured interface.
Introduced	22.7.R1
Platforms	VSR

## admin-state *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ipsec</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

## ip-exception *reference*

Synopsis	IP exception filter
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ipsec</b> <b>ip-exception</b> <i>reference</i>
Tree	<a href="#">ip-exception</a>

Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	<b>configure filter ip-exception string</b>
Introduced	22.7.R1
Platforms	VSR

### **ipsec-tunnel [name] string**

Synopsis	Enter the <b>ipsec-tunnel</b> list instance
Context	<b>configure router string interface string ipsec ipsec-tunnel string</b>
Tree	<a href="#">ipsec-tunnel</a>
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

### **[name] string**

Synopsis	IPsec tunnel name
Context	<b>configure router string interface string ipsec ipsec-tunnel string</b>
Tree	<a href="#">ipsec-tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

### **admin-state keyword**

Synopsis	Administrative state of the IPsec tunnel
Context	<b>configure router string interface string ipsec ipsec-tunnel string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

## bfd

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>bfd</b>
Tree	<b>bfd</b>
Introduced	22.7.R1
Platforms	VSR

## bfd-designate *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>bfd bfd-designate</b> <i>boolean</i>
Tree	<b>bfd-designate</b>
Default	false
Introduced	22.7.R1
Platforms	VSR

## bfd-liveness

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>bfd bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.

BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.

Introduced 22.7.R1  
 Platforms VSR

### **dest-ip string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Destination address used for the BFD session  
 Context **configure** *router string interface string ipsec ipsec-tunnel string bfd bfd-liveness dest-ip string*  
 Tree *dest-ip*  
 Notes This element is mandatory.  
 Introduced 22.7.R1  
 Platforms VSR

### **interface string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Name of the interface used by the BFD session  
 Context **configure** *router string interface string ipsec ipsec-tunnel string bfd bfd-liveness interface string*  
 Tree *interface*  
 String Length 1 to 32  
 Notes This element is mandatory.  
 Introduced 22.7.R1  
 Platforms VSR

**service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string bfd bfd-liveness service-name string</i>
Tree	<i>service-name</i>
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

**clear-df-bit** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string clear-df-bit boolean</i>
Tree	<i>clear-df-bit</i>
Description	When configured to <b>true</b> , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

**copy-traffic-class-upon-decapsulation** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
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Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string copy-traffic-class-upon-decapsulation boolean</i>
Tree	<a href="#">copy-traffic-class-upon-decapsulation</a>
Description	When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

### **encapsulated-ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string encapsulated-ip-mtu number</i>
Tree	<a href="#">encapsulated-ip-mtu</a>
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR



## icmp-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp-generation</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a>
Tree	<a href="#">icmp-generation</a>
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

## frag-required



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>frag-required</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a>
Tree	<a href="#">frag-required</a>
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b> <i>interval</i> <i>number</i>
Tree	<a href="#">interval</a>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

### **message-count** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b> <i>message-count</i> <i>number</i>
Tree	<a href="#">message-count</a>

Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp6-generation</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string icmp6-generation</i>
Tree	<a href="#">icmp6-generation</a>
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>packet-too-big</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string icmp6-generation packet-too-big</i>
Tree	<a href="#">packet-too-big</a>
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the <b>configure router interface ipsec ipsec-tunnel ip-mtu</b> command for the interface.</p>
Introduced	22.7.R1

Platforms VSR

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

### **interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

## message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string icmp6-generation packet-too-big message-count number</i>
Tree	<a href="#">message-count</a>
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

## ip-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string ip-mtu number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

## key-exchange

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>key-exchange</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>key-exchange</b>
Tree	<b>key-exchange</b>
Introduced	22.7.R1
Platforms	VSR

## dynamic



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>dynamic</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>key-exchange dynamic</b>
Tree	<b>dynamic</b>
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	22.7.R1
Platforms	VSR

## auto-establish *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string</i> <b>key-exchange dynamic auto-establish</b> <i>boolean</i>
Tree	<b>auto-establish</b>
Default	false
Introduced	22.7.R1
Platforms	VSR

## cert

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>cert</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">cert</a>
Tree	<a href="#">cert</a>
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

## cert-profile *reference*

Synopsis	Certificate profile name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">cert</a> <a href="#">cert-profile</a> <i>reference</i>
Tree	<a href="#">cert-profile</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">cert-profile</a> <i>string</i>
Introduced	22.7.R1
Platforms	VSR

## status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">cert</a> <a href="#">status-verify</a>
Tree	<a href="#">status-verify</a>
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

**default-result** *keyword*

Synopsis	Default result for Certificate Status Verification
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert status-verify</b> <b>default-result</b> <i>keyword</i>
Tree	<b>default-result</b>
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	22.7.R1
Platforms	VSR

**primary** *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert status-verify</b> <b>primary</b> <i>keyword</i>
Tree	<b>primary</b>
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsf
Default	crl
Introduced	22.7.R1
Platforms	VSR

**secondary** *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert status-verify</b> <b>secondary</b> <i>keyword</i>
Tree	<b>secondary</b>
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsf
Default	none



Introduced 22.7.R1  
 Platforms VSR

### **trust-anchor-profile** *reference*

Synopsis Trust anchor profile name  
 Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange dynamic cert trust-anchor-profile reference*  
 Tree [trust-anchor-profile](#)  
 Reference **configure** *ipsec trust-anchor-profile string*  
 Introduced 22.7.R1  
 Platforms VSR

### **id**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context  
 Context **configure** *router string interface string ipsec ipsec-tunnel string key-exchange dynamic id*  
 Tree [id](#)  
 Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:
 

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

 Introduced 22.7.R1  
 Platforms VSR

### **fqdn** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type

Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id fqdn string</i>
Tree	<a href="#">fqdn</a>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

### **ipv4 string**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv4 string</i>
Tree	<a href="#">ipv4</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

### **ipv6** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic id ipv6 (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ipv6</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

## ike-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">ike-policy</a> <i>reference</i>
Tree	<a href="#">ike-policy</a>
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ike-policy</a> <i>number</i>
Introduced	22.7.R1
Platforms	VSR

## ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i>
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

## pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange dynamic pre-shared-key string</i>
Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

## manual



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>manual</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange manual</i>
Tree	<a href="#">manual</a>
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	22.7.R1
Platforms	VSR

## keys [[security-association](#)] *number direction keyword*

Synopsis	Enter the <b>keys</b> list instance
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	<a href="#">keys</a>
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

## [[security-association](#)] *number*

Synopsis	SA entry ID
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Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	<a href="#">keys</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

### **direction** *keyword*

Synopsis	Direction of the IPsec tunnel
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	<a href="#">keys</a>
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

### **authentication-key** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string key-exchange manual keys number direction keyword authentication-key string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 130
Introduced	22.7.R1
Platforms	VSR

## encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">encryption-key</a> <i>string</i>
Tree	<a href="#">encryption-key</a>
String Length	1 to 66
Introduced	22.7.R1
Platforms	VSR

## ipsec-transform *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

## spi *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">spi</a> <i>number</i>
Tree	<a href="#">spi</a>

Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.  The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **local-gateway-address-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string local-gateway-address-override</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-gateway-address-override</a>
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

### **max-history-key-records**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>max-history-key-records</b> context
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string max-history-key-records</i>
Tree	<a href="#">max-history-key-records</a>
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

## esp number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	<b>configure</b> router string interface string ipsec ipsec-tunnel string max-history-key-records esp number
Tree	esp
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

## ike number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	<b>configure</b> router string interface string ipsec ipsec-tunnel string max-history-key-records ike number
Tree	ike
Range	1 to 3
Introduced	22.7.R1
Platforms	VSR

## pmtu-discovery-aging number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	<b>configure</b> router string interface string ipsec ipsec-tunnel string pmtu-discovery-aging number
Tree	pmtu-discovery-aging



Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	22.7.R1
Platforms	VSR

### **private-sap** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string private-sap number</i>
Tree	<i>private-sap</i>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **private-service** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	<b>configure</b> <i>router string interface string ipsec ipsec-tunnel string private-service string</i>

Tree	<a href="#">private-service</a>
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

### **private-tcp-mss-adjust** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">private-tcp-mss-adjust</a> <i>number</i>
Tree	<a href="#">private-tcp-mss-adjust</a>
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">propagate-pmtu-v4</a> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true

Introduced 22.7.R1  
 Platforms VSR

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable propagation of the path MTU to IPv6 hosts

Context **configure** *router string interface string ipsec ipsec-tunnel string propagate-pmtu-v6 boolean*

Tree [propagate-pmtu-v6](#)

Description When configured to **true**, the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).

Default true

Introduced 22.7.R1

Platforms VSR

### **public-tcp-mss-adjust** (*number | keyword*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis TCP maximum segment size (MSS) on the public network

Context **configure** *router string interface string ipsec ipsec-tunnel string public-tcp-mss-adjust (number | keyword)*

Tree [public-tcp-mss-adjust](#)

Description This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.

Range 512 to 9000

Units bytes

Options auto

Introduced 22.7.R1

Platforms VSR

**remote-gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>remote-gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>remote-gateway-address</b>
Introduced	22.7.R1
Platforms	VSR

**replay-window number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>replay-window</b> <i>number</i>
Tree	<b>replay-window</b>
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32   64   128   256   512
Units	packets
Introduced	22.7.R1
Platforms	VSR

**security-policy****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>security-policy</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>security-policy</b>
Tree	<b>security-policy</b>

Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

**id number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">security-policy</a> <i>id number</i>
Tree	<a href="#">id</a>
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

**strict-match boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">security-policy</a> <a href="#">strict-match</a> <i>boolean</i>
Tree	<a href="#">strict-match</a>
Description	<p>When configured to <b>true</b>, this command enables strict match of the security policy entry.</p> <p>When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.</p> <p>If there is no match, the setup fails, and TS_UNACCEPTABLE is sent.</p> <p>If there is a match, but there is an existing CHILD_SA for the matched security policy, the setup fails, and NO_PROPOSAL_CHOSEN is sent.</p> <p>If there is a match, and there is not a CHILD_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD_SA is created.</p>
Default	false

Introduced 22.7.R1  
 Platforms VSR

### **ipv6-exception** *reference*

Synopsis IPv6 filter exception used to bypass encryption  
 Context **configure** *router string interface string ipsec ipv6-exception reference*  
 Tree [ipv6-exception](#)  
 Description This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.  
 Reference **configure** *filter ipv6-exception string*  
 Introduced 22.7.R1  
 Platforms VSR

### **public-sap** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Public SAP ID  
 Context **configure** *router string interface string ipsec public-sap number*  
 Tree [public-sap](#)  
 Range 0 to 4094  
 Notes This element is mandatory.  
 Introduced 22.7.R1  
 Platforms VSR

### **tunnel-group** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tunnel group ID

Context	<b>configure</b> <i>router string interface string ipsec tunnel-group reference</i>
Tree	<a href="#">tunnel-group</a>
Reference	<b>configure</b> <i>isa tunnel-group number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <i>router string interface string ipv4</i>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## allow-directed-broadcasts *boolean*

Synopsis	Forward directed broadcasts
Context	<b>configure</b> <i>router string interface string ipv4 allow-directed-broadcasts boolean</i>
Tree	<a href="#">allow-directed-broadcasts</a>
Description	<p>When configured to <b>true</b>, the router forwards packets received on a local router interface to the subnet broadcast address of another IP interface.</p> <p>When configured to <b>false</b>, this router does not allow directed broadcasts and the packets are discarded.</p> <p>Allowing directed broadcasts is a well-known mechanism used for denial-of-service attacks.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## bfd

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <i>router string interface string ipv4 bfd</i>
Tree	<a href="#">bfd</a>

Description	Commands in this context configure the Bidirectional Forwarding Detection (BFD) settings for the associated IP interface.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>echo-receive</b> <i>number</i>
Tree	<b>echo-receive</b>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>multiplier</b> <i>number</i>
Tree	<b>multiplier</b>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1



Platforms All

### **receive number**

Synopsis BFD receive interval over this interface

Context **configure** *router string interface string ipv4 bfd receive number*

Tree [receive](#)

Description This command specifies the receive interval for the BFD session.  
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Units milliseconds

Default 100

Introduced 16.0.R1

Platforms All

### **transmit-interval number**

Synopsis BFD transmit interval over this interface

Context **configure** *router string interface string ipv4 bfd transmit-interval number*

Tree [transmit-interval](#)

Description This command configures the transmit intervals.  
On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range 10 to 100000

Units milliseconds

Default 100

Introduced 16.0.R1

Platforms All

### **type keyword**

Synopsis Local termination point for the BFD session

Context **configure** *router string interface string ipv4 bfd type keyword*

Tree [type](#)

Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## dhcp

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure</b> <i>router string interface string ipv4 dhcp</i>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of DHCP
Context	<b>configure</b> <i>router string interface string ipv4 dhcp admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string interface string ipv4 dhcp description string</i>
Tree	<a href="#">description</a>

String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **gi-address** *string*

Synopsis	GI address for the DHCP relay
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">gi-address</a> <i>string</i>
Tree	<a href="#">gi-address</a>
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	All

### **option-82**

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a>
Tree	<a href="#">option-82</a>
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

### **action** *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	replace, drop, keep
Default	keep

Introduced 16.0.R1  
Platforms All

### **circuit-id**

Synopsis Enter the **circuit-id** context  
Context **configure** [router](#) *string* [interface](#) *string* [ipv4 dhcp option-82](#) [circuit-id](#)  
Tree [circuit-id](#)  
Introduced 16.0.R1  
Platforms All

### **ascii-tuple**

Synopsis Use the ASCII-encoded tuple for the circuit ID  
Context **configure** [router](#) *string* [interface](#) *string* [ipv4 dhcp option-82](#) [circuit-id](#) [ascii-tuple](#)  
Tree [ascii-tuple](#)  
Notes The following elements are part of a choice: **ascii-tuple**, **if-name**, **ifindex**, **none**, **port-id**, or **vlan-ascii-tuple**.  
Introduced 16.0.R1  
Platforms All

### **if-name**

Synopsis Use the interface name for the circuit ID  
Context **configure** [router](#) *string* [interface](#) *string* [ipv4 dhcp option-82](#) [circuit-id](#) [if-name](#)  
Tree [if-name](#)  
Notes The following elements are part of a choice: **ascii-tuple**, **if-name**, **ifindex**, **none**, **port-id**, or **vlan-ascii-tuple**.  
Introduced 16.0.R1  
Platforms All

### **ifindex**

Synopsis Use the interface index for the circuit ID  
Context **configure** [router](#) *string* [interface](#) *string* [ipv4 dhcp option-82](#) [circuit-id](#) [ifindex](#)  
Tree [ifindex](#)

Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## none

Synopsis	Do not include the circuit ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id none</b>
Tree	<b>none</b>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## port-id

Synopsis	Use the port ID for the circuit ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id port-id</b>
Tree	<b>port-id</b>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 circuit-id vlan-ascii-tuple</b>
Tree	<b>vlan-ascii-tuple</b>
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet.  When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-name</b> , <b>ifindex</b> , <b>none</b> , <b>port-id</b> , or <b>vlan-ascii-tuple</b> .

Introduced	16.0.R1
Platforms	All

## remote-id

Synopsis	Enter the <b>remote-id</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a> <a href="#">remote-id</a>
Tree	<a href="#">remote-id</a>
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

## ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a> <a href="#">remote-id</a> <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	All

## mac

Synopsis	Use the MAC address for the remote ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a> <a href="#">remote-id</a> <a href="#">mac</a>
Tree	<a href="#">mac</a>
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	All

## none

Synopsis	Do not include the remote ID
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">remote-id</a> <a href="#">none</a>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	All

## vendor-specific-option

Synopsis	Enter the <b>vendor-specific-option</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a>
Tree	<a href="#">vendor-specific-option</a>
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

## client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">client-mac-address</a> <i>boolean</i>
Tree	<a href="#">client-mac-address</a>
Default	false
Introduced	16.0.R1
Platforms	All

## pool-name *boolean*

Synopsis	Send the pool name in the VSO
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">pool-name</a> <i>boolean</i>
Tree	<a href="#">pool-name</a>
Default	false
Introduced	16.0.R1
Platforms	All

**port-id** *boolean*

Synopsis	Send the port ID in the VSO
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">port-id</a> <i>boolean</i>
Tree	<a href="#">port-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**service-id** *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">service-id</a> <i>boolean</i>
Tree	<a href="#">service-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**string** *string*

Synopsis	User-defined ASCII string for the VSO
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**system-id** *boolean*

Synopsis	Send the system ID in the VSO
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">system-id</a> <i>boolean</i>
Tree	<a href="#">system-id</a>



Default	false
Introduced	16.0.R1
Platforms	All

### **python-policy** *reference*

Synopsis	Python policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp python-policy</b> <i>reference</i>
Tree	<a href="#">python-policy</a>
Description	This command associates a Python policy name with the interface.
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **relay-plain-bootp** *boolean*

Synopsis	Relay plain BOOTP messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp relay-plain-bootp</b> <i>boolean</i>
Tree	<a href="#">relay-plain-bootp</a>
Description	When configured to <b>true</b> , the system relays plain BOOTP messages. When configured to <b>false</b> , the system considers the plain BOOTP packets as malformed DHCP packets; therefore, the system does not relay the messages.
Default	false
Introduced	16.0.R1
Platforms	All

### **release-include-gi-address** *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp release-include-gi-address</b> <i>boolean</i>
Tree	<a href="#">release-include-gi-address</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server string**

Synopsis	IP addresses for DHCP server requests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>server</b> <i>string</i>
Tree	<b>server</b>
Description	This command configures a list of servers that this interface forwards requests to.  The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**src-ip-addr keyword**

Synopsis	Type of source address to use for DHCP relay
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>src-ip-addr</b> <i>keyword</i>
Tree	<b>src-ip-addr</b>
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	All

**trusted boolean**

Synopsis	Relay untrusted packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>trusted</b> <i>boolean</i>
Tree	<b>trusted</b>
Description	When configured to <b>true</b> , the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.  A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.

This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.

Default	false
Introduced	16.0.R1
Platforms	All

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a>
Tree	<a href="#">icmp</a>
Description	Commands in this context configure Internet Control Message Protocol (ICMP) parameters on a network IP interface.
Introduced	16.0.R1
Platforms	All

## mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">mask-reply</a> <i>boolean</i>
Tree	<a href="#">mask-reply</a>
Default	true
Introduced	16.0.R1
Platforms	All

## param-problem

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a>
Tree	<a href="#">param-problem</a>
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>param-problem</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>param-problem</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>param-problem</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**redirects**

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>redirects</b>
Tree	<b>redirects</b>

Description	Commands in this context configure the settings for ICMP redirect messages generated by the interface.  The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp redirects admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp redirects number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 icmp redirects seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1

Platforms All

## **ttl-expired**

Synopsis Enter the **ttl-expired** context

Context **configure router string interface string ipv4 icmp ttl-expired**

Tree **ttl-expired**

Description Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.

Introduced 16.0.R1

Platforms All

## **admin-state keyword**

Synopsis Administrative state of sending TTL expired messages

Context **configure router string interface string ipv4 icmp ttl-expired admin-state keyword**

Tree **admin-state**

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

## **number number**

Synopsis Maximum number of TTL expired messages to send

Context **configure router string interface string ipv4 icmp ttl-expired number number**

Tree **number**

Range 10 to 2000

Default 100

Introduced 16.0.R1

Platforms All

## **seconds number**

Synopsis Time used to limit the number of TTL expired messages

Context	<b>configure</b> <i>router string interface string ipv4 icmp ttl-expired seconds number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

## unreachables

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure</b> <i>router string interface string ipv4 icmp unreachables</i>
Tree	<a href="#">unreachables</a>
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	<b>configure</b> <i>router string interface string ipv4 icmp unreachables admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## number *number*

Synopsis	Maximum number of unreachable messages to send
Context	<b>configure</b> <i>router string interface string ipv4 icmp unreachables number number</i>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100

Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables</a> <i>seconds</i> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **ip-helper-address** *string*

Synopsis	IP address of the target UDP broadcast gateway
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 ip-helper-address</a> <i>string</i>
Tree	<a href="#">ip-helper-address</a>
Description	This command configures the redirection of broadcast UDP packets received on the associated interface to the specified helper gateway address, and then to the gateway.
Introduced	16.0.R1
Platforms	All

### **local-dhcp-server** *reference*

Synopsis	DHCP server for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 local-dhcp-server</a> <i>reference</i>
Tree	<a href="#">local-dhcp-server</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

## learn-unsolicited *boolean*

Synopsis	Learn new entries from any received NA message
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">learn-unsolicited</a> <i>boolean</i>
Tree	<a href="#">learn-unsolicited</a>
Description	<p>When configured to <b>true</b>, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to <b>false</b>, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> <li>• If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.</li> <li>• If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.</li> </ul>
Default	false
Introduced	16.0.R1
Platforms	All

## limit

Synopsis	Enter the <b>limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a>
Tree	<a href="#">limit</a>
Description	<p>Commands in this context configure the maximum number of dynamic neighbor entries that can be learned on the interface</p> <p>When the number of entries reaches the threshold (the configured percentage) of this limit, the system sends an SNMP trap.</p>

When the limit is exceeded, the system learns no new entries until an entry expires and traffic to these destinations is dropped. Already learned entries are refreshed.

Introduced 16.0.R1  
 Platforms All

### **log-only** *boolean*

Synopsis Generate log entries only if limit is reached  
 Context **configure** *router string interface string ipv4 neighbor-discovery limit log-only boolean*  
 Tree [log-only](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **max-entries** *number*

Synopsis Maximum number of entries learned on an IP interface  
 Context **configure** *router string interface string ipv4 neighbor-discovery limit max-entries number*  
 Tree [max-entries](#)  
 Range 0 to 524288  
 Introduced 16.0.R1  
 Platforms All

### **threshold** *number*

Synopsis Threshold value that triggers a warning message  
 Context **configure** *router string interface string ipv4 neighbor-discovery limit threshold number*  
 Tree [threshold](#)  
 Range 1 to 100  
 Units percent  
 Default 90  
 Introduced 16.0.R1  
 Platforms All

**local-proxy-arp** *boolean*

Synopsis	Enable local proxy ARP on interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">local-proxy-arp</a> <i>boolean</i>
Tree	<a href="#">local-proxy-arp</a>
Description	When configured to <b>true</b> , the router enables local proxy ARP on the interface. When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

**proactive-refresh** *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">proactive-refresh</a> <i>boolean</i>
Tree	<a href="#">proactive-refresh</a>
Description	When configured to <b>true</b> , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries). When configured to <b>false</b> , the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.
Default	false
Introduced	16.0.R1
Platforms	All

**proxy-arp-policy** *reference*

Synopsis	Proxy ARP policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">proxy-arp-policy</a> <i>reference</i>
Tree	<a href="#">proxy-arp-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced	16.0.R1
Platforms	All

### **remote-proxy-arp** *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">remote-proxy-arp</a> <i>boolean</i>
Tree	<a href="#">remote-proxy-arp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **retry-timer** *number*

Synopsis	ARP retry interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">retry-timer</a> <i>number</i>
Tree	<a href="#">retry-timer</a>
Range	1 to 300
Units	deciseconds
Default	50
Introduced	16.0.R1
Platforms	All

### **static-neighbor** [[ipv4-address](#)] *string*

Synopsis	Enter the <b>static-neighbor</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i>
Tree	<a href="#">static-neighbor</a>
Description	Commands in this context configure a static ARP entry that associates an IP address with a MAC address for the core router instance.
Introduced	16.0.R1
Platforms	All

**[ipv4-address] string**

Synopsis	IPv4 address that corresponds to the physical address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b> <b>static-neighbor</b> <i>string</i>
Tree	<b>static-neighbor</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**mac-address string**

Synopsis	MAC address for the static neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b> <b>static-neighbor</b> <i>string</i> <b>mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**static-neighbor-unnumbered**

Synopsis	Enable the <b>static-neighbor-unnumbered</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b> <b>static-neighbor-unnumbered</b>
Tree	<b>static-neighbor-unnumbered</b>
Description	Commands in this context configure the static ARP MAC for an unnumbered interface. This entry overrides the dynamic ARP entry on the unnumbered interface.
Introduced	16.0.R1
Platforms	All

**mac-address string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address for the static neighbor
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Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery static-neighbor-unnumbered mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery timeout</b> <i>number</i>
Tree	<b>timeout</b>
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

### **primary**

Synopsis	Enable the <b>primary</b> context
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 primary</b>
Tree	<b>primary</b>
Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 primary address</b> <i>string</i>
Tree	<b>address</b>
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

### **broadcast** *keyword*

Synopsis	Broadcast address format
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>primary</b> <b>broadcast</b> <i>keyword</i>
Tree	<b>broadcast</b>
Description	This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts.  This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

### **gre-termination** *boolean*

Synopsis	Enable GRE termination
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>primary</b> <b>gre-termination</b> <i>boolean</i>
Tree	<b>gre-termination</b>
Description	When configured to <b>true</b> , the router terminates MPLS-over-GRE and IP-over-GRE packets for destination IP addresses from a user-defined subnet. The user defines a subnet for the termination of GRE packets by executing this command on a numbered network IP interface or a loopback interface.
Default	false
Introduced	19.10.R1
Platforms	VSR

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>primary</b> <b>prefix-length</b> <i>number</i>
Tree	<b>prefix-length</b>
Range	0 to 32

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>primary</b> <b>track-srrp</b> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **qos-route-lookup** *keyword*

Synopsis	IP address for QoS route lookup for ingress IP packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>qos-route-lookup</b> <i>keyword</i>
Tree	<a href="#">qos-route-lookup</a>
Description	<p>This command specifies the IP address type used for QPPB enabled per-packet QoS handling (in terms of FC and priority). When using QPPB, routes are associated with a QoS treatment (FC and optionally priority) through either explicit configuration or the route policy. If an IPv4 or IPv6 packet arrives on an interface where the configuration of this command applies to the packet, the QoS treatment of the packet is based on the route that matched the destination IP address or the route that matched the source IP address.</p> <p>See "Enabling QPPB on an IP interface" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about QPPB.</p>
Options	destination, source, source-and-dest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **secondary** [[address](#)] *string*

Synopsis	Enter the <b>secondary</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>secondary</b> <i>string</i>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1



Platforms All

### **[address]** *string*

Synopsis Secondary IPv4 address assigned to the interface

Context **configure** *router string interface string ipv4 secondary string*

Tree [secondary](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **broadcast** *keyword*

Synopsis Broadcast address format

Context **configure** *router string interface string ipv4 secondary string broadcast keyword*

Tree [broadcast](#)

Description This command overrides the default broadcast address that the IP interface uses when sourcing IP broadcasts.

This command does not affect the type of broadcasts the IP interface can receive. The IP interface can receive either the local broadcast or the valid subnet broadcast address sent by a host.

Options all-ones, host-ones

Default host-ones

Introduced 16.0.R1

Platforms All

### **igp-inhibit** *boolean*

Synopsis Disable the running IGP from recognizing secondary IP

Context **configure** *router string interface string ipv4 secondary string igp-inhibit boolean*

Tree [igp-inhibit](#)

Description When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.

Default false

Introduced 16.0.R1

Platforms All

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <i>router string interface string ipv4 secondary string prefix-length number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	<b>configure</b> <i>router string interface string ipv4 secondary string track-srrp number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **tcp-mss** *number*

Synopsis	TCP maximum segment size for the interface
Context	<b>configure</b> <i>router string interface string ipv4 tcp-mss number</i>
Tree	<a href="#">tcp-mss</a>
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

### **unnumbered**

Synopsis	Enter the <b>unnumbered</b> context
Context	<b>configure</b> <i>router string interface string ipv4 unnumbered</i>
Tree	<a href="#">unnumbered</a>

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Description	Commands in this context configure an IP interface as an unnumbered interface and specify the IP address to use for the interface. An operator can configure unnumbered interfaces to conserve IP addresses.
Introduced	16.0.R1
Platforms	All

### **ip-address** *string*

Synopsis	IP address to associate with unnumbered IP interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>unnumbered</b> <b>ip-address</b> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

### **ip-int-name** *string*

Synopsis	Unnumbered IP interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>unnumbered</b> <b>ip-int-name</b> <i>string</i>
Tree	<a href="#">ip-int-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

### **system**

Synopsis	Use system IP address for the unnumbered IP interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>unnumbered</b> <b>system</b>
Tree	<a href="#">system</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

**urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a>
Tree	<a href="#">urpf-check</a>
Introduced	16.0.R1
Platforms	All

**ignore-default** *boolean*

Synopsis	Ignore default routes when performing a uRPF check
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> <a href="#">ignore-default</a> <i>boolean</i>
Tree	<a href="#">ignore-default</a>
Description	When configured to <b>true</b> , the router ignores default routes while performing a uRPF check to determine the validity of incoming packets. When configured to <b>false</b> , default routes are considered eligible.
Default	false
Introduced	16.0.R1
Platforms	All

**mode** *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

**vrrp** [[virtual-router-id](#)] *number*

Synopsis	Enter the <b>vrrp</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i>
Tree	<a href="#">vrrp</a>

Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its Virtual Router Identifier (VRID) and a set of IP addresses.
Introduced	16.0.R1
Platforms	All

### **[virtual-router-id]** *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i>
Tree	<b>vrrp</b>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of VRRP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	<p>The command determines the administrative state of non-owner virtual router instances. Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**authentication-key *string***

Synopsis	Password for simple text authentication
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
Description	<p>This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.</p> <p>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.</p>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

**backup *string***

Synopsis	Virtual router IP addresses for the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>backup</b> <i>string</i>
Tree	<b>backup</b>
Description	<p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

## bfd-liveness

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number</i> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Description	<p>Commands in this context assign a Bidirectional Forwarding Detection (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism that speeds up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP advertisement message. In addition, the standby VRRP routers transition to a master state to speed up convergence.</p> <p>The VRRP election process takes place based on the advertisement messages sent by all VRRP routers.</p> <p>Only one BFD session can be assigned to any VRRP or SRRP instance, but multiple SRRP or VRRP sessions can use the same BFD session.</p>
Introduced	16.0.R1
Platforms	All

## dest-ip *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number</i> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i>
Tree	<b>dest-ip</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## interface-name *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **service-name** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **init-delay** *number*

Synopsis	VRRP initialization delay timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">init-delay</a> <i>number</i>
Tree	<a href="#">init-delay</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **mac** *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">mac</a> <i>string</i>



Tree	<a href="#">mac</a>
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
Introduced	16.0.R1
Platforms	All

### **master-int-inherit** *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>master-int-inherit</b> <i>boolean</i>
Tree	<a href="#">master-int-inherit</a>
Description	<p>When configured to <b>true</b>, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to <b>false</b>, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

### **message-interval** *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>message-interval</b> <i>number</i>
Tree	<a href="#">message-interval</a>

Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command:</p> <ul style="list-style-type: none"> <li>• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as master.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.</li> </ul>
Range	1 to 2559
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

## monitor-oper-group *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number</i> <b>monitor-oper-group</b> <i>reference</i>
Tree	<b>monitor-oper-group</b>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	<b>configure</b> <i>service oper-group string</i>
Introduced	22.2.R1

Platforms All

### **ntp-reply** *boolean*

Synopsis Allow processing of NTP requests

Context **configure** *router string interface string ipv4 vrrp number ntp-reply boolean*

Tree [ntp-reply](#)

Description When configured to **true**, the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to **false**, the router does not process NTP requests.

Default false

Introduced 20.2.R1

Platforms All

### **oper-group** *reference*

Synopsis Operational group name associated with the VRRP

Context **configure** *router string interface string ipv4 vrrp number oper-group reference*

Tree [oper-group](#)

Description This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.

Reference **configure** *service oper-group string*

Introduced 16.0.R1

Platforms All

### **owner** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Designate the virtual router instance as owner

Context **configure** *router string interface string ipv4 vrrp number owner boolean*

Tree [owner](#)

Description	When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.  When configured to <b>false</b> , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

### **passive** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Description	When configured to <b>true</b> , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).  When configured to <b>false</b> , this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.
Default	false
Introduced	16.0.R1
Platforms	All

### **ping-reply** *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number</i> <b>ping-reply</b> <i>boolean</i>
Tree	<b>ping-reply</b>
Description	When configured to <b>true</b> , the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).  When configured to <b>false</b> , ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.

Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.

Default	false
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	VRRP priority control policy
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number policy reference</i>
Tree	<i>policy</i>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	<b>configure</b> <i>vrrp policy number</i>
Introduced	16.0.R1
Platforms	All

### **preempt boolean**

Synopsis	Allow the VRRP to override an existing non-owner master
Context	<b>configure</b> <i>router string interface string ipv4 vrrp number preempt boolean</i>
Tree	<i>preempt</i>
Description	<p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1

Platforms All

### **priority number**

Synopsis Base priority for the VRRP

Context **configure** *router string interface string ipv4 vrrp number priority number*

Tree [priority](#)

Description This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.

The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.

Range 1 to 255

Introduced 16.0.R1

Platforms All

### **ssh-reply boolean**

Synopsis Allow the non-owner master to reply to SSH requests

Context **configure** *router string interface string ipv4 vrrp number ssh-reply boolean*

Tree [ssh-reply](#)

Description When configured to **true**, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).

When configure to **false**, SSH requests to non-owner master virtual IP addresses are silently discarded.

Default false

Introduced 16.0.R1

Platforms All

### **standby-forwarding boolean**

Synopsis Allow standby router to forward traffic

Context **configure** *router string interface string ipv4 vrrp number standby-forwarding boolean*

Tree [standby-forwarding](#)

Description	When configured to <b>true</b> , the standby router forwards all traffic. When configured to <b>false</b> , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

### telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp number</b> <b>telnet-reply</b> <i>boolean</i>
Tree	<a href="#">telnet-reply</a>
Description	When configured to <b>true</b> , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to <b>false</b> , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

### traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp number</b> <b>traceroute-reply</b> <i>boolean</i>
Tree	<a href="#">traceroute-reply</a>
Description	When configured to <b>true</b> , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to <b>false</b> , the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <i>router string interface string</i> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

**address** [**ipv6-address**] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <i>router string interface string</i> <b>ipv6 address string</b>
Tree	<b>address</b>
Introduced	16.0.R1
Platforms	All

**[ipv6-address]** *string*

Synopsis	IPv6 address assigned to the interface
Context	<b>configure</b> <i>router string interface string</i> <b>ipv6 address string</b>
Tree	<b>address</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**duplicate-address-detection** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	<b>configure</b> <i>router string interface string</i> <b>ipv6 address string duplicate-address-detection boolean</b>
Tree	<b>duplicate-address-detection</b>
Description	When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD).



When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.

Default	true
Introduced	16.0.R1
Platforms	All

### **eui-64** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	<b>configure</b> <i>router string interface string ipv6 address string eui-64 boolean</i>
Tree	<a href="#">eui-64</a>
Description	When configured to <b>true</b> , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

### **prefix-length** *number*

Synopsis	IPv6 address prefix length
Context	<b>configure</b> <i>router string interface string ipv6 address string prefix-length number</i>
Tree	<a href="#">prefix-length</a>
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **primary-preference** *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	<b>configure</b> <i>router string interface string ipv6 address string primary-preference number</i>

Tree	<a href="#">primary-preference</a>
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <i>address</i> <i>string</i> <a href="#">track-srrp</a> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <i>bfd</i>
Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <i>bfd</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	All

### **echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 bfd echo-receive</b> <i>number</i>
Tree	<b>echo-receive</b>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 bfd multiplier</b> <i>number</i>
Tree	<b>multiplier</b>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **receive** *number*

Synopsis	BFD receive interval over this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 bfd receive</b> <i>number</i>
Tree	<b>receive</b>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000

Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **transmit-interval** *number*

Synopsis	BFD transmit interval over this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>transmit-interval</b> <i>number</i>
Tree	<b>transmit-interval</b>
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Local termination point for the BFD session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **duplicate-address-detection** *boolean*

Synopsis Enable Duplicate Address Detection

Context **configure** *router string interface string ipv6 duplicate-address-detection boolean*

Tree [duplicate-address-detection](#)

Description When configured to **true**, the router enables Duplicate Address Detection (DAD) on the interface.

When configured to **false**, the router disables DAD on a per-interface basis. This prevents the router from performing a DAD check on the interface. All IPv6 addresses on an interface with DAD disabled, immediately enter a preferred state, without checking for uniqueness on the interface. This is useful for interfaces that enter a looped state during troubleshooting and are operationally disabled when the loop is detected, requiring manual intervention to clear the DAD violation.

Default true

Introduced 16.0.R1

Platforms All

### **forward-ipv4-packets** *boolean*

Synopsis Forward unencapsulated IPv4 packets

Context **configure** *router string interface string ipv6 forward-ipv4-packets boolean*

Tree [forward-ipv4-packets](#)

Description When configured to **true**, the router can use an IPv6-only interface, with no configured IPv4 addresses, to forward IPv4 packets that originate or terminate locally.

The interface reports that its IPv4 operational state is up if its IPv6 operational state is up. Not all protocols observe the interface as up from an IPv4 perspective. This command mostly supports BGP routing use cases; see RFC 5549 for details.

When configured to **false**, the router prevents IPv4 packets from being forwarded if there are no configured IPv4 subnets.

Default false

Introduced 19.5.R1

Platforms All

### **icmp6**

Synopsis Enter the **icmp6** context

Context	<b>configure</b> <i>router string interface string ipv6 icmp6</i>
Tree	<a href="#">icmp6</a>
Introduced	16.0.R1
Platforms	All

## packet-too-big

Synopsis	Enter the <b>packet-too-big</b> context
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 packet-too-big</i>
Tree	<a href="#">packet-too-big</a>
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 packet-too-big admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	<b>configure</b> <i>router string interface string ipv6 icmp6 packet-too-big number number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit Packet Too Big messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 packet-too-big seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

**param-problem**

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem</b>
Tree	<b>param-problem</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1

Platforms All

### **seconds** *number*

Synopsis Time used to limit ICMPv6 Parameter Problem messages

Context **configure** *router string interface string ipv6 icmp6 param-problem seconds number*

Tree [seconds](#)

Range 1 to 60

Default 10

Introduced 16.0.R1

Platforms All

### **redirects**

Synopsis Enter the **redirects** context

Context **configure** *router string interface string ipv6 icmp6 redirects*

Tree [redirects](#)

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of Redirect message sends

Context **configure** *router string interface string ipv6 icmp6 redirects admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **number** *number*

Synopsis Number to limit ICMPv6 Redirect messages per time frame

Context **configure** *router string interface string ipv6 icmp6 redirects number number*

Tree [number](#)



Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

### **time-exceeded**

Synopsis	Enter the <b>time-exceeded</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 time-exceeded</b>
Tree	<b>time-exceeded</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 time-exceeded admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 time-exceeded</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 time-exceeded</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

**unreachables**

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 unreachables</b>
Tree	<b>unreachables</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 unreachables admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

### **number** *number*

Synopsis Number to limit Unreachable messages per time frame

Context **configure** *router string interface string ipv6 icmp6 unreachablees number number*

Tree [number](#)

Range 10 to 2000

Default 100

Introduced 16.0.R1

Platforms All

### **seconds** *number*

Synopsis Time used to limit ICMPv6 Unreachable messages

Context **configure** *router string interface string ipv6 icmp6 unreachablees seconds number*

Tree [seconds](#)

Range 1 to 60

Default 10

Introduced 16.0.R1

Platforms All

### **link-local-address**

Synopsis Enter the **link-local-address** context

Context **configure** *router string interface string ipv6 link-local-address*

Tree [link-local-address](#)

Description Commands in this context configure the IPv6 link-local address that is used as a virtual SRRP IPv6 address by the master SRRP node. This address is sent in the Router Advertisements initiated by the master SRRP node. Clients use this address as IPv6 default-gateway. Both SRRP nodes, master and backup, must be configured with the same link-local address.

Only one link-local address is allowed per interface.

**Caution:** Removing a manually configured link-local address may impact routing protocols or static routes that have a dependency on that address. Nokia does not recommend removing a link-local address when there are active IPv6 subscriber hosts on an IES or VPRN interface.

Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	IPv6 link-local address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

### **duplicate-address-detection** *boolean*

Synopsis	Enable Duplicate Address Detection
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">duplicate-address-detection</a> <i>boolean</i>
Tree	<a href="#">duplicate-address-detection</a>
Description	When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD) on the interface.  When configured to <b>false</b> , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

### **local-dhcp-server** *reference*

Synopsis	DHCP server for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">local-dhcp-server</a> <i>reference</i>
Tree	<a href="#">local-dhcp-server</a>
Description	This command instantiates a local DHCP server. A local DHCP server can serve multiple interfaces but is limited to the routing context in which it was created.
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

## learn-unsolicited *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">learn-unsolicited</a> <i>keyword</i>
Tree	<a href="#">learn-unsolicited</a>
Description	<p>This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.</p> <p>When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.</p>
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

## limit

Synopsis	Enter the <b>limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a>
Tree	<a href="#">limit</a>
Description	<p>Commands in this context configure the maximum amount of dynamic IPv6 neighbor entries that can be learned on an IP interface.</p> <p>When the number of dynamic neighbor entries reaches the configured percentage of this limit the system sends an SNMP trap. When the limit is exceeded, no new entries are learned until an entry expires and traffic to these destinations is dropped. Entries that have already been learned are refreshed.</p>
Introduced	16.0.R1
Platforms	All

**log-only** *boolean*

Synopsis	Generate log entries when limit is reached
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery limit log-only</b> <i>boolean</i>
Tree	<b>log-only</b>
Description	When configured to <b>true</b> , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.  When configured to <b>false</b> , the router does not send the warning message.
Default	false
Introduced	16.0.R1
Platforms	All

**max-entries** *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery limit max-entries</b> <i>number</i>
Tree	<b>max-entries</b>
Description	This command configures the maximum number of entries that can be learned on an IP interface.  When unconfigured, no maximum limit is imposed.
Range	0 to 102400
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Threshold percentage that triggers a warning message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery limit threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

**local-proxy-nd** *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">local-proxy-nd</a> <i>boolean</i>
Tree	<a href="#">local-proxy-nd</a>
Description	When configured to <b>true</b> , the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.  When configured to <b>false</b> , the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.
Default	false
Introduced	16.0.R1
Platforms	All

**proactive-refresh** *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">proactive-refresh</a> <i>keyword</i>
Tree	<a href="#">proactive-refresh</a>
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

**proxy-nd-policy** *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">proxy-nd-policy</a> <i>reference</i>
Tree	<a href="#">proxy-nd-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced 16.0.R1  
 Platforms All

### **reachable-time** *number*

Synopsis Neighbor reachability detection timer  
 Context **configure** *router string interface string ipv6 neighbor-discovery reachable-time number*  
 Tree [reachable-time](#)  
 Range 30 to 3600  
 Introduced 16.0.R1  
 Platforms All

### **secure-nd**

Synopsis Enter the **secure-nd** context  
 Context **configure** *router string interface string ipv6 neighbor-discovery secure-nd*  
 Tree [secure-nd](#)  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of Secure Neighbor Discovery  
 Context **configure** *router string interface string ipv6 neighbor-discovery secure-nd admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **allow-unsecured-msgs** *boolean*

Synopsis Accept unsecured messages  
 Context **configure** *router string interface string ipv6 neighbor-discovery secure-nd allow-unsecured-msgs boolean*



Tree	<a href="#">allow-unsecured-msgs</a>
Description	When configured to <b>true</b> , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to <b>false</b> , the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

### **public-key-min-bits** *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a> <a href="#">public-key-min-bits</a> <i>number</i>
Tree	<a href="#">public-key-min-bits</a>
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

### **security-parameter** *number*

Synopsis	Security parameter used in the generation of a CGA
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a> <a href="#">security-parameter</a> <i>number</i>
Tree	<a href="#">security-parameter</a>
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

### **stale-time** *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">stale-time</a> <i>number</i>
Tree	<a href="#">stale-time</a>
Range	60 to 65535

Introduced 16.0.R1  
 Platforms All

### **static-neighbor** [[ipv6-address](#)] *string*

Synopsis Enter the **static-neighbor** list instance

Context **configure** [router](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) [static-neighbor](#) *string*

Tree [static-neighbor](#)

Description Commands in this context configure an IPv6-to-MAC address mapping on the interface. Use this command if a directly attached IPv6 node does not support ICMPv6 neighbor discovery, or for some reason, a static address must be used. This command can only be used on Ethernet media.

The IPv6 address must be on the subnet that was configured from the IPv6 **address** or a **link-local-address** commands.

Introduced 16.0.R1  
 Platforms All

### [\[ipv6-address\]](#) *string*

Synopsis IPv6 address corresponding to the physical address

Context **configure** [router](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) [static-neighbor](#) *string*

Tree [static-neighbor](#)

Notes This element is part of a list key.

Introduced 16.0.R1  
 Platforms All

### **mac-address** *string*

Synopsis MAC address for the static neighbor

Context **configure** [router](#) *string* [interface](#) *string* [ipv6](#) [neighbor-discovery](#) [static-neighbor](#) *string* [mac-address](#) *string*

Tree [mac-address](#)

Notes This element is mandatory.

Introduced 16.0.R1  
 Platforms All

**qos-route-lookup** *keyword*

Synopsis	IP address for QoS route lookup for ingress IP packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>qos-route-lookup</b> <i>keyword</i>
Tree	<b>qos-route-lookup</b>
Description	This command specifies the IP address type used for QPPB enabled per-packet QoS handling (in terms of FC and priority). When using QPPB, routes are associated with a QoS treatment (FC and optionally priority) through either explicit configuration or the route policy. If an IPv4 or IPv6 packet arrives on an interface where the configuration of this command applies to the packet, the QoS treatment of the packet is based on the route that matched the destination IP address or the route that matched the source IP address.  See "Enabling QPPB on an IP interface" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about QPPB.
Options	destination, source, source-and-dest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tcp-mss** *number*

Synopsis	TCP maximum segment size for the IPv6 interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>tcp-mss</b> <i>number</i>
Tree	<b>tcp-mss</b>
Range	1220 to 9726
Introduced	16.0.R1
Platforms	All

**urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>urpf-check</b>
Tree	<b>urpf-check</b>
Introduced	16.0.R1
Platforms	All

**ignore-default** *boolean*

Synopsis	Ignore default route when performing a uRPF check
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Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 urpf-check ignore-default</b> <i>boolean</i>
Tree	<b>ignore-default</b>
Default	false
Introduced	16.0.R1
Platforms	All

**mode** *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 urpf-check mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

**vrrp** [**virtual-router-id**] *number*

Synopsis	Enter the <b>vrrp</b> list instance
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i>
Tree	<b>vrrp</b>
Description	Commands in this context configure a VRRP virtual router instance. A virtual router is defined by its virtual router identifier (VRID) and a set of IP addresses.
Max. Instances	4
Introduced	16.0.R1
Platforms	All

**[virtual-router-id]** *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i>
Tree	<b>vrrp</b>
Range	1 to 255
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of VRRP
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **backup** *string*

Synopsis	Virtual router IP addresses for the interface
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number backup string</i>
Tree	<a href="#">backup</a>
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p>

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	4
Introduced	16.0.R1
Platforms	All

## bfd-liveness

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp number</b> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Description	<p>Commands in this context assign a bidirectional forwarding detect (BFD) session to a specific VRRP or SRRP instance. This BFD session provides a heartbeat mechanism for use in speeding up the transition of the standby VRRP router to an active state. If the associated BFD session fails, the VRRP routers immediately send a VRRP Advertisement message. In addition, the standby VRRP routers transition to a Master state to speed convergence.</p> <p>The normal VRRP election process takes place based on the Advertisement messages sent by all VRRP routers.</p> <p>There can be only one BFD session assigned to any specific VRRP or SRRP instance, but there can be multiple SRRP or VRRP sessions using the same BFD session.</p>
Introduced	16.0.R1
Platforms	All

## dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp number</b> <b>bfd-liveness</b> <b>dest-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>dest-ip</b>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **interface-name** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **service-name** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **init-delay** *number*

Synopsis	VRRP initialization delay timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">init-delay</a> <i>number</i>

Tree	<a href="#">init-delay</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **mac string**

Synopsis	Virtual MAC address to use in ARP responses
Context	<b>configure</b> <a href="#">router string</a> <a href="#">interface string</a> <a href="#">ipv6 vrrp number</a> <a href="#">mac string</a>
Tree	<a href="#">mac</a>
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
Introduced	16.0.R1
Platforms	All

### **master-int-inherit boolean**

Synopsis	Allow master instance to dictate the master down timer
Context	<b>configure</b> <a href="#">router string</a> <a href="#">interface string</a> <a href="#">ipv6 vrrp number</a> <a href="#">master-int-inherit boolean</a>
Tree	<a href="#">master-int-inherit</a>
Description	When configured to <b>true</b> , the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.



When configured to **false**, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.

Introduced 16.0.R1

Platforms All

### **message-interval** *number*

Synopsis Interval for sending VRRP advertisement messages

Context **configure** *router string interface string ipv6 vrrp number message-interval number*

Tree [message-interval](#)

Description This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.

The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the **master-int-inherit** command:

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as the master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range 10 to 4095

Units centiseconds

Default 100

Introduced 16.0.R1

Platforms All

## monitor-oper-group *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number monitor-oper-group reference</i>
Tree	<a href="#">monitor-oper-group</a>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	<b>configure</b> <a href="#">service oper-group string</a>
Introduced	22.2.R1
Platforms	All

## ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number ntp-reply boolean</i>
Tree	<a href="#">ntp-reply</a>
Description	When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router.  When configured to <b>false</b> , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

## oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number oper-group reference</i>
Tree	<a href="#">oper-group</a>
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master

router (MR), the operational group is up. The operational group is down for all other VRRP states.

Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **owner** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	<b>configure router</b> <i>string interface string ipv6 vrrp number owner</i> <i>boolean</i>
Tree	<i>owner</i>
Description	When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.  When configured to <b>false</b> , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

### **passive** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	<b>configure router</b> <i>string interface string ipv6 vrrp number passive</i> <i>boolean</i>
Tree	<i>passive</i>
Description	When configured to <b>true</b> , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).

When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.

Default	false
Introduced	16.0.R1
Platforms	All

### **ping-reply** *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number ping-reply boolean</i>
Tree	<a href="#">ping-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **policy** *reference*

Synopsis	VRRP priority control policy
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number policy reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	<b>configure</b> <i>vrrp policy number</i>

Introduced	16.0.R1
Platforms	All

### **preempt** *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number preempt boolean</i>
Tree	<i>preempt</i>
Description	<p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Base priority for the VRRP
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number priority number</i>
Tree	<i>priority</i>
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **standby-forwarding** *boolean*

Synopsis	Allow standby router to forward traffic
Context	<b>configure</b> <i>router string interface string ipv6 vrrp number standby-forwarding boolean</i>

Tree	<a href="#">standby-forwarding</a>
Description	When configured to <b>true</b> , the standby router forwards all traffic. When configured to <b>false</b> , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

### **telnet-reply** *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>telnet-reply</b> <i>boolean</i>
Tree	<a href="#">telnet-reply</a>
Description	When configured to <b>true</b> , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to <b>false</b> , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

### **traceroute-reply** *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>traceroute-reply</b> <i>boolean</i>
Tree	<a href="#">traceroute-reply</a>
Description	When configured to <b>true</b> , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to <b>false</b> , the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1

Platforms All

## lag

Synopsis Enter the **lag** context

Context **configure** *router string interface string lag*

Tree [lag](#)

Introduced 16.0.R1

Platforms All

## link-map-profile *number*

Synopsis LAG link map profile for a SAP or network interface

Context **configure** *router string interface string lag link-map-profile number*

Tree [link-map-profile](#)

Description This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range 1 to 64

Introduced 16.0.R1

Platforms All

## per-link-hash

Synopsis Enter the **per-link-hash** context

Context **configure** *router string interface string lag per-link-hash*

Tree [per-link-hash](#)

Introduced 16.0.R1

Platforms All

## class *number*

Synopsis Class used on LAG egress using weighted per-link-hash

Context	<b>configure</b> <i>router string interface string lag per-link-hash class number</i>
Tree	<b>class</b>
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <i>router string interface string lag per-link-hash weight number</i>
Tree	<b>weight</b>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

### **ldp-sync-timer**

Synopsis	Enter the <b>ldp-sync-timer</b> context
Context	<b>configure</b> <i>router string interface string ldp-sync-timer</i>
Tree	<b>ldp-sync-timer</b>
Description	Commands in this context set associated parameters for the synchronization of an IGP and LDP.
Introduced	16.0.R1
Platforms	All

### **end-of-lib** *boolean*

Synopsis	Terminate LDP synchronization timer
Context	<b>configure</b> <i>router string interface string ldp-sync-timer end-of-lib boolean</i>
Tree	<b>end-of-lib</b>
Description	This command configures the system to terminate the LDP synchronization timer early for a specific session to an LDP peer, if the IGP interface receives LDP End-of-LIB Typed Wildcard FEC messages for every FEC type negotiated.
Default	false



Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time interval for the LDP synchronization timer
Context	<b>configure</b> <i>router string interface string ldp-sync-timer seconds number</i>
Tree	<i>seconds</i>
Range	1 to 1800
Introduced	16.0.R1
Platforms	All

### **load-balancing**

Synopsis	Enter the <b>load-balancing</b> context
Context	<b>configure</b> <i>router string interface string load-balancing</i>
Tree	<i>load-balancing</i>
Description	Commands in this context configure interface per-flow load-balancing options that apply to traffic that enters this interface and that egresses over a LAG or ECMP. This is a per-interface setting. Load-balancing options enabled on the interface level overwrite options that can also be enabled on the system level.
Introduced	16.0.R1
Platforms	All

### **flow-label-load-balancing** *boolean*

Synopsis	Enable flow label load balancing
Context	<b>configure</b> <i>router string interface string load-balancing flow-label-load-balancing boolean</i>
Tree	<i>flow-label-load-balancing</i>
Description	When configured to <b>true</b> , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.  When configured to <b>false</b> , the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

### **ip-load-balancing** *keyword*

Synopsis	IP load-balancing algorithm
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>load-balancing</b> <b>ip-load-balancing</b> <i>keyword</i>
Tree	<a href="#">ip-load-balancing</a>
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the <b>I4-load-balancing</b> command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	16.0.R3
Platforms	All

### **lsr-load-balancing** *keyword*

Synopsis	LSR load-balancing algorithm
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>load-balancing</b> <b>lsr-load-balancing</b> <i>keyword</i>
Tree	<a href="#">lsr-load-balancing</a>
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	16.0.R1
Platforms	All

### **spi-load-balancing** *boolean*

Synopsis	Enable SPI use in hashing
Context	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i> <b>load-balancing</b> <b>spi-load-balancing</b> <i>boolean</i>
Tree	<a href="#">spi-load-balancing</a>
Description	When configured to <b>true</b> , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

### **teid-load-balancing** *boolean*

Synopsis	Enable use of TEID in hashing
Context	<b>configure</b> <i>router string interface string load-balancing teid-load-balancing boolean</i>
Tree	<a href="#">teid-load-balancing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **loopback**

Synopsis	Use interface as a loopback interface
Context	<b>configure</b> <i>router string interface string loopback</i>
Tree	<a href="#">loopback</a>
Description	When configured, this interface is used as a loopback interface. This command and the <b>vas-if-type</b> command are mutually exclusive.
Notes	The following elements are part of a choice: <b>loopback</b> or <b>port</b> .
Introduced	16.0.R1
Platforms	All

### **mac** *string*

Synopsis	MAC address of the interface
Context	<b>configure</b> <i>router string interface string mac string</i>
Tree	<a href="#">mac</a>
Description	This command assigns a specific MAC address to an IP interface. Only one MAC address can be assigned to an IP interface. When multiple <b>mac</b> commands are entered, the last command overwrites the previous command.
Introduced	16.0.R1
Platforms	All

### **mac-accounting** *boolean*

Synopsis	Enable MAC accounting functionality
Context	<b>configure</b> <i>router string interface string mac-accounting boolean</i>

Tree	<a href="#">mac-accounting</a>
Description	When configured to <b>true</b> , the router enables MAC accounting functionality.
Default	false
Introduced	16.0.R1
Platforms	All

## network-domains

Synopsis	Enter the <b>network-domains</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">network-domains</a>
Tree	<a href="#">network-domains</a>
Introduced	16.0.R4
Platforms	All

## network-domain [[domain-name](#)] *reference*

Synopsis	Add a list entry for <b>network-domain</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>reference</i>
Tree	<a href="#">network-domain</a>
Description	<p>Commands in this context assign an interface to a network domain. The router then takes the network domain into account during SAP ingress queue allocation for VPLS SAP.</p> <p>The network domain association can only be done in the base routing context. An operator can associate a network domain with an interface without a physical port being specified, but the configuration has no effect until a corresponding port, or LAG, is defined.</p> <p>Single interfaces can be associated with multiple network domains.</p>
Max. Instances	5
Introduced	16.0.R4
Platforms	All

## [[domain-name](#)] *reference*

Synopsis	Network domain name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>reference</i>
Tree	<a href="#">network-domain</a>

Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **port** (*port-and-encap* | *keyword*)

Synopsis	Port to bind to this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>port</b> ( <i>port-and-encap</i>   <i>keyword</i> )
Tree	<a href="#">port</a>
Description	This command creates an association between a logical IP interface and a physical port. An operator can also associate an interface with the system (loopback address).
String Length	1 to 45
Options	system
Notes	The following elements are part of a choice: <b>loopback</b> or <b>port</b> .
Introduced	16.0.R1
Platforms	All

### **ptp-hw-assist**

Synopsis	Enter the <b>ptp-hw-assist</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ptp-hw-assist</b>
Tree	<a href="#">ptp-hw-assist</a>
Description	<p>Commands in this context enable the port-based timestamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.</p> <p>Only one interface per physical port can have port-based timestamping assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the PTP timestamping assist
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ptp-hw-assist</a> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>qos</b>
Tree	<a href="#">qos</a>
Description	Commands in this context associate a network QoS policy with a network IP interface. Only one network QoS policy can be associated with an IP interface at one time. Attempts to associate a second QoS policy return an error.
Introduced	16.0.R1
Platforms	All

## egress-instance *number*

Synopsis	Port egress queue group instance for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>qos</b> <a href="#">egress-instance</a> <i>number</i>
Tree	<a href="#">egress-instance</a>
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## egress-port-redirect-group *reference*

Synopsis	QoS queue group name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>qos</b> <a href="#">egress-port-redirect-group</a> <i>reference</i>
Tree	<a href="#">egress-port-redirect-group</a>
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group

name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.

Reference	<b>configure qos queue-group-templates egress queue-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ingress-fp-redirect-group** *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>qos ingress-fp-redirect-group</b> <i>reference</i>
Tree	<a href="#">ingress-fp-redirect-group</a>
Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ingress-instance** *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>qos ingress-instance</b> <i>number</i>
Tree	<a href="#">ingress-instance</a>
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **network-policy** *reference*

Synopsis	Network policy name associated with a network interface
Context	<b>configure router</b> <i>string</i> <b>interface</b> <i>string</i> <b>qos network-policy</b> <i>reference</i>
Tree	<a href="#">network-policy</a>

Description	This command associates an existing network policy name with the IP interface.
Reference	<b>configure qos network string</b>
Introduced	16.0.R1
Platforms	All

### **strip-label boolean**

Synopsis	Strip all MPLS labels before PBR processing
Context	<b>configure router string interface string strip-label boolean</b>
Tree	<a href="#">strip-label</a>
Description	<p>When configured to <b>true</b>, the router forces packets to be stripped of all (maximum 5) MPLS labels before the packets are handed over for possible filter (PBR) processing.</p> <p>This command is supported on:</p> <ul style="list-style-type: none"> <li>• optical ports for the 7750 SR and 7450 ESS</li> <li>• null/dot1q encaps</li> <li>• network ports</li> <li>• IPv4</li> <li>• IPv6</li> </ul>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tos-marking-state keyword**

Synopsis	TOS marking state
Context	<b>configure router string interface string tos-marking-state keyword</b>
Tree	<a href="#">tos-marking-state</a>
Description	<p>This command configures the ToS marking state.</p> <p>This command is used to alter the default trusted state to a non-trusted state. When configured to <b>trusted</b> or default, the ToS field is not remarked by egress network IP interfaces unless the egress network IP interface has the remark-trusted state set, in which case the egress network interface treats all VPRN and network IP interfaces as untrusted.</p> <p>When configured to <b>untrusted</b>, all egress network IP interfaces remark IP packets received on the network interface according to the egress marking definitions on each network interface.</p>
Options	trusted, untrusted



Default	trusted
Introduced	16.0.R1
Platforms	All

## untrusted

Synopsis	Enable the <b>untrusted</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>untrusted</b>
Tree	<a href="#">untrusted</a>
Description	<p>Commands in this context configure the untrusted state for a network IP interface.</p> <p>The untrusted state identifies the participating interfaces in the label security feature for prefixes of a VPN family at an inter-AS boundary. The router supports a maximum of 15 network interfaces that can participate in this feature.</p> <p>The user normally applies this command to an inter-AS interface. PIP keeps track of the untrusted status of each interface.</p>
Introduced	16.0.R4
Platforms	All

## default-forwarding *keyword*

Synopsis	Default action for selective ILM
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>untrusted</b> <a href="#">default-forwarding</a> <i>keyword</i>
Tree	<a href="#">default-forwarding</a>
Description	<p>This command specifies the default forwarding behavior of labeled packets received on this interface.</p> <p>This command sets the default behavior for an untrusted interface in the datapath and for all ILMs. When enabling the label security for VPN IPv4 or VPN IPv6 prefixes, BGP programs the data path to provide an exception to the normal way of forwarding away from the default for those VPRN ILMs.</p> <p>When the default behavior is to forward packets, the router checks labeled packets in the normal way against the table of programmed ILMs to decide if packets are dropped or forwarded in a GRT, a VRF, or a L2 service context.</p> <p>When the specified behavior is to drop packets, all labeled packets received on the interface are automatically dropped.</p>
Options	forward, drop
Default	forward
Introduced	16.0.R4
Platforms	All

**urpf-selected-vprns** *boolean*

Synopsis	Enable uRPF checking of incoming traffic on interface
Context	<b>configure</b> <i>router string interface string urpf-selected-vprns boolean</i>
Tree	<a href="#">urpf-selected-vprns</a>
Description	<p>When configured to <b>true</b>, the router performs uRPF checks of incoming traffic on the network interface for the following:</p> <ul style="list-style-type: none"> <li>• Packets associated with the global routing table (base router) context</li> <li>• Packets associated with VPRNs that have enabled the uRPF check using the <b>configure service vprn network ingress urpf-check</b> command</li> </ul> <p>When configured to <b>false</b>, the router performs uRPF checks for all ingress traffic on the network interface (associated with the base router and all VPRNs) based on the IPv4 and IPv6 <b>urpf-check</b> command configuration options of the network interface.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**vas-if-type** *keyword*

Synopsis	VAS interface type
Context	<b>configure</b> <i>router string interface string vas-if-type keyword</i>
Tree	<a href="#">vas-if-type</a>
Description	This command configures the type of a Value Added Service (VAS) facing interface. This command and <b>loopback</b> command
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

**ipsec**

Synopsis	Enter the <b>ipsec</b> context
Context	<b>configure</b> <i>router string ipsec</i>
Tree	<a href="#">ipsec</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**multi-chassis-shunt-interface** [*name*] *string*

Synopsis	Enter the <b>multi-chassis-shunt-interface</b> list instance
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunt-interface string</i>
Tree	<a href="#">multi-chassis-shunt-interface</a>
Description	This command configures the multi-chassis shunting interface name for the peer.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Multi-chassis shunt interface name
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunt-interface string</i>
Tree	<a href="#">multi-chassis-shunt-interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**next-hop**

Synopsis	Enter the <b>next-hop</b> context
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunt-interface string next-hop</i>
Tree	<a href="#">next-hop</a>
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next hop address for the shunting interface
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunt-interface string next-hop address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">address</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**multi-chassis-shunting-profile** [*name*] *string*

Synopsis	Enter the <b>multi-chassis-shunting-profile</b> list instance
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunting-profile string</i>
Tree	<a href="#">multi-chassis-shunting-profile</a>
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Multi-chassis shunting profile name
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunting-profile string</i>
Tree	<a href="#">multi-chassis-shunting-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer** [*ip-address*] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunting-profile string peer reference</i>
Tree	<a href="#">peer</a>
Max. Instances	3
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[ip-address]** *reference*

Synopsis	Peer address
Context	<b>configure</b> <i>router string ipsec multi-chassis-shunting-profile string peer reference</i>
Tree	<a href="#">peer</a>

Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-chassis-shunt-interface** *reference*

Synopsis	Multi-chassis shunt interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec multi-chassis-shunting-profile</a> <i>string</i> <a href="#">peer reference multi-chassis-shunt-interface</a> <i>reference</i>
Tree	<a href="#">multi-chassis-shunt-interface</a>
Description	This command configures the shunting interface name for the peer.
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec multi-chassis-shunt-interface</a> <i>string</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **security-policy** [*id*] *number*

Synopsis	Enter the <b>security-policy</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec security-policy</a> <i>number</i>
Tree	<a href="#">security-policy</a>
Introduced	22.7.R1
Platforms	VSR

### **[id]** *number*

Synopsis	IPsec security policy ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec security-policy</a> <i>number</i>
Tree	<a href="#">security-policy</a>
Range	1 to 32768
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec security-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	22.7.R1
Platforms	VSR

**[entry-id]** *number*

Synopsis	IPsec security policy entry ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec security-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**local-ip**

Synopsis	Enter the <b>local-ip</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec security-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <a href="#">local-ip</a>
Tree	<a href="#">local-ip</a>
Description	<p>Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	22.7.R1
Platforms	VSR

**address** *string*

Synopsis	Destination IPv4 address of the aggregate route
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipsec security-policy</a> <i>number</i> <a href="#">entry</a> <i>number</i> <a href="#">local-ip</a> <a href="#">address</a> <i>string</i>

Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

### **any boolean**

Synopsis	Use any IP address
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ipsec security-policy</a> <a href="#">number</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">local-ip</a> <a href="#">any</a> <a href="#">boolean</a>
Tree	<a href="#">any</a>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

### **local-ipv6**

Synopsis	Enter the <b>local-ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ipsec security-policy</a> <a href="#">number</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">local-ipv6</a>
Tree	<a href="#">local-ipv6</a>
Description	<p>Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	22.7.R1
Platforms	VSR

### **address string**

Synopsis	Destination IPv6 address of the aggregate route
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ipsec security-policy</a> <a href="#">number</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">local-ipv6</a> <a href="#">address</a> <a href="#">string</a>
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1

Platforms VSR

### **any** *boolean*

Synopsis Use any IP address

Context **configure** *router string ipsec security-policy number entry number local-ipv6 any boolean*

Tree [any](#)

Default false

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR

### **remote-ip**

Synopsis Enter the **remote-ip** context

Context **configure** *router string ipsec security-policy number entry number remote-ip*

Tree [remote-ip](#)

Description Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry.

The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.

Introduced 22.7.R1

Platforms VSR

### **address** *string*

Synopsis Destination IPv4 address of the aggregate route

Context **configure** *router string ipsec security-policy number entry number remote-ip address string*

Tree [address](#)

Notes The following elements are part of a choice: **address** or **any**.

Introduced 22.7.R1

Platforms VSR



**any *boolean***

Synopsis	Use any IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>remote-ip</b> <b>any</b> <i>boolean</i>
Tree	<b>any</b>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

**remote-ipv6**

Synopsis	Enter the <b>remote-ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>remote-ipv6</b>
Tree	<b>remote-ipv6</b>
Description	Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry.  The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.
Introduced	22.7.R1
Platforms	VSR

**address *string***

Synopsis	Destination IPv6 address of the aggregate route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipsec</b> <b>security-policy</b> <i>number</i> <b>entry</b> <i>number</i> <b>remote-ipv6</b> <b>address</b> <i>string</i>
Tree	<b>address</b>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

**any *boolean***

Synopsis	Use any IP address
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipsec security-policy number</i> <i>entry number</i> <i>remote-ipv6 any boolean</i>
Tree	<a href="#">any</a>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	22.7.R1
Platforms	VSR

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6</i>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6 neighbor-discovery</i>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

## reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ipv6 neighbor-discovery reachable-time number</i>
Tree	<a href="#">reachable-time</a>
Range	30 to 3600
Default	30
Introduced	16.0.R1
Platforms	All

**stale-time** *number*

Synopsis	Neighbor discovery cache entry stale time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>stale-time</b> <i>number</i>
Tree	<b>stale-time</b>
Range	60 to 65535
Default	14400
Introduced	16.0.R1
Platforms	All

**router-advertisement**

Synopsis	Enter the <b>router-advertisement</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b>
Tree	<b>router-advertisement</b>
Introduced	16.0.R1
Platforms	All

**dns-options**

Synopsis	Enable the <b>dns-options</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>dns-options</b>
Tree	<b>dns-options</b>
Introduced	16.0.R1
Platforms	All

**rdnss-lifetime** (*keyword* | *number*)

Synopsis	Maximum time over which the RDNSS address is valid
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>dns-options</b> <b>rdnss-lifetime</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>rdnss-lifetime</b>
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0   4 to 3600
Units	seconds

Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

**server string**

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	<b>configure</b> <a href="#">router string ipv6 router-advertisement dns-options server string</a>
Tree	<a href="#">server</a>
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**interface [ip-int-name] string**

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router string ipv6 router-advertisement interface string</a>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[ip-int-name] string**

Synopsis	Router interface name
Context	<b>configure</b> <a href="#">router string ipv6 router-advertisement interface string</a>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of router advertisement
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**current-hop-limit** *number*

Synopsis	Hop limit advertised in RA messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>current-hop-limit</b> <i>number</i>
Tree	<b>current-hop-limit</b>
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	All

**dns-options**

Synopsis	Enable the <b>dns-options</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>dns-options</b>
Tree	<b>dns-options</b>
Introduced	16.0.R1
Platforms	All

**include-rdnss** *boolean*

Synopsis	Include the RDNSS option in the RA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>dns-options</b> <b>include-rdnss</b> <i>boolean</i>
Tree	<b>include-rdnss</b>
Default	true

Introduced	16.0.R1
Platforms	All

### **rdnss-lifetime** (*number* | *keyword*)

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>dns-options</b> <b>rdnss-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>rdnss-lifetime</b>
Range	0   4 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

### **server** *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>dns-options</b> <b>server</b> <i>string</i>
Tree	<b>server</b>
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **managed-configuration** *boolean*

Synopsis	Set the managed address configuration flag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>managed-configuration</b> <i>boolean</i>
Tree	<b>managed-configuration</b>
Default	false
Introduced	16.0.R1
Platforms	All

**max-advertisement-interval** *number*

Synopsis	Maximum time between sending advertisement messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>max-advertisement-interval</b> <i>number</i>
Tree	<b>max-advertisement-interval</b>
Range	4 to 1800
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

**min-advertisement-interval** *number*

Synopsis	Minimum interval between router advertisement messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>min-advertisement-interval</b> <i>number</i>
Tree	<b>min-advertisement-interval</b>
Range	3 to 1350
Units	seconds
Default	200
Introduced	16.0.R1
Platforms	All

**mtu** *number*

Synopsis	MTU for sending packets to the router
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ipv6</b> <b>router-advertisement</b> <b>interface</b> <i>string</i> <b>mtu</b> <i>number</i>
Tree	<b>mtu</b>
Range	1280 to 9800
Introduced	16.0.R1
Platforms	All

**nd-router-preference** *keyword*

Synopsis	Default router preference for Router Advertisements
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Context	<b>configure router</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>string</i> <b>nd-router-preference</b> <i>keyword</i>
Tree	<a href="#">nd-router-preference</a>
Description	<p>This command configures the default router preference for Router Advertisements (RAs) and allows IPv6 hosts to discover and select a default gateway address by listening to RAs.</p> <p>This feature provides basic traffic engineering functionality for host devices. When this command is applied, the router advertises the respective router preference to the connected host to assist in its selection of the most appropriate default gateway on a link.</p> <p>This extension is backward compatible, both for routers (setting the router preference bits) and hosts (interpreting the router preference bits). These bits are ignored by hosts that do not implement the RFC 4191 functionality by configuring this command. Similarly, hosts that do not implement the RFC 4191 functionality interpret the values sent by devices that do not implement the RFC 4191 extension as a medium preference.</p>
Options	medium, high, low
Default	medium
Introduced	23.10.R1
Platforms	All

### **other-stateful-configuration** *boolean*

Synopsis	Set the other configuration flag
Context	<b>configure router</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>string</i> <b>other-stateful-configuration</b> <i>boolean</i>
Tree	<a href="#">other-stateful-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **prefix** [[ipv6-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure router</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>string</i> <b>prefix</b> <i>string</i>
Tree	<a href="#">prefix</a>
Max. Instances	254
Introduced	16.0.R1



Platforms All

### **[ipv6-prefix]** *string*

Synopsis IPv6 address prefix

Context **configure** [router](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) *string* [prefix](#) *string*

Tree [prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **autonomous** *boolean*

Synopsis Set the autonomous flag value

Context **configure** [router](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) *string* [prefix](#) *string* [autonomous](#) *boolean*

Tree [autonomous](#)

Default true

Introduced 16.0.R1

Platforms All

### **on-link** *boolean*

Synopsis Use prefix for on-link determination

Context **configure** [router](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) *string* [prefix](#) *string* [on-link](#) *boolean*

Tree [on-link](#)

Default true

Introduced 16.0.R1

Platforms All

### **preferred-lifetime** (*keyword* | *number*)

Synopsis Remaining time that the prefix remains preferred

Context **configure** [router](#) *string* [ipv6](#) [router-advertisement](#) [interface](#) *string* [prefix](#) *string* [preferred-lifetime](#) (*keyword* | *number*)

Tree	<a href="#">preferred-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	604800
Introduced	16.0.R1
Platforms	All

### **valid-lifetime** (*keyword* | *number*)

Synopsis	Remaining time in which the prefix is still valid
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">valid-lifetime</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">valid-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

### **reachable-time** *number*

Synopsis	Time the router is reachable by other hosts or nodes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>string</i> <a href="#">reachable-time</a> <i>number</i>
Tree	<a href="#">reachable-time</a>
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All

### **retransmit-time** *number*

Synopsis	Time to advertise neighbor advertisement messages
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Context	<b>configure router</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>string</i> <b>retransmit-time</b> <i>number</i>
Tree	<a href="#">retransmit-time</a>
Range	0 to 1800000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All

### **router-lifetime** *number*

Synopsis	Lifetime value in neighbor advertisement messages
Context	<b>configure router</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>string</i> <b>router-lifetime</b> <i>number</i>
Tree	<a href="#">router-lifetime</a>
Range	0   4 to 9000
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	All

### **use-virtual-mac** *boolean*

Synopsis	Use VRRP virtual MAC address for advertisement message
Context	<b>configure router</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>string</i> <b>use-virtual-mac</b> <i>boolean</i>
Tree	<a href="#">use-virtual-mac</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6-te-router-id**

Synopsis	Enter the <b>ipv6-te-router-id</b> context
Context	<b>configure router</b> <i>string</i> <b>ipv6-te-router-id</b>
Tree	<a href="#">ipv6-te-router-id</a>
Introduced	19.10.R1

Platforms All

### **interface** *reference*

Synopsis Network IP interface name to obtain IP address

Context **configure** *router string ipv6-te-router-id interface reference*

Tree [interface](#)

Description This command specifies the interface name from which to obtain the IP address to use as the IPv6 TE Router ID. This router ID uniquely identifies the router to other routers as IPv6 TE capable in an IGP TE domain.

IS-IS advertises this information using the IPv6 TE Router ID TLV.

Reference **configure** *router string interface string*

Introduced 19.10.R1

Platforms All

### **isa-service-chaining**

Synopsis Enable the **isa-service-chaining** context

Context **configure** *router string isa-service-chaining*

Tree [isa-service-chaining](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-group** [*id*] *number*

Synopsis Add a list entry for **nat-group**

Context **configure** *router string isa-service-chaining nat-group number*

Tree [nat-group](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis ISA NAT group/ISA WLAN GW group ID for the EVPN pools

Context **configure** *router string isa-service-chaining nat-group number*

Tree [nat-group](#)

Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vxlan-vtep-range

Synopsis	Enable the <b>vxlan-vtep-range</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">isa-service-chaining vxlan-vtep-range</a>
Tree	<a href="#">vxlan-vtep-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## end (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	End address of the VXLAN VTEP range
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">isa-service-chaining vxlan-vtep-range end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">end</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## start (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Start address of the VXLAN VTEP range
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">isa-service-chaining vxlan-vtep-range start</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">start</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## isis [[isis-instance](#)] *number*

Synopsis	Enter the <b>isis</b> list instance
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Context	<b>configure router string isis number</b>
Tree	<b>isis</b>
Introduced	16.0.R1
Platforms	All

### **[isis-instance] number**

Synopsis	Instance ID for the IS-IS instance
Context	<b>configure router string isis number</b>
Tree	<b>isis</b>
Range	0 to 127
MD-CLI	0
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the IS-IS instance
Context	<b>configure router string isis number admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **advertise-passive-only boolean**

Synopsis	Advertise prefixes that belong to passive interfaces
Context	<b>configure router string isis number advertise-passive-only boolean</b>
Tree	<b>advertise-passive-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *keyword*

Synopsis	Router capabilities advertisement to neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>advertise-router-capability</b> <i>keyword</i>
Tree	<a href="#">advertise-router-capability</a>
Options	area, as
Introduced	16.0.R1
Platforms	All

**advertise-tunnel-link** *boolean*

Synopsis	Allow use of forwarding adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>advertise-tunnel-link</b> <i>boolean</i>
Tree	<a href="#">advertise-tunnel-link</a>
Default	false
Introduced	16.0.R1
Platforms	All

**all-l1isis** *string*

Synopsis	Destination MAC address for all L1 IS-IS routers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>all-l1isis</b> <i>string</i>
Tree	<a href="#">all-l1isis</a>
Default	01:80:C2:00:00:14
Introduced	16.0.R1
Platforms	All

**all-l2isis** *string*

Synopsis	Destination MAC address for all L2 IS-IS routers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>all-l2isis</b> <i>string</i>
Tree	<a href="#">all-l2isis</a>
Default	01:80:C2:00:00:15
Introduced	16.0.R1
Platforms	All

**area-address** *string*

Synopsis	Area address portion of the NSAP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>area-address</b> <i>string</i>
Tree	<b>area-address</b>
String Length	2 to 38
Max. Instances	3
Introduced	16.0.R1
Platforms	All

**authentication-check** *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>authentication-check</b> <i>boolean</i>
Tree	<b>authentication-check</b>
Default	true
Introduced	16.0.R1
Platforms	All

**authentication-key** *string*

Synopsis	Authentication key to verify PDUs sent from neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

**authentication-keychain** *reference*

Synopsis	Keychain used to sign and authenticate
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>authentication-keychain</b> <i>reference</i>
Tree	<b>authentication-keychain</b>
Reference	<b>configure</b> <b>system</b> <b>security</b> <b>keychains</b> <b>keychain</b> <i>string</i>



Introduced 16.0.R3  
Platforms All

### **authentication-type** *keyword*

Synopsis Authentication type  
Context **configure** [router](#) *string* [isis](#) *number* [authentication-type](#) *keyword*  
Tree [authentication-type](#)  
Options password, message-digest  
Introduced 16.0.R1  
Platforms All

### **csnp-authentication** *boolean*

Synopsis Authenticate individual IS-IS packets of the CSNP type  
Context **configure** [router](#) *string* [isis](#) *number* [csnp-authentication](#) *boolean*  
Tree [csnp-authentication](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **database-export**

Synopsis Enable the **database-export** context  
Context **configure** [router](#) *string* [isis](#) *number* [database-export](#)  
Tree [database-export](#)  
Introduced 16.0.R1  
Platforms All

### **bgp-ls-identifier**

Synopsis Enable the **bgp-ls-identifier** context  
Context **configure** [router](#) *string* [isis](#) *number* [database-export](#) [bgp-ls-identifier](#)  
Tree [bgp-ls-identifier](#)  
Introduced 16.0.R1

Platforms All

### **value** *number*

Synopsis BGP-LS identifier sent in the BGP-LS NLRI  
 Context **configure** **router** *string* **isis** *number* **database-export** **bgp-ls-identifier** *value* *number*  
 Tree [value](#)  
 Max. Range 0 to 4294967295  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

### **igp-identifier** *number*

Synopsis Unique ID of the IGP instance in the BGP-LS NLRI  
 Context **configure** **router** *string* **isis** *number* **database-export** **igp-identifier** *number*  
 Tree [igp-identifier](#)  
 Max. Range 0 to 18446744073709551615  
 Introduced 16.0.R1  
 Platforms All

### **default-route-tag** *number*

Synopsis Route tag for the default route  
 Context **configure** **router** *string* **isis** *number* **default-route-tag** *number*  
 Tree [default-route-tag](#)  
 Range 1 to 4294967295  
 Introduced 16.0.R1  
 Platforms All

### **entropy-label**

Synopsis Enter the **entropy-label** context  
 Context **configure** **router** *string* **isis** *number* **entropy-label**  
 Tree [entropy-label](#)

Introduced 16.0.R1  
Platforms All

### **override-tunnel-elc** *boolean*

Synopsis Enable override of received ELC advertisements  
Context **configure** [router](#) *string* [isis](#) *number* [entropy-label](#) [override-tunnel-elc](#) *boolean*  
Tree [override-tunnel-elc](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **export-limit**

Synopsis Enable the **export-limit** context  
Context **configure** [router](#) *string* [isis](#) *number* [export-limit](#)  
Tree [export-limit](#)  
Introduced 16.0.R1  
Platforms All

### **log-percent** *number*

Synopsis Export limit before warning and SNMP notification sent  
Context **configure** [router](#) *string* [isis](#) *number* [export-limit](#) [log-percent](#) *number*  
Tree [log-percent](#)  
Range 1 to 100  
Introduced 16.0.R1  
Platforms All

### **number** *number*

Synopsis Maximum routes or prefixes exported from route table  
Context **configure** [router](#) *string* [isis](#) *number* [export-limit](#) [number](#) *number*  
Tree [number](#)  
Range 1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Export policies that determine exported routes
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>export-policy</b> <i>reference</i>
Tree	<b>export-policy</b>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the <b>aggregate</b> command is also configured in the <b>configure router</b> context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the <b>configure router policy-options</b> context.</p>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **flexible-algorithms**

Synopsis	Enter the <b>flexible-algorithms</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <b>flexible-algorithms</b>
Tree	<b>flexible-algorithms</b>
Description	Commands in this context configure IS-IS parameters for flexible algorithm participation.
Introduced	20.7.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>flexible-algorithms</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Options	enable, disable
Default	disable
Introduced	20.7.R1
Platforms	All

**advertise-admin-group** *keyword*

Synopsis	Administrative group TLV to advertise
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>flexible-algorithms</b> <b>advertise-admin-group</b> <i>keyword</i>
Tree	<b>advertise-admin-group</b>
Description	This command configures the type of Administrative Group TLV the router advertises as an IGP link attribute. This command is configured for this IGP instance.
Options	prefer-ag, eag-only, ag-eag
Default	prefer-ag
Introduced	23.3.R1
Platforms	All

**flex-algo** [**flex-algo-id**] *number*

Synopsis	Enter the <b>flex-algo</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>flexible-algorithms</b> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Description	Commands in this context configure an IS-IS flexible algorithm. When flexible algorithm is configured in an IS-IS instance, the IS-IS instance is configured for all levels (Level 1 and Level 2).
Max. Instances	7
Introduced	20.7.R1
Platforms	All

**[flex-algo-id] number**

Synopsis	Flexible algorithm ID
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <a href="#">number</a>
Tree	<a href="#">flex-algo</a>
Range	128 to 255
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

**advertise reference**

Synopsis	Flexible Algorithm Definition advertisement
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <a href="#">number</a> <a href="#">advertise</a> <a href="#">reference</a>
Tree	<a href="#">advertise</a>
Description	<p>This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).</p> <p>The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.</p>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <a href="#">string</a>
Introduced	20.7.R1
Platforms	All

**loopfree-alternate**

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">flexible-algorithms</a> <a href="#">flex-algo</a> <a href="#">number</a> <a href="#">loopfree-alternate</a>
Tree	<a href="#">loopfree-alternate</a>
Introduced	20.7.R1
Platforms	All

**micro-loop-avoidance**

Synopsis	Enable the <b>micro-loop-avoidance</b> context
Context	<b>configure</b> <i>router string isis number flexible-algorithms flex-algo number micro-loop-avoidance</i>
Tree	<a href="#">micro-loop-avoidance</a>
Introduced	21.7.R1
Platforms	All

**participate** *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	<b>configure</b> <i>router string isis number flexible-algorithms flex-algo number participate boolean</i>
Tree	<a href="#">participate</a>
Description	When configured to <b>true</b> , the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support.  When configured to <b>false</b> , flexible algorithm participation is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

**graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <i>router string isis number graceful-restart</i>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

**helper-mode** *boolean*

Synopsis	Enable the Graceful Restart helper for IS-IS
Context	<b>configure</b> <i>router string isis number graceful-restart helper-mode boolean</i>
Tree	<a href="#">helper-mode</a>
Default	true

Introduced 16.0.R1  
Platforms All

### **hello-authentication** *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets  
Context **configure** *router string isis number hello-authentication boolean*  
Tree [hello-authentication](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **hello-padding** *keyword*

Synopsis IS-IS Hello message padding  
Context **configure** *router string isis number hello-padding keyword*  
Tree [hello-padding](#)  
Options adaptive, loose, strict, none  
Introduced 16.0.R1  
Platforms All

### **ignore-attached-bit** *boolean*

Synopsis Ignore attached bit on received Layer 1 LSPs  
Context **configure** *router string isis number ignore-attached-bit boolean*  
Tree [ignore-attached-bit](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ignore-lsp-errors** *boolean*

Synopsis Ignore LSP packets with errors  
Context **configure** *router string isis number ignore-lsp-errors boolean*  
Tree [ignore-lsp-errors](#)



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Default	false
Introduced	16.0.R1
Platforms	All

### **ignore-narrow-metric** *boolean*

Synopsis	Ignore links with narrow metrics
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ignore-narrow-metric</a> <i>boolean</i>
Tree	<a href="#">ignore-narrow-metric</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **igp-shortcut**

Synopsis	Enter the <b>igp-shortcut</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">igp-shortcut</a>
Tree	<a href="#">igp-shortcut</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of RSVP-TE or SR-TE shortcut
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">igp-shortcut</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## allow-sr-over-srte *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable SR over SR-TE LSPs
Context	<b>configure</b> <i>router string isis number igp-shortcut allow-sr-over-srte boolean</i>
Tree	<a href="#">allow-sr-over-srte</a>
Description	<p>When configured to <b>true</b>, the router only allows SR-MPLS SRv4 and SRv6 IGP shortcuts to use SR-TE LSPs with <b>allow-sr-over-srte</b> explicitly enabled with an adjacency SID as top SID in the SR-TE LSP. IPv4 and IPv6 addresses can use all available SR-TE LSPs as IGP shortcuts regardless of the explicit <b>allow-sr-over-srte</b> configuration.</p> <p>Under ECMP, when this command is configured to <b>true</b>, preference is given to the SR-TE LSPs with <b>allow-sr-over-srte</b> explicitly configured over the LSPs that do not have <b>allow-sr-over-srte</b> configured.</p>
Default	false
Introduced	23.3.R1
Platforms	All

## tunnel-next-hop

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>tunnel-next-hop</b> context
Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop</i>
Tree	<a href="#">tunnel-next-hop</a>
Introduced	16.0.R1
Platforms	All

## family [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop family keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1

Platforms All

### **[family-type]** *keyword*

Synopsis Address family type for tunnel next hop

Context **configure** **router** *string* **isis** *number* **igp-shortcut** **tunnel-next-hop** **family** *keyword*

Tree **family**

Options ipv4, ipv6, srv4, srv6

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **resolution** *keyword*

Synopsis Resolution mode for IGP shortcut tunnels

Context **configure** **router** *string* **isis** *number* **igp-shortcut** **tunnel-next-hop** **family** *keyword* **resolution** *keyword*

Tree **resolution**

Options none, filter, any, match-family-ip

Default none

Introduced 16.0.R1

Platforms All

### **resolution-filter**

Synopsis Enter the **resolution-filter** context

Context **configure** **router** *string* **isis** *number* **igp-shortcut** **tunnel-next-hop** **family** *keyword* **resolution-filter**

Tree **resolution-filter**

Introduced 16.0.R1

Platforms All

### **rsvp** *boolean*

Synopsis Use RSVP tunneling for next-hop resolution

Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop family keyword resolution-filter rsvp boolean</i>
Tree	<a href="#">rsvp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-te** *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <i>router string isis number igp-shortcut tunnel-next-hop family keyword resolution-filter sr-te boolean</i>
Tree	<a href="#">sr-te</a>
Default	false
Introduced	16.0.R1
Platforms	All

**iid-tlv** *boolean*

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	<b>configure</b> <i>router string isis number iid-tlv boolean</i>
Tree	<a href="#">iid-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	<b>configure</b> <i>router string isis number import-policy reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <i>policy-options policy-statement string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1

Platforms All

### **interface** [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance  
 Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string*  
 Tree [interface](#)  
 Introduced 16.0.R1  
 Platforms All

### **[interface-name]** *string*

Synopsis Router interface name  
 Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string*  
 Tree [interface](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **adjacency-set** [[id](#)] *reference*

Synopsis Add a list entry for **adjacency-set**  
 Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [adjacency-set](#) *reference*  
 Tree [adjacency-set](#)  
 Introduced 16.0.R1  
 Platforms All

### **[id]** *reference*

Synopsis Adjacency set ID  
 Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [adjacency-set](#) *reference*  
 Tree [adjacency-set](#)  
 Reference **configure** [router](#) *string* [isis](#) *number* [segment-routing](#) [adjacency-set](#) *number*  
 Notes This element is part of a list key.

Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the IS-IS interface
Context	<b>configure</b> <b>router</b> <i>string isis number interface string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **bfd-liveness**

Synopsis	Enter the <b>bfd-liveness</b> context
Context	<b>configure</b> <b>router</b> <i>string isis number interface string bfd-liveness</i>
Tree	<a href="#">bfd-liveness</a>
Description	Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enable the <b>ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string isis number interface string bfd-liveness ipv4</i>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

### **include-bfd-tlv** *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
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Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <a href="#">include-bfd-tlv</a> <a href="#">boolean</a>
Tree	<a href="#">include-bfd-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">bfd-liveness</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

## include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">include-bfd-tlv</a> <a href="#">boolean</a>
Tree	<a href="#">include-bfd-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

## csnp-interval *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">csnp-interval</a> <a href="#">number</a>
Tree	<a href="#">csnp-interval</a>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**default-instance** *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>default-instance</b> <i>boolean</i>
Tree	<a href="#">default-instance</a>
Default	false
Introduced	16.0.R1
Platforms	All

**flex-algo** [[flex-algo-id](#)] *number*

Synopsis	Enter the <b>flex-algo</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i>
Tree	<a href="#">flex-algo</a>
Max. Instances	7
Introduced	20.7.R1
Platforms	All

**[flex-algo-id]** *number*

Synopsis	Flexible algorithm ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i>
Tree	<a href="#">flex-algo</a>
Range	128 to 255
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

**ipv4-node-sid**

Synopsis	Enable the <b>ipv4-node-sid</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>flex-algo</b> <i>number</i> <b>ipv4-node-sid</b>
Tree	<a href="#">ipv4-node-sid</a>
Introduced	20.7.R1



Platforms All

### **index number**

Synopsis Node SID index for this interface

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [flex-algo](#) *number* [ipv4-node-sid](#) [index](#) *number*

Tree [index](#)

Range 0 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 20.7.R1

Platforms All

### **label number**

Synopsis Label value for the node SID

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [flex-algo](#) *number* [ipv4-node-sid](#) [label](#) *number*

Tree [label](#)

Range 1 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 20.7.R1

Platforms All

### **ipv6-node-sid**

Synopsis Enable the **ipv6-node-sid** context

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [flex-algo](#) *number* [ipv6-node-sid](#)

Tree [ipv6-node-sid](#)

Introduced 20.7.R1

Platforms All

### **index number**

Synopsis Node SID index for this interface

Context	<b>configure</b> <i>router string isis number interface string flex-algo number ipv6-node-sid index number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	20.7.R1
Platforms	All

### **label** *number*

Synopsis	Label value for the node SID
Context	<b>configure</b> <i>router string isis number interface string flex-algo number ipv6-node-sid label number</i>
Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	20.7.R1
Platforms	All

### **hello-authentication** *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	<b>configure</b> <i>router string isis number interface string hello-authentication boolean</i>
Tree	<a href="#">hello-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **hello-authentication-key** *string*

Synopsis	Authentication key or hash string for Hello PDUs
Context	<b>configure</b> <i>router string isis number interface string hello-authentication-key string</i>
Tree	<a href="#">hello-authentication-key</a>
String Length	1 to 366
Introduced	16.0.R1

Platforms All

### **hello-authentication-keychain** *reference*

Synopsis Authentication keychain to use for the session

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [hello-authentication-keychain](#) *reference*

Tree [hello-authentication-keychain](#)

Reference **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string*

Introduced 16.0.R3

Platforms All

### **hello-authentication-type** *keyword*

Synopsis Hello authentication type

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [hello-authentication-type](#) *keyword*

Tree [hello-authentication-type](#)

Options password, message-digest

Introduced 16.0.R1

Platforms All

### **hello-padding** *keyword*

Synopsis Padding on IS-IS Hello packets

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [hello-padding](#) *keyword*

Tree [hello-padding](#)

Options adaptive, loose, strict, none

Introduced 16.0.R1

Platforms All

### **interface-type** *keyword*

Synopsis Interface type to broadcast, point-to-point, or to be default

Context **configure** [router](#) *string* [isis](#) *number* [interface](#) *string* [interface-type](#) *keyword*

Tree [interface-type](#)

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Options	point-to-point, broadcast
Introduced	16.0.R1
Platforms	All

### **ipv4-adjacency-sid**

Synopsis	Enable the <b>ipv4-adjacency-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-adjacency-sid</a>
Tree	<a href="#">ipv4-adjacency-sid</a>
Introduced	16.0.R1
Platforms	All

### **label** *number*

Synopsis	Adjacency SID label
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-adjacency-sid</a> <a href="#">label</a> <i>number</i>
Tree	<a href="#">label</a>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

### **ipv4-multicast** *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-multicast</a> <i>boolean</i>
Tree	<a href="#">ipv4-multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv4-node-sid**

Synopsis	Enable the <b>ipv4-node-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-node-sid</a>
Tree	<a href="#">ipv4-node-sid</a>

Introduced 16.0.R1  
Platforms All

### **clear-n-flag** *boolean*

Synopsis Clear the node-sid flag (N-flag)  
Context **configure** *router string isis number interface string ipv4-node-sid clear-n-flag boolean*  
Tree [clear-n-flag](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **index** *number*

Synopsis Node SID index for this interface  
Context **configure** *router string isis number interface string ipv4-node-sid index number*  
Tree [index](#)  
Range 0 to 4294967295  
Notes The following elements are part of a choice: **index** or **label**.  
Introduced 16.0.R1  
Platforms All

### **label** *number*

Synopsis Label value for the node SID  
Context **configure** *router string isis number interface string ipv4-node-sid label number*  
Tree [label](#)  
Range 1 to 4294967295  
Notes The following elements are part of a choice: **index** or **label**.  
Introduced 16.0.R1  
Platforms All

### **ipv6-adjacency-sid**

Synopsis Enable the **ipv6-adjacency-sid** context

Context	<b>configure</b> <i>router string isis number interface string ipv6-adjacency-sid</i>
Tree	<a href="#">ipv6-adjacency-sid</a>
Introduced	16.0.R1
Platforms	All

### **label** *number*

Synopsis	Adjacency SID label
Context	<b>configure</b> <i>router string isis number interface string ipv6-adjacency-sid label number</i>
Tree	<a href="#">label</a>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

### **ipv6-multicast** *boolean*

Synopsis	Enable IPv6 multicast routing for the interface
Context	<b>configure</b> <i>router string isis number interface string ipv6-multicast boolean</i>
Tree	<a href="#">ipv6-multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6-node-sid**

Synopsis	Enable the <b>ipv6-node-sid</b> context
Context	<b>configure</b> <i>router string isis number interface string ipv6-node-sid</i>
Tree	<a href="#">ipv6-node-sid</a>
Introduced	16.0.R1
Platforms	All

### **clear-n-flag** *boolean*

Synopsis	Clear the node-sid flag (N-flag)
Context	<b>configure</b> <i>router string isis number interface string ipv6-node-sid clear-n-flag boolean</i>

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Tree	<a href="#">clear-n-flag</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **index number**

Synopsis	Node SID index for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6-node-sid</a> <a href="#">index</a> <i>number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

### **label number**

Synopsis	Label value for the node SID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6-node-sid</a> <a href="#">label</a> <i>number</i>
Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

### **ipv6-unicast boolean**

Synopsis	Enable IPv6 unicast routing for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6-unicast</a> <i>boolean</i>
Tree	<a href="#">ipv6-unicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

**level** [*level-number*] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <i>router string isis number interface string level keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[level-number]** *keyword*

Synopsis	ISIS protocol level number
Context	<b>configure</b> <i>router string isis number interface string level keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**hello-authentication-key** *string*

Synopsis	Authentication key for Hello PDUs
Context	<b>configure</b> <i>router string isis number interface string level keyword hello-authentication-key string</i>
Tree	<a href="#">hello-authentication-key</a>
Description	This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match.  If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All



**hello-authentication-keychain** *reference*

Synopsis	Authentication keychain to use for the session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-authentication-keychain</a> <i>reference</i>
Tree	<a href="#">hello-authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

**hello-authentication-type** *keyword*

Synopsis	Hello authentication enabled on the context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-authentication-type</a> <i>keyword</i>
Tree	<a href="#">hello-authentication-type</a>
Description	This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello <b>authentication-key</b> statement must also be included.
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

**hello-interval** *number*

Synopsis	Interval between Hello messages sent on this level
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">hello-interval</a> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	1 to 20000
Units	seconds
Default	9
Introduced	16.0.R1
Platforms	All

**hello-multiplier** *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
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Context	<b>configure</b> <i>router string isis number interface string level keyword hello-multiplier number</i>
Tree	<a href="#">hello-multiplier</a>
Range	2 to 100
Default	3
Introduced	16.0.R1
Platforms	All

### **hello-padding** *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	<b>configure</b> <i>router string isis number interface string level keyword hello-padding keyword</i>
Tree	<a href="#">hello-padding</a>
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

### **ipv4-multicast-metric** *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
Context	<b>configure</b> <i>router string isis number interface string level keyword ipv4-multicast-metric number</i>
Tree	<a href="#">ipv4-multicast-metric</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **ipv6-multicast-metric** *number*

Synopsis	IS-IS interface metric applied for IPv6 multicast
Context	<b>configure</b> <i>router string isis number interface string level keyword ipv6-multicast-metric number</i>
Tree	<a href="#">ipv6-multicast-metric</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**ipv6-unicast-metric** *number*

Synopsis	IS-IS interface metric applied for IPv6 unicast
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>level</b> <i>keyword</i> <b>ipv6-unicast-metric</b> <i>number</i>
Tree	<b>ipv6-unicast-metric</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**metric** *number*

Synopsis	IS-IS interface metric applied for IPv4 unicast
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>level</b> <i>keyword</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**passive** *boolean*

Synopsis	Passive interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>level</b> <i>keyword</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Default	false
Introduced	16.0.R1
Platforms	All

**priority** *number*

Synopsis	Router to become the designated router on a multi-access network
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>level</b> <i>keyword</i> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	0 to 127
Default	64

Introduced 16.0.R1  
 Platforms All

### **sd-offset** *number*

Synopsis Value of the signal degrade offset  
 Context **configure** *router string isis number interface string level keyword sd-offset number*  
 Tree [sd-offset](#)  
 Range 1 to 16777215  
 Introduced 16.0.R1  
 Platforms All

### **sf-offset** *number*

Synopsis Value of the signal fail offset  
 Context **configure** *router string isis number interface string level keyword sf-offset number*  
 Tree [sf-offset](#)  
 Range 1 to 16777215  
 Introduced 16.0.R1  
 Platforms All

### **level-capability** *keyword*

Synopsis IS-IS levels for this interface  
 Context **configure** *router string isis number interface string level-capability keyword*  
 Tree [level-capability](#)  
 Options 1, 2, 1/2  
 Default 1/2  
 Introduced 16.0.R1  
 Platforms All

### **load-balancing-weight** *number*

Synopsis Load balancing weight  
 Context **configure** *router string isis number interface string load-balancing-weight number*

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Tree	<a href="#">load-balancing-weight</a>
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

## loopfree-alternate

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R3
Platforms	All

## exclude *boolean*

Synopsis	Enable/disable Loopfree Alternative at interface level.
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <b>exclude</b> <i>boolean</i>
Tree	<a href="#">exclude</a>
Default	false
Introduced	16.0.R3
Platforms	All

## policy-map

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a>
Tree	<a href="#">policy-map</a>
Introduced	16.0.R3
Platforms	All

## route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a> <a href="#">route-nh-template</a> <i>reference</i>
Tree	<a href="#">route-nh-template</a>

Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

### **lsp-pacing-interval** *number*

Synopsis	Interval for sending LSPs from interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">lsp-pacing-interval</a> <i>number</i>
Tree	<a href="#">lsp-pacing-interval</a>
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **mesh-group**

Synopsis	Enable the <b>mesh-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">mesh-group</a>
Tree	<a href="#">mesh-group</a>
Introduced	16.0.R1
Platforms	All

### **blocked**

Synopsis	Prevent the interface from flooding LSPs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">mesh-group</a> <a href="#">blocked</a>
Tree	<a href="#">blocked</a>
Notes	The following elements are part of a choice: <b>blocked</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Mesh group for the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>mesh-group</b> <b>value</b> <i>number</i>
Tree	<b>value</b>
Range	1 to 2000000000
Notes	The following elements are part of a choice: <b>blocked</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

**passive** *boolean*

Synopsis	Passive interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Default	false
Introduced	16.0.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>retransmit-interval</b> <i>number</i>
Tree	<b>retransmit-interval</b>
Range	1 to 65535
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

**sid-protection** *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>interface</b> <i>string</i> <b>sid-protection</b> <i>boolean</i>
Tree	<b>sid-protection</b>
Default	true

Introduced	16.0.R1
Platforms	All

### **tag number**

Synopsis	Route tag for IP address of interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">tag</a> <i>number</i>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **ipv4-multicast-routing keyword**

Synopsis	IS-IS topology for IPv4 multicast routing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ipv4-multicast-routing</a> <i>keyword</i>
Tree	<a href="#">ipv4-multicast-routing</a>
Options	false, native, mt
Default	native
Introduced	16.0.R1
Platforms	All

### **ipv4-routing boolean**

Synopsis	Support IPv4 routing for IS-IS instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ipv4-routing</a> <i>boolean</i>
Tree	<a href="#">ipv4-routing</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6-multicast-routing keyword**

Synopsis	Topology to populate the IPv6 multicast RTM
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ipv6-multicast-routing</a> <i>keyword</i>



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Tree	<a href="#">ipv6-multicast-routing</a>
Options	false, native, mt
Introduced	16.0.R1
Platforms	All

### **ipv6-routing** *keyword*

Synopsis	Routing topology for IPv6
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ipv6-routing</a> <i>keyword</i>
Tree	<a href="#">ipv6-routing</a>
Options	false, native, mt
Default	false
Introduced	16.0.R1
Platforms	All

### **ldp-over-rsvp** *boolean*

Synopsis	Allow LDP over RSVP processing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ldp-over-rsvp</a> <i>boolean</i>
Tree	<a href="#">ldp-over-rsvp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ldp-sync** *boolean*

Synopsis	Use IGP-LDP synchronization feature on all interfaces participating in IS-IS routing protocol
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">ldp-sync</a> <i>boolean</i>
Tree	<a href="#">ldp-sync</a>
Default	true
Introduced	16.0.R1
Platforms	All

**level** [*level-number*] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i>
Tree	<i>level</i>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[level-number]** *keyword*

Synopsis	ISIS protocol level number
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i>
Tree	<i>level</i>
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> <i>advertise-router-capability</i> <i>boolean</i>
Tree	<i>advertise-router-capability</i>
Default	true
Introduced	16.0.R1
Platforms	All

**authentication-key** *string*

Synopsis	Authentication key to verify PDUs sent on the interface
Context	<b>configure</b> <i>router</i> <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> <i>authentication-key</i> <i>string</i>
Tree	<i>authentication-key</i>
Description	This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface.

Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The **authentication-type** command must also be included.

String Length	1 to 366
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	Keychain used to sign and authenticate
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type to be used
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">authentication-type</a> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

### **bier**

Synopsis	Enter the <b>bier</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">bier</a>
Tree	<a href="#">bier</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BIER
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Context	<b>configure</b> <i>router string isis number level keyword bier admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **template** *reference*

Synopsis	BIER template name
Context	<b>configure</b> <i>router string isis number level keyword bier template reference</i>
Tree	<a href="#">template</a>
Reference	<b>configure</b> <i>router string bier template string</i>
Introduced	16.0.R4
Platforms	All

### **csnp-authentication** *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	<b>configure</b> <i>router string isis number level keyword csnp-authentication boolean</i>
Tree	<a href="#">csnp-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **database-export-exclude** *boolean*

Synopsis	Exclude IGP link-state information of a specific IS-IS level from being exported into extended TE-DB
Context	<b>configure</b> <i>router string isis number level keyword database-export-exclude boolean</i>
Tree	<a href="#">database-export-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

**default-ipv4-multicast-metric** *number*

Synopsis	Default metric for IPv4 unicast
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> <b>default-ipv4-multicast-metric</b> <i>number</i>
Tree	<a href="#">default-ipv4-multicast-metric</a>
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

**default-ipv6-multicast-metric** *number*

Synopsis	Default metric for IPv6 unicast
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> <b>default-ipv6-multicast-metric</b> <i>number</i>
Tree	<a href="#">default-ipv6-multicast-metric</a>
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

**default-ipv6-unicast-metric** *number*

Synopsis	Default metric for IPv6 unicast
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> <b>default-ipv6-unicast-metric</b> <i>number</i>
Tree	<a href="#">default-ipv6-unicast-metric</a>
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

**default-metric** *number*

Synopsis	Default metric
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>level</i> <i>keyword</i> <b>default-metric</b> <i>number</i>
Tree	<a href="#">default-metric</a>
Range	1 to 16777215

Default	10
Introduced	16.0.R1
Platforms	All

### **external-preference** *number*

Synopsis	External route preference for IS-IS level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>external-preference</b> <i>number</i>
Tree	<b>external-preference</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **hello-authentication** *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>hello-authentication</b> <i>boolean</i>
Tree	<b>hello-authentication</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **hello-padding** *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>hello-padding</b> <i>keyword</i>
Tree	<b>hello-padding</b>
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>level</b> <i>keyword</i> <b>loopfree-alternate-exclude</b> <i>boolean</i>

Tree	<a href="#">loopfree-alternate-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **lsp-mtu-size** *number*



**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">lsp-mtu-size</a> <i>number</i>
Tree	<a href="#">lsp-mtu-size</a>
Range	490 to 9778
Units	bytes
Default	1492
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	External route preference at level
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **psnp-authentication** *boolean*

Synopsis	Enable authentication on PSNP IS-IS protocol packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">psnp-authentication</a> <i>boolean</i>
Tree	<a href="#">psnp-authentication</a>
Default	true
Introduced	16.0.R1

Platforms All

### **wide-metrics-only** *boolean*

Synopsis Use wide metrics advertisements in the LSPs  
 Context **configure** *router string isis number level keyword wide-metrics-only boolean*  
 Tree [wide-metrics-only](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **level-capability** *keyword*

Synopsis Routing level for instance  
 Context **configure** *router string isis number level-capability keyword*  
 Tree [level-capability](#)  
 Options 1, 2, 1/2  
 Default 1/2  
 Introduced 16.0.R1  
 Platforms All

### **link-group** [*link-group-name*] *string*

Synopsis Enter the **link-group** list instance  
 Context **configure** *router string isis number link-group string*  
 Tree [link-group](#)  
 Introduced 16.0.R1  
 Platforms All

### **[link-group-name]** *string*

Synopsis Link group name for the IS-IS protocol  
 Context **configure** *router string isis number link-group string*  
 Tree [link-group](#)  
 String Length 1 to 32



Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>link-group</i> <i>string</i> <i>description</i> <i>string</i>
Tree	<i>description</i>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**level** [*level-number*] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>link-group</i> <i>string</i> <i>level</i> <i>keyword</i>
Tree	<i>level</i>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[level-number]** *keyword*

Synopsis	ISIS protocol level number
Context	<b>configure</b> <b>router</b> <i>string</i> <i>isis</i> <i>number</i> <i>link-group</i> <i>string</i> <i>level</i> <i>keyword</i>
Tree	<i>level</i>
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **ipv4-multicast-metric-offset** *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>ipv4-multicast-metric-offset</b> <i>number</i>
Tree	<a href="#">ipv4-multicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **ipv4-unicast-metric-offset** *number*

Synopsis	Offset value for the IPv4 unicast address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>ipv4-unicast-metric-offset</b> <i>number</i>
Tree	<a href="#">ipv4-unicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **ipv6-multicast-metric-offset** *number*

Synopsis	Offset value for the IPv6 multicast address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>ipv6-multicast-metric-offset</b> <i>number</i>
Tree	<a href="#">ipv6-multicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **ipv6-unicast-metric-offset** *number*

Synopsis	Offset value for the IPv6 unicast address family
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>ipv6-unicast-metric-offset</b> <i>number</i>
Tree	<a href="#">ipv6-unicast-metric-offset</a>
Range	1 to 16777215

Introduced 16.0.R1  
 Platforms All

### **member** [[interface-name](#)] *reference*

Synopsis Add a list entry for **member**  
 Context **configure** [router](#) *string* [isis](#) *number* [link-group](#) *string* [level](#) *keyword* [member](#) *reference*  
 Tree [member](#)  
 Max. Instances 8  
 Introduced 16.0.R1  
 Platforms All

### **[interface-name]** *reference*

Synopsis Router interface name for this link group  
 Context **configure** [router](#) *string* [isis](#) *number* [link-group](#) *string* [level](#) *keyword* [member](#) *reference*  
 Tree [member](#)  
 Reference **configure** [router](#) *string* [isis](#) *number* [interface](#) *string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **oper-members** *number*

Synopsis Minimum number of operational links  
 Context **configure** [router](#) *string* [isis](#) *number* [link-group](#) *string* [level](#) *keyword* [oper-members](#) *number*  
 Tree [oper-members](#)  
 Range 1 to 8  
 Introduced 16.0.R1  
 Platforms All

**revert-members** *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>link-group</b> <i>string</i> <b>level</b> <i>keyword</i> <b>revert-members</b> <i>number</i>
Tree	<a href="#">revert-members</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

**loopfree-alternate**

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>loopfree-alternate</b>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R1
Platforms	All

**augment-route-table** *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>loopfree-alternate</b> <b>augment-route-table</b> <i>boolean</i>
Tree	<a href="#">augment-route-table</a>
Description	When configured to <b>true</b> , this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to <b>false</b> , rLFA-specific information is not added to RTM entries.
Default	false
Introduced	19.10.R1
Platforms	All

**exclude**

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>loopfree-alternate</b> <b>exclude</b>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3

Platforms All

### **prefix-policy** *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">exclude</a> <a href="#">prefix-policy</a> <i>reference</i>
Tree	<a href="#">prefix-policy</a>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

### **multi-homed-prefix**

Synopsis	Enable the <b>multi-homed-prefix</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">multi-homed-prefix</a>
Tree	<a href="#">multi-homed-prefix</a>
Description	Commands in this context enable multihomed prefix LFA for IS-IS routes (IP FRR), SR-ISIS tunnels, and SRv6-ISIS tunnels.  This feature uses the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.  This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of intra-area anycast prefixes.  The computed IP next hop-based backup path is added to IS-IS routes of external /32 prefixes or /128 prefixes and intra-area /32 or /128 anycast prefixes in the RTM if the prefix is not protected by the base LFA or if the user set leaf preference command option is configured to all. The user must enable the <b>configure routing-options ip-fast-reroute</b> command to have these backup paths programmed into the FIB in the datapath.  The computed IP next hop or repair tunnel-based backup path is also programmed for:

- SR-ISIS node SID tunnels of external /32 IPv4 prefixes and /128 IPv6 prefixes, and node SID tunnels of intra-area /32 IPv4 anycast prefixes and /128 anycast IPv6 prefixes, in both algorithm 0 and flexible-algorithms
- SRv6-ISIS locator routes and tunnels of external prefixes and of intra-area anycast prefixes of any size, in both algorithm 0 and flexible algorithm numbers.

As a result, an SR-TE LSP, an SR-MPLS policy, or an SRv6 policy which uses an SR-ISIS SID or an SRv6-ISIS SID of those same prefixes in its configured or computed SID list benefits from the multihomed prefix LFA protection.

Once the IP next-hop based multihomed prefix LFA is enabled, the extensions to compute an SR-TE repair tunnel for the multihomed prefix LFA in the case of SR-ISIS and SRv6-ISIS are automatically enabled if the user also enabled TI-LFA or Remote LFA. The computation reuses the SID list of the primary path or of the TI-LFA or Remote LFA backup path of the alternate ABR or ASBR or alternate owner router.

Introduced 22.7.R1

Platforms All

### preference *keyword*

Synopsis Multihomed prefix LFA backup path preference

Context **configure** *router string isis number loopfree-alternate multi-homed-prefix preference keyword*

Tree [preference](#)

Options none, all

Default none

Introduced 22.7.R1

Platforms All

### remote-lfa

Synopsis Enable the **remote-lfa** context

Context **configure** *router string isis number loopfree-alternate remote-lfa*

Tree [remote-lfa](#)

Introduced 16.0.R1

Platforms All

### max-pq-cost *number*

Synopsis Maximum cost of destination node during reverse SPF calculation

Context	<b>configure</b> <i>router string isis number loopfree-alternate remote-lfa max-pq-cost number</i>
Tree	<a href="#">max-pq-cost</a>
Max. Range	0 to 4294967295
Default	4261412864
Introduced	16.0.R1
Platforms	All

## node-protect

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <i>router string isis number loopfree-alternate remote-lfa node-protect</i>
Tree	<a href="#">node-protect</a>
Introduced	16.0.R4
Platforms	All

## max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	<b>configure</b> <i>router string isis number loopfree-alternate remote-lfa node-protect max-pq-nodes number</i>
Tree	<a href="#">max-pq-nodes</a>
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

## ti-lfa

Synopsis	Enable the <b>ti-lfa</b> context
Context	<b>configure</b> <i>router string isis number loopfree-alternate ti-lfa</i>
Tree	<a href="#">ti-lfa</a>
Description	Commands in this context configure the Topology-Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this IS-IS instance.
Introduced	16.0.R1
Platforms	All

**max-sr-frr-labels** *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	<b>configure</b> <i>router string isis number loopfree-alternate ti-lfa max-sr-frr-labels number</i>
Tree	<a href="#">max-sr-frr-labels</a>
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R1
Platforms	All

**max-srv6-frr-sids** *number*

Synopsis	Maximum number of SIDs the TI-LFA backup path can use
Context	<b>configure</b> <i>router string isis number loopfree-alternate ti-lfa max-srv6-frr-sids number</i>
Tree	<a href="#">max-srv6-frr-sids</a>
Description	This command configures the maximum number of SRv6 SIDs allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path
Range	0 to 3
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**node-protect**

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <i>router string isis number loopfree-alternate ti-lfa node-protect</i>
Tree	<a href="#">node-protect</a>
Introduced	16.0.R5
Platforms	All



## ***lsp-lifetime number***

**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	<b>configure</b> <i>router string isis number lsp-lifetime number</i>
Tree	<a href="#">lsp-lifetime</a>
Range	350 to 65535
Units	seconds
Default	1200
Introduced	16.0.R1
Platforms	All

## ***lsp-minimum-remaining-lifetime number***

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	<b>configure</b> <i>router string isis number lsp-minimum-remaining-lifetime number</i>
Tree	<a href="#">lsp-minimum-remaining-lifetime</a>
Range	350 to 65535
Units	seconds
Introduced	19.7.R1
Platforms	All

## ***lsp-mtu-size number***

**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	<b>configure</b> <i>router string isis number lsp-mtu-size number</i>
Tree	<a href="#">lsp-mtu-size</a>
Range	490 to 9778
Units	bytes
Default	1492

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Introduced	16.0.R1
Platforms	All

## **lsp-refresh**

Synopsis	Enter the <b>lsp-refresh</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">lsp-refresh</a>
Tree	<a href="#">lsp-refresh</a>
Introduced	16.0.R1
Platforms	All

## **half-lifetime** *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">lsp-refresh</a> <a href="#">half-lifetime</a> <i>boolean</i>
Tree	<a href="#">half-lifetime</a>
Default	true
Introduced	16.0.R1
Platforms	All

## **interval** *number*

Synopsis	Refresh timer interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">lsp-refresh</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	150 to 65535
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

## **mru-mismatch-detection** *boolean*

Synopsis	Enable detection of MRU mismatch
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">mru-mismatch-detection</a> <i>boolean</i>

Tree	<a href="#">mru-mismatch-detection</a>
Description	<p>When configured to <b>true</b>, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size.</p> <p>When configured to <b>false</b>, the IS-IS router instance will not drop oversized IIH packets.</p> <p>By default, FP-based hardware can receive oversized packets but it will not originate them.</p>
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## multi-topology

Synopsis	Enable the <b>multi-topology</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">multi-topology</a>
Tree	<a href="#">multi-topology</a>
Introduced	16.0.R1
Platforms	All

## ipv4-multicast *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">multi-topology</a> <a href="#">ipv4-multicast</a> <i>boolean</i>
Tree	<a href="#">ipv4-multicast</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6-multicast *boolean*

Synopsis	Support IPv6 topology (MT4)
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">multi-topology</a> <a href="#">ipv6-multicast</a> <i>boolean</i>
Tree	<a href="#">ipv6-multicast</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6-unicast** *boolean*

Synopsis	Support multi-topology TLVs
Context	<b>configure</b> <i>router string isis number multi-topology ipv6-unicast boolean</i>
Tree	<a href="#">ipv6-unicast</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **multicast-import**

Synopsis	Enter the <b>multicast-import</b> context
Context	<b>configure</b> <i>router string isis number multicast-import</i>
Tree	<a href="#">multicast-import</a>
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	<b>configure</b> <i>router string isis number multicast-import ipv4 boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Submit IPv6 routes into the multicast RPF of the RTM
Context	<b>configure</b> <i>router string isis number multicast-import ipv6 boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

## overload

Synopsis	Enable the <b>overload</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>overload</b>
Tree	<a href="#">overload</a>
Introduced	16.0.R1
Platforms	All

## max-metric *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">overload</a> <b>max-metric</b> <i>boolean</i>
Tree	<a href="#">max-metric</a>
Default	false
Introduced	16.0.R1
Platforms	All

## overload-export-external *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">overload-export-external</a> <i>boolean</i>
Tree	<a href="#">overload-export-external</a>
Default	false
Introduced	16.0.R1
Platforms	All

## overload-export-interlevel *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">overload-export-interlevel</a> <i>boolean</i>
Tree	<a href="#">overload-export-interlevel</a>
Default	false
Introduced	16.0.R1
Platforms	All

## overload-fib-error-notify-only

Synopsis	Enable the <b>overload-fib-error-notify-only</b> context
Context	<b>configure</b> <i>router string isis number</i> <b>overload-fib-error-notify-only</b>
Tree	<b>overload-fib-error-notify-only</b>
Description	<p>Commands in this context configure the IS-IS router to send a notification when an overload condition occurs while programming the FIB, instead of advertising the overload condition of the router in the IS-IS LSP.</p> <p><b>Note:</b> Nokia recommends being careful using this command. When you configure the router not to advertise the IS-IS overload state in the IS-IS LSP, other routers are not instructed to take the overloaded router out of the IS-IS forwarding topology and this will cause suboptimal forwarding and non-deterministic behavior on the overloaded router. To avoid changing the default IS-IS overflow behavior, leave this command disabled.</p> <p>When this command is configured, the IS-IS router enters a suboptimal state where it sends only a notification trap; transit traffic can still use the router in this state.</p> <p>The IS-IS router tracks the segment routing prefix SIDs where FIB programming failed. With the <b>retry</b> command configured, the router retries programming the segment routing prefix SIDs in the FIB using this tracked information.</p> <p>When this command is not configured, during normal operation, the system may force the router to enter an overload state because of a lack of FIB resources. In this state, the router is used to terminate traffic and is not used to transit traffic.</p>
Introduced	23.7.R1
Platforms	All

## retry number

Synopsis	Time to retry programming failed entries in the FIB
Context	<b>configure</b> <i>router string isis number</i> <b>overload-fib-error-notify-only</b> <i>retry number</i>
Tree	<b>retry</b>
Description	<p>This command configures the time the router uses to retry programming the failed entries in the FIB.</p> <p>The <b>overload-fib-error-notify-only</b> command must be configured to use the retry timer. The removal of the <b>overload-fib-error-notify-only</b> configuration causes the system to program the failed entries in the FIB by triggering an immediate SPF.</p>
Range	10 to 1800
Units	seconds
Default	10
Introduced	23.7.R1
Platforms	All

**overload-include-locators** *boolean*

Synopsis	Advertise SRv6 locators if IS-IS instance overloads
Context	<b>configure</b> <i>router string isis number</i> <b>overload-include-locators</b> <i>boolean</i>
Tree	<b>overload-include-locators</b>
Description	When configured to <b>true</b> , if the IS-IS instance goes into overload (because of resource depletion or manual configuration), the router includes SRv6 locators when it advertises links and prefixes with <b>max-metric</b> .
Default	false
Introduced	23.10.R1
Platforms	All

**overload-on-boot**

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure</b> <i>router string isis number</i> <b>overload-on-boot</b>
Tree	<b>overload-on-boot</b>
Introduced	16.0.R1
Platforms	All

**max-metric** *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	<b>configure</b> <i>router string isis number</i> <b>overload-on-boot</b> <b>max-metric</b> <i>boolean</i>
Tree	<b>max-metric</b>
Default	false
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	<b>configure</b> <i>router string isis number</i> <b>overload-on-boot</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	60 to 1800
Units	seconds

Introduced 16.0.R1  
Platforms All

### **poi-tlv** *boolean*

Synopsis Purge Originator Identification TLV  
Context **configure** *router string isis number poi-tlv boolean*  
Tree [poi-tlv](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **prefix-attributes-tlv** *boolean*

Synopsis Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information  
Context **configure** *router string isis number prefix-attributes-tlv boolean*  
Tree [prefix-attributes-tlv](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **prefix-limit**

Synopsis Enable the **prefix-limit** context  
Context **configure** *router string isis number prefix-limit*  
Tree [prefix-limit](#)  
Introduced 16.0.R1  
Platforms All

### **limit** *number*

Synopsis Maximum number of prefixes for IS-IS instance  
Context **configure** *router string isis number prefix-limit limit number*  
Tree [limit](#)  
Range 1 to 4294967295



Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Send warning message when the prefix limit is reached
Context	<b>configure</b> <b>router</b> <i>string isis number prefix-limit log-only boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-timeout** (*number | keyword*)

Synopsis	Time in overload state when prefix limit is reached
Context	<b>configure</b> <b>router</b> <i>string isis number prefix-limit overload-timeout (number   keyword)</i>
Tree	<a href="#">overload-timeout</a>
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

### **warning-threshold** *number*

Synopsis	Threshold value to trigger a warning message to be sent
Context	<b>configure</b> <b>router</b> <i>string isis number prefix-limit warning-threshold number</i>
Tree	<a href="#">warning-threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **psnp-authentication** *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>psnp-authentication</b> <i>boolean</i>
Tree	<b>psnp-authentication</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **reference-bandwidth** *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>reference-bandwidth</b> <i>number</i>
Tree	<b>reference-bandwidth</b>
Range	1 to 18446744073709551615
Units	kilobps
Introduced	16.0.R1
Platforms	All

### **rib-priority**

Synopsis	Enter the <b>rib-priority</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>rib-priority</b>
Tree	<b>rib-priority</b>
Introduced	16.0.R1
Platforms	All

### **high**

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>rib-priority</b> <b>high</b>
Tree	<b>high</b>
Introduced	16.0.R1
Platforms	All

**prefix-list reference**

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">rib-priority</a> <a href="#">high</a> <a href="#">prefix-list</a> <i>reference</i>
Tree	<a href="#">prefix-list</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: <b>prefix-list</b> or <b>tag</b> .
Introduced	16.0.R1
Platforms	All

**tag number**

Synopsis	Tag value that is used to match IS-IS routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">rib-priority</a> <a href="#">high</a> <a href="#">tag</a> <i>number</i>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>prefix-list</b> or <b>tag</b> .
Introduced	16.0.R1
Platforms	All

**router-id string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the ISIS instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">router-id</a> <i>string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

**segment-routing**

Synopsis	Enter the <b>segment-routing</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a>
Tree	<a href="#">segment-routing</a>
Introduced	16.0.R1
Platforms	All

### **adj-sid-hold** (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <b>adj-sid-hold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">adj-sid-hold</a>
Description	<p>This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.</p> <p>When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.</p> <ul style="list-style-type: none"> <li>• IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.</li> <li>• The adjacency SID hold timer starts.</li> <li>• The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.</li> <li>• If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.</li> <li>• If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.</li> <li>• A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.</li> </ul>
Range	1 to 1800
Units	seconds
Options	none

Default	15
Introduced	16.0.R1
Platforms	All

### **adjacency-set** [*id*] *number*

Synopsis	Enter the <b>adjacency-set</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>segment-routing</b> <b>adjacency-set</b> <i>number</i>
Tree	<b>adjacency-set</b>
Introduced	16.0.R1
Platforms	All

### **[id]** *number*

Synopsis	Identifier for specified adjacency set
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>segment-routing</b> <b>adjacency-set</b> <i>number</i>
Tree	<b>adjacency-set</b>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertise** *boolean*

Synopsis	Advertise the adjacency set when all links terminate on the same neighboring node
Context	<b>configure</b> <b>router</b> <i>string</i> <b>isis</b> <i>number</i> <b>segment-routing</b> <b>adjacency-set</b> <i>number</i> <b>advertise</b> <i>boolean</i>
Tree	<b>advertise</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **family** *keyword*

Synopsis	Address family for the adjacency set
----------	--------------------------------------

Context	<b>configure</b> <i>router string isis number segment-routing adjacency-set number family keyword</i>
Tree	<i>family</i>
Options	ipv4, ipv6
Default	ipv4
Introduced	16.0.R1
Platforms	All

### **parallel** *boolean*

Synopsis	Require all members of the adjacency set to terminate on the same neighboring node
Context	<b>configure</b> <i>router string isis number segment-routing adjacency-set number parallel boolean</i>
Tree	<i>parallel</i>
Default	true
Introduced	16.0.R1
Platforms	All

### **sid**

Synopsis	Enable the <b>sid</b> context
Context	<b>configure</b> <i>router string isis number segment-routing adjacency-set number sid</i>
Tree	<i>sid</i>
Introduced	16.0.R1
Platforms	All

### **label** *number*

Synopsis	Adjacency SID label
Context	<b>configure</b> <i>router string isis number segment-routing adjacency-set number sid label number</i>
Tree	<i>label</i>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

**adjacency-sid**

Synopsis	Enter the <b>adjacency-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">adjacency-sid</a>
Tree	<a href="#">adjacency-sid</a>
Introduced	22.7.R1
Platforms	All

**allocate-dual-sids** *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">adjacency-sid</a> <a href="#">allocate-dual-sids</a> <i>boolean</i>
Tree	<a href="#">allocate-dual-sids</a>
Description	<p>When configured to <b>true</b>, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to <b>false</b>, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	22.7.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of segment routing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**class-forwarding** *boolean*

Synopsis	Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
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Context	<b>configure</b> <i>router string isis number segment-routing class-forwarding boolean</i>
Tree	<a href="#">class-forwarding</a>
Description	<p>When configured to <b>true</b>, this command enables Class-Based Forwarding (CBF) with ECMP for SR-ISIS resolved to RSVP-TE LSPs as IGP shortcuts.</p> <p>For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations.</p> <p>When configured to <b>false</b>, CBF over IGP shortcuts is disabled.</p>
Default	false
Introduced	20.2.R1
Platforms	All

### egress-statistics

Synopsis	Enter the <b>egress-statistics</b> context
Context	<b>configure</b> <i>router string isis number segment-routing egress-statistics</i>
Tree	<a href="#">egress-statistics</a>
Introduced	19.10.R1
Platforms	All

### adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	<b>configure</b> <i>router string isis number segment-routing egress-statistics adj-set boolean</i>
Tree	<a href="#">adj-set</a>
Description	<p>When configured to <b>true</b>, this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <i>router string isis number segment-routing egress-statistics adj-sid boolean</i>



Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

### **node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **entropy-label** *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">entropy-label</a> <i>boolean</i>
Tree	<a href="#">entropy-label</a>
Introduced	16.0.R1
Platforms	All

### **export-tunnel-table** *keyword*

Synopsis	Tunnel table export policies to export tunneled routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">export-tunnel-table</a> <i>keyword</i>
Tree	<a href="#">export-tunnel-table</a>
Options	ldp
Introduced	16.0.R1
Platforms	All

## ingress-statistics

Synopsis	Enter the <b>ingress-statistics</b> context
Context	<b>configure</b> <i>router string isis number segment-routing ingress-statistics</i>
Tree	<a href="#">ingress-statistics</a>
Introduced	19.10.R1
Platforms	All

## adj-set *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	<b>configure</b> <i>router string isis number segment-routing ingress-statistics adj-set boolean</i>
Tree	<a href="#">adj-set</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

## adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <i>router string isis number segment-routing ingress-statistics adj-sid boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

### **node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **mapping-server**

Synopsis	Enter the <b>mapping-server</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">mapping-server</a>
Tree	<a href="#">mapping-server</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the IS-IS mapping server
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **node-sid-map** [[sid-index](#)] *number*

Synopsis	Enter the <b>node-sid-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <i>number</i>
Tree	<a href="#">node-sid-map</a>
Introduced	16.0.R1
Platforms	All

**[sid-index] number**

Synopsis	SID index of a mapping server Prefix-SID
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <a href="#">number</a>
Tree	<a href="#">node-sid-map</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**clear-n-flag boolean**

Synopsis	Clear the node-sid flag (N-flag)
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <a href="#">number</a> <a href="#">clear-n-flag</a> <a href="#">boolean</a>
Tree	<a href="#">clear-n-flag</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ip-prefix string**

Synopsis	Prefix of a mapping server Prefix-SID
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">isis</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <a href="#">number</a> <a href="#">ip-prefix</a> <a href="#">string</a>
Tree	<a href="#">ip-prefix</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**level-capability keyword**

Synopsis	Flags to assign in SID Label Binding TLV advertised by Segment Routing Mapping Server
----------	---

Context	<b>configure</b> <i>router string isis number segment-routing mapping-server node-sid-map number level-capability keyword</i>
Tree	<a href="#">level-capability</a>
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

### **range** *number*

Synopsis	Range of addresses and their associated prefix SIDs
Context	<b>configure</b> <i>router string isis number segment-routing mapping-server node-sid-map number range number</i>
Tree	<a href="#">range</a>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **set-flags**

Synopsis	Enter the <b>set-flags</b> context
Context	<b>configure</b> <i>router string isis number segment-routing mapping-server node-sid-map number set-flags</i>
Tree	<a href="#">set-flags</a>
Introduced	16.0.R1
Platforms	All

### **bit-s** *boolean*

Synopsis	SID Label Binding TLV to be flooded across the entire routing domain
Context	<b>configure</b> <i>router string isis number segment-routing mapping-server node-sid-map number set-flags bit-s boolean</i>
Tree	<a href="#">bit-s</a>
Default	false
Introduced	16.0.R1

Platforms All

## maximum-sid-depth

Synopsis Enter the **maximum-sid-depth** context

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [maximum-sid-depth](#)

Tree [maximum-sid-depth](#)

Introduced 20.2.R1

Platforms All

## override-bmi *number*

Synopsis Value to override the announced node MSD-BMI value

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [maximum-sid-depth](#) [override-bmi](#) *number*

Tree [override-bmi](#)

Description This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.

When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.

Range 0 to 12

Introduced 20.2.R1

Platforms All

## override-erld *number*

Synopsis Value to override the announced node MSD-ERLD value

Context **configure** [router](#) [string](#) [isis](#) [number](#) [segment-routing](#) [maximum-sid-depth](#) [override-erld](#) *number*

Tree [override-erld](#)

Description This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing.

When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.

Range	0 to 15
Introduced	20.2.R1
Platforms	All

## micro-loop-avoidance

Synopsis	Enable the <b>micro-loop-avoidance</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">micro-loop-avoidance</a>
Tree	<a href="#">micro-loop-avoidance</a>
Description	Commands in this context configure the micro-loop avoidance feature in the IGP instance. This feature prevents micro-loops from using Segment Routing (SR) loop-free tunnels for packets that are forwarded over SR IS-IS node SID tunnels.
Introduced	19.10.R1
Platforms	All

## fib-delay *number*

Synopsis	FIB delay before programming new primary next-hops
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">micro-loop-avoidance</a> <a href="#">fib-delay</a> <i>number</i>
Tree	<a href="#">fib-delay</a>
Description	This command specifies the delay time before programming the new next-hops for the SR tunnel.
Range	1 to 300
Units	deciseconds
Default	15
Introduced	19.10.R1
Platforms	All

## multi-topology

Synopsis	Enter the <b>multi-topology</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">multi-topology</a>
Tree	<a href="#">multi-topology</a>
Introduced	23.10.R1
Platforms	All

## **mt2** *boolean*

Synopsis	Support IPv6 routing topology (MT2)
Context	<b>configure</b> <i>router string isis number segment-routing multi-topology mt2 boolean</i>
Tree	<a href="#">mt2</a>
Description	When configured to <b>true</b> , the router enables SR-MPLS for MS-ISIS MT, which enables Segment Routing in MT2.
Default	false
Introduced	23.10.R1
Platforms	All

## **prefix-sid-range**

Synopsis	Enable the <b>prefix-sid-range</b> context
Context	<b>configure</b> <i>router string isis number segment-routing prefix-sid-range</i>
Tree	<a href="#">prefix-sid-range</a>
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	16.0.R1
Platforms	All

## **global**

Synopsis	Allocate labels from the SRBG space
Context	<b>configure</b> <i>router string isis number segment-routing prefix-sid-range global</i>
Tree	<a href="#">global</a>
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the <b>configure router mpls-labels sr-labels</b> context.
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All



## max-index *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	<b>configure</b> <i>router string isis number segment-routing prefix-sid-range max-index number</i>
Tree	<a href="#">max-index</a>
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## start-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	<b>configure</b> <i>router string isis number segment-routing prefix-sid-range start-label number</i>
Tree	<a href="#">start-label</a>
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## srlb *reference*

Synopsis	Segment routing local block
Context	<b>configure</b> <i>router string isis number segment-routing srlb reference</i>
Tree	<a href="#">srlb</a>
Reference	<b>configure</b> <i>router string mpls-labels reserved-label-block string</i>
Introduced	16.0.R1

Platforms All

### **tunnel-mtu** *number*

Synopsis Tunnel MTU size

Context **configure** *router string isis number segment-routing tunnel-mtu number*

Tree [tunnel-mtu](#)

Range 512 to 9786

Introduced 16.0.R1

Platforms All

### **tunnel-table-pref** *number*

Synopsis Preference of SR tunnels created by the IGP instance

Context **configure** *router string isis number segment-routing tunnel-table-pref number*

Tree [tunnel-table-pref](#)

Description This command configures the TTM preference of SR tunnels created by the IGP instance. This is used in the case of BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the new tunnel binding commands are configured to the **any** value which parses the TTM for tunnels in the protocol preference order. The user can choose to either go with the global TTM preference or list explicitly the tunnel types they want to use. When they list the tunnel types explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected one fails. Also, a reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to TTM a SR tunnel entry for each resolved remote node SID prefix and programs the data path with the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the setting of the default preference of the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as **SR-ISIS** and **SR-OSPF**).

The global default TTM preference for the tunnel types is as follows:

- ROUTE\_PREF\_RSVP 7
- ROUTE\_PREF\_SR\_TE 8
- ROUTE\_PREF\_LDP 9
- ROUTE\_PREF\_OSPF\_TTM 10
- ROUTE\_PREF\_ISIS\_TTM 11
- ROUTE\_PREF\_BGP\_TTM 12

- `ROUTE_PREF_GRE 255`

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-ISIS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on lowest IGP instance-id.

It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	11
Introduced	16.0.R1
Platforms	All

## segment-routing-v6

Synopsis	Enter the <b>segment-routing-v6</b> context
Context	<b>configure</b> <i>router string isis number</i> <b>segment-routing-v6</b>
Tree	<a href="#">segment-routing-v6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	<b>configure</b> <i>router string isis number</i> <b>segment-routing-v6 adj-sid-hold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">adj-sid-hold</a>

**Description** This command specifies the length of time the system holds the SRv6 adjacency route and tunnel entries programmed in datapath while the adjacency is down.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its SRv6 End.X SID sub-TLV
- The adjacency SID hold timer starts.
- The route table, FIB, and tunnel table entries are kept for as long as the adjacency SID hold timer is running. This allows packets to flow over the LFA backup path, if the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of a SRv6 policy after IGP converges.

- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change when a new LFA SPF is run while the adjacency SID hold timer is running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the SID value returned into the locator subnet where it was drawn from. Users of the adjacency (for example, SRv6 policy) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static SID value or a new dynamic SID value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by tunnel of the local adjacency SID and of all remote locator routes that resolve to a next hop over this adjacency.

Each IS-IS instance runs a single timer per adjacency that IPv4 SR-MPLS, IPv6 SR-MPLS, and SRv6 adjacency SIDs share. When you enable both SR-MPLS (**configure router isis segment-routing**) and SRv6 (**configure router isis segment-routing-v6**) in the IS-IS instance, the system programs the higher of the two timer values for all SIDs on the adjacency.

Range	1 to 1800
Units	seconds
Options	none
Default	15
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of segment routing SRv6
Context	<b>configure router</b> <i>string</i> <b>isis</b> <i>number</i> <b>segment-routing-v6</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **locator** [**locator-name**] *reference*

Synopsis	Enter the <b>locator</b> list instance
Context	<b>configure router</b> <i>string</i> <b>isis</b> <i>number</i> <b>segment-routing-v6</b> <b>locator</b> <i>reference</i>

Tree	<a href="#">locator</a>
Description	This command adds a reference to a locator for each algorithm in this IS-IS instance. The same algorithm locator can be shared with other IGP instances and BGP instances in IP-VPN or EVPN.
Max. Instances	8
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[locator-name] reference**

Synopsis	Locator name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>reference</i>
Tree	<a href="#">locator</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**level [level-number] keyword**

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>reference</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[level-number] keyword**

Synopsis	ISIS protocol level number
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>reference</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **metric number**

Synopsis	IS-IS metric to advertise in the locator level list
Context	<b>configure router string isis number segment-routing-v6 locator reference level keyword metric number</b>
Tree	<b>metric</b>
Range	1 to 16777215
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **level-capability keyword**

Synopsis	IS-IS routing level capability
Context	<b>configure router string isis number segment-routing-v6 locator reference level-capability keyword</b>
Tree	<b>level-capability</b>
Description	This command configures the routing level capability for an instance of the IS-IS routing process.  The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Options	1, 2, 1/2
Default	1/2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **multi-topology**

Synopsis	Enter the <b>multi-topology</b> context
Context	<b>configure router string isis number segment-routing-v6 locator reference multi-topology</b>
Tree	<b>multi-topology</b>
Description	Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.

Use the **configure router isis segment-routing-v6 admin-state** command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the **configure router isis ipv6-routing** command to **native**, the **configure router isis multi-topology ipv6-unicast** command to **true**, or both.

Introduced 22.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **mt0** *boolean*

Synopsis Support standard topology (MT0)  
 Context **configure router** *string* **isis** *number* **segment-routing-v6** *locator reference* **multi-topology mt0** *boolean*  
 Tree [mt0](#)  
 Default true  
 Introduced 22.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **mt2** *boolean*

Synopsis Support IPv6 routing topology (MT2)  
 Context **configure router** *string* **isis** *number* **segment-routing-v6** *locator reference* **multi-topology mt2** *boolean*  
 Tree [mt2](#)  
 Default false  
 Introduced 22.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **tag** *number*

Synopsis Route tag to advertise in the locator  
 Context **configure router** *string* **isis** *number* **segment-routing-v6** *locator reference* **tag** *number*  
 Tree [tag](#)  
 Range 1 to 4294967295  
 Introduced 21.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**micro-segment-locator** [[locator-name](#)] *reference*

Synopsis	Enter the <b>micro-segment-locator</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i>
Tree	<a href="#">micro-segment-locator</a>
Max. Instances	8
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[locator-name]** *reference*

Synopsis	Micro-segment SRv6 locator name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i>
Tree	<a href="#">micro-segment-locator</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**level** [[level-number](#)] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[level-number]** *keyword*

Synopsis	ISIS protocol level number
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **metric** *number*

Synopsis	IS-IS metric to advertise in the locator level list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">level</a> <i>keyword</i> <a href="#">metric</a> <i>number</i>
Tree	<a href="#">metric</a>
Range	1 to 16777215
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **level-capability** *keyword*

Synopsis	IS-IS routing level capability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">level-capability</a> <i>keyword</i>
Tree	<a href="#">level-capability</a>
Description	This command configures the routing level capability for an instance of the IS-IS routing process.  The level capability configured on the instance must match the level capability on the interface to form an adjacency.
Options	1, 2, 1/2
Default	1/2
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **multi-topology**

Synopsis	Enter the <b>multi-topology</b> context
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Context	<b>configure router string isis number segment-routing-v6 micro-segment-locator reference multi-topology</b>
Tree	<a href="#">multi-topology</a>
Description	<p>Commands in this context enable the use of a local SRv6 locator in an IS-IS IPv6 topology. A user can enable one or more locators in an IS-IS instance. Each locator can be enabled in a single topology of an IS-IS instance, topology 0 (MT0) or topology 2 (MT2). A local locator can be used in multiple IS-IS instances, but can only be assigned to at most one IPv6 topology independently within each IS-IS instance.</p> <p>Use the <b>configure router isis segment-routing-v6 admin-state</b> command to enable the processing of local and remote IPv6 prefixes and SRv6 locators in MT0 and MT2. In addition, to enable SRv6 forwarding in the MT0, MT2, or both topologies, set the <b>configure router isis ipv6-routing</b> command to <b>native</b>, the <b>configure router isis multi-topology ipv6-unicast</b> command to <b>true</b>, or both.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **mt0 boolean**

Synopsis	Support standard topology (MT0)
Context	<b>configure router string isis number segment-routing-v6 micro-segment-locator reference multi-topology mt0 boolean</b>
Tree	<a href="#">mt0</a>
Default	true
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **mt2 boolean**

Synopsis	Support IPv6 routing topology (MT2)
Context	<b>configure router string isis number segment-routing-v6 micro-segment-locator reference multi-topology mt2 boolean</b>
Tree	<a href="#">mt2</a>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **tag number**

Synopsis	Route tag to advertise in the locator
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <a href="#">reference</a> <a href="#">tag</a> <i>number</i>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **standard-multi-instance** *boolean*

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">standard-multi-instance</a> <i>boolean</i>
Tree	<a href="#">standard-multi-instance</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **strict-adjacency-check** *boolean*

Synopsis	Enable strict checking of address families for IS-IS adjacencies
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">strict-adjacency-check</a> <i>boolean</i>
Tree	<a href="#">strict-adjacency-check</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **summary-address** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>summary-address</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">summary-address</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">summary-address</a>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix for the summary address
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Context	<b>configure router string isis number summary-address</b> ( <i>ipv4-prefix   ipv6-prefix</i> )
Tree	<a href="#">summary-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **algorithm number**

Synopsis	Algorithm topology for the summary address
Context	<b>configure router string isis number summary-address</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">algorithm number</a>
Tree	<a href="#">algorithm</a>
Range	0   128 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **level-capability keyword**

Synopsis	IS-IS level for the summary address
Context	<b>configure router string isis number summary-address</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">level-capability keyword</a>
Tree	<a href="#">level-capability</a>
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

### **route-tag number**

Synopsis	Route tag assigned to the summary address
Context	<b>configure router string isis number summary-address</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <a href="#">route-tag number</a>
Tree	<a href="#">route-tag</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**suppress-attached-bit** *boolean*

Synopsis	Allow IS-IS to suppress setting attached bit on LSPs
Context	<b>configure</b> <i>router string isis number suppress-attached-bit boolean</i>
Tree	<a href="#">suppress-attached-bit</a>
Default	false
Introduced	16.0.R1
Platforms	All

**system-id** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System ID
Context	<b>configure</b> <i>router string isis number system-id string</i>
Tree	<a href="#">system-id</a>
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

**timers**

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <i>router string isis number timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

**lsp-wait**

Synopsis	Enter the <b>lsp-wait</b> context
Context	<b>configure</b> <i>router string isis number timers lsp-wait</i>
Tree	<a href="#">lsp-wait</a>

Introduced	16.0.R1
Platforms	All

### **lsp-initial-wait** *number*

Synopsis	Initial LSP generation delay
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-initial-wait</a> <i>number</i>
Tree	<a href="#">lsp-initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	10
Introduced	16.0.R1
Platforms	All

### **lsp-max-wait** *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-max-wait</a> <i>number</i>
Tree	<a href="#">lsp-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **lsp-second-wait** *number*

Synopsis	Delay between first and second LSP generation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-second-wait</a> <i>number</i>
Tree	<a href="#">lsp-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

## spf-wait

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure router string isis number timers spf-wait</b>
Tree	<a href="#">spf-wait</a>
Introduced	16.0.R1
Platforms	All

## spf-initial-wait *number*

Synopsis	Initial SPF calculation delay after topology change
Context	<b>configure router string isis number timers spf-wait spf-initial-wait number</b>
Tree	<a href="#">spf-initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

## spf-max-wait *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	<b>configure router string isis number timers spf-wait spf-max-wait number</b>
Tree	<a href="#">spf-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

## spf-second-wait *number*

Synopsis	Hold time between first and second SPF calculations
Context	<b>configure router string isis number timers spf-wait spf-second-wait number</b>
Tree	<a href="#">spf-second-wait</a>

Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **traffic-engineering** *boolean*

Synopsis	Enable traffic engineering for the router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">traffic-engineering</a> <i>boolean</i>
Tree	<a href="#">traffic-engineering</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **traffic-engineering-options**

Synopsis	Enter the <b>traffic-engineering-options</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">traffic-engineering-options</a>
Tree	<a href="#">traffic-engineering-options</a>
Introduced	19.10.R1
Platforms	All

### **advertise-delay** *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">traffic-engineering-options</a> <a href="#">advertise-delay</a> <i>boolean</i>
Tree	<a href="#">advertise-delay</a>
Description	<p>When configured to <b>true</b>, the router advertises link delay in the IGP LSDB within legacy Traffic Engineering (TE) attributes in IS-IS or within the Application-Specific Link Attribute (ASLA) when ASLA is enabled for SR-TE or RSVP-TE applications.</p> <p>When the <b>application-link-attributes legacy</b> command is configured for SR-TE or RSVP-TE, link delay is advertised as a legacy TE TLV with the ASLA legacy bit set.</p> <p>When configured to <b>false</b>, the router disables link delay advertisement.</p>
Default	false
Introduced	22.10.R1



Platforms All

### application-link-attributes

Synopsis Enable the **application-link-attributes** context

Context **configure** [router](#) [string](#) [isis](#) [number](#) [traffic-engineering-options](#) [application-link-attributes](#)

Tree [application-link-attributes](#)

Description Commands in this context configure the traffic engineering behavior for the advertisement of TE attributes for each link on a per-application basis for RSVP-TE and SR-TE applications.

Introduced 19.10.R1

Platforms All

### legacy *boolean*

Synopsis Advertise legacy TE attributes

Context **configure** [router](#) [string](#) [isis](#) [number](#) [traffic-engineering-options](#) [application-link-attributes](#) [legacy](#) *boolean*

Tree [legacy](#)

Description When configured to **true**, the router supports the legacy mode of advertising TE attributes.  
When configured to **false**, legacy mode is disabled.

Default false

Introduced 19.10.R1

Platforms All

### ipv6 *boolean*

Synopsis Advertise IS-IS IPv6 Traffic Engineering

Context **configure** [router](#) [string](#) [isis](#) [number](#) [traffic-engineering-options](#) [ipv6](#) *boolean*

Tree [ipv6](#)

Default false

Introduced 19.10.R1

Platforms All

## unicast-import

Synopsis	Enter the <b>unicast-import</b> context
Context	<b>configure</b> <i>router string isis number</i> <b>unicast-import</b>
Tree	<b>unicast-import</b>
Introduced	16.0.R1
Platforms	All

## ipv4 boolean

Synopsis	Submit IPv4 routes into unicast RTM
Context	<b>configure</b> <i>router string isis number unicast-import</i> <b>ipv4 boolean</b>
Tree	<b>ipv4</b>
Default	true
Introduced	16.0.R1
Platforms	All

## ipv6 boolean

Synopsis	Submit IPv6 routes into unicast RTM
Context	<b>configure</b> <i>router string isis number unicast-import</i> <b>ipv6 boolean</b>
Tree	<b>ipv6</b>
Default	true
Introduced	16.0.R1
Platforms	All

## I2tp

Synopsis	Enter the <b>I2tp</b> context
Context	<b>configure</b> <i>router string</i> <b>I2tp</b>
Tree	<b>I2tp</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of L2TP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**avp-hiding** *keyword*

Synopsis	Attribute of the Value Pair (AVP) hiding algorithm
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>avp-hiding</b> <i>keyword</i>
Tree	<b>avp-hiding</b>
Options	sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**challenge** *boolean*

Synopsis	Use challenge-response authentication
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>challenge</b> <i>boolean</i>
Tree	<b>challenge</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destruct-timeout** *number*

Synopsis	Destruction timeout
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>destruct-timeout</b> <i>number</i>
Tree	<b>destruct-timeout</b>
Range	60 to 86400
Units	seconds
Default	60

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ethernet-tunnel

Synopsis	Enter the <b>ethernet-tunnel</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">ethernet-tunnel</a>
Tree	<a href="#">ethernet-tunnel</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## reconnect-timeout (*number* | *keyword*)

Synopsis	Timeout for a session setup retry
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">ethernet-tunnel</a> <a href="#">reconnect-timeout</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">reconnect-timeout</a>
Range	10 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## exclude-avps

Synopsis	Enter the <b>exclude-avps</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">exclude-avps</a>
Tree	<a href="#">exclude-avps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## calling-number *boolean*

Synopsis	Calling Number AVP to exclude
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">exclude-avps</a> <a href="#">calling-number</a> <i>boolean</i>

Tree	<a href="#">calling-number</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **initial-rx-lcp-conf-req** *boolean*

Synopsis	Exclude the Initial Received LCP CONFREQ AVP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">exclude-avps</a> <a href="#">initial-rx-lcp-conf-req</a> <i>boolean</i>
Tree	<a href="#">initial-rx-lcp-conf-req</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">failover</a>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **recovery-max-session-lifetime** *number*

Synopsis	Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">failover</a> <a href="#">recovery-max-session-lifetime</a> <i>number</i>
Tree	<a href="#">recovery-max-session-lifetime</a>
Range	2 to 4294967295
Units	centiseconds
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recovery-method** *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp failover recovery-method</b> <i>keyword</i>
Tree	<b>recovery-method</b>
Options	mcs, recovery-tunnel
Default	mcs
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recovery-time** *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp failover recovery-time</b> <i>number</i>
Tree	<b>recovery-time</b>
Range	0 to 900
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**track-srrp** [*id*] *reference*

Synopsis	Enter the <b>track-srrp</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp failover track-srrp</b> <i>reference</i>
Tree	<b>track-srrp</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id]** *reference*

Synopsis	SRRP instance ID for multi-chassis redundancy failover
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp failover track-srrp</b> <i>reference</i>
Tree	<b>track-srrp</b>
Reference	<b>configure</b> <b>redundancy multi-chassis peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>sync track-srrp</b> <i>number</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer reference**

Synopsis	Multi-chassis peer address
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">failover</a> <a href="#">track-srrp</a> <a href="#">reference</a> <a href="#">peer</a> <a href="#">reference</a>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy</a> <a href="#">multi-chassis</a> <a href="#">peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag string**

Synopsis	Synchronization tag on the multi-chassis peer
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">failover</a> <a href="#">track-srrp</a> <a href="#">reference</a> <a href="#">sync-tag</a> <a href="#">string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group [tunnel-group-name] string**

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[tunnel-group-name] string**

Synopsis	Tunnel group name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i>
Tree	<b>group</b>
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the L2TP tunnel group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**avp-hiding keyword**

Synopsis	The AVP hiding algorithm
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>avp-hiding</b> <i>keyword</i>
Tree	<b>avp-hiding</b>
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**challenge keyword**

Synopsis	Enable use of challenge-response authentication
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>challenge</b> <i>keyword</i>
Tree	<b>challenge</b>
Options	false, true
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [router](#) *string* [l2tp group](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destruct-timeout** *number*

Synopsis Destruction timeout

Context **configure** [router](#) *string* [l2tp group](#) *string* [destruct-timeout](#) *number*

Tree [destruct-timeout](#)

Range 60 to 86400

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ethernet-tunnel**

Synopsis Enter the **ethernet-tunnel** context

Context **configure** [router](#) *string* [l2tp group](#) *string* [ethernet-tunnel](#)

Tree [ethernet-tunnel](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reconnect-timeout** (*number* | *keyword*)

Synopsis Timeout for a session setup retry at group level

Context **configure** [router](#) *string* [l2tp group](#) *string* [ethernet-tunnel](#) [reconnect-timeout](#) (*number* | *keyword*)

Tree [reconnect-timeout](#)

Range 10 to 3600

Units	seconds
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">failover</a>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">failover</a> <a href="#">recovery-method</a> <a href="#">keyword</a>
Tree	<a href="#">recovery-method</a>
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">failover</a> <a href="#">recovery-time</a> <a href="#">number</a>
Tree	<a href="#">recovery-time</a>
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hello-interval (*number* | *keyword*)

Synopsis	Hello interval
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>l2tp group</i> <i>string</i> <i>hello-interval</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hello-interval</a>
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **idle-timeout** (*number* | *keyword*)

Synopsis	Idle timeout
Context	<b>configure</b> <i>router</i> <i>string</i> <i>l2tp group</i> <i>string</i> <i>idle-timeout</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">idle-timeout</a>
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **l2tpv3**

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>l2tp group</i> <i>string</i> <i>l2tpv3</i>
Tree	<a href="#">l2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cookie-length** (*number* | *keyword*)

Synopsis	Cookie field length
Context	<b>configure</b> <i>router</i> <i>string</i> <i>l2tp group</i> <i>string</i> <i>l2tpv3</i> <i>cookie-length</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cookie-length</a>
Range	4   8
Options	disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **digest-type** *keyword*

Synopsis Hashing algorithm that calculates the message digest  
 Context **configure** *router string l2tp group string l2tpv3 digest-type keyword*  
 Tree [digest-type](#)  
 Options none, md5, sha1  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nonce-length** *number*

Synopsis Length for the local L2TPv3 nonce (random number)  
 Context **configure** *router string l2tp group string l2tpv3 nonce-length number*  
 Tree [nonce-length](#)  
 Range 0 | 16 to 64  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis L2TPv3 password  
 Context **configure** *router string l2tp group string l2tpv3 password string*  
 Tree [password](#)  
 String Length 1 to 115  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** (*number* | *keyword*)

Synopsis TCP maximum segment size (MSS) on private network  
 Context **configure** *router string l2tp group string l2tpv3 private-tcp-mss-adjust (number | keyword)*  
 Tree [private-tcp-mss-adjust](#)  
 Range 512 to 9000

Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	TCP Maximum Segment Size (MSS) on public network
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">l2tpv3</a> <b>public-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pw-cap-list**

Synopsis	Enter the <b>pw-cap-list</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">l2tpv3</a> <b>pw-cap-list</b>
Tree	<a href="#">pw-cap-list</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ethernet** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet pseudowire type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">l2tpv3</a> <b>pw-cap-list</b> <b>ethernet</b> <i>boolean</i>
Tree	<a href="#">ethernet</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ethernet-vlan *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Advertise Ethernet VLAN pseudowire type

Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [l2tpv3](#) [pw-cap-list](#) [ethernet-vlan](#) *boolean*

Tree [ethernet-vlan](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### rem-router-id *string*

Synopsis Filter on remote router ID

Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [l2tpv3](#) [rem-router-id](#) *string*

Tree [rem-router-id](#)

Default 0.0.0.0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### track-password-change *boolean*

Synopsis Enable tracking of password changes

Context **configure** [router](#) [string](#) [l2tp](#) [group](#) [string](#) [l2tpv3](#) [track-password-change](#) *boolean*

Tree [track-password-change](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### lac

Synopsis Enter the **lac** context

Context	<b>configure</b> <i>router string l2tp group string lac</i>
Tree	<a href="#">lac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **df-bit** *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	<b>configure</b> <i>router string l2tp group string lac df-bit keyword</i>
Tree	<a href="#">df-bit</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **Ins**

Synopsis	Enter the <b>Ins</b> context
Context	<b>configure</b> <i>router string l2tp group string Ins</i>
Tree	<a href="#">Ins</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **Ins-group** *reference*

Synopsis	ISA LNS group
Context	<b>configure</b> <i>router string l2tp group string Ins Ins-group reference</i>
Tree	<a href="#">Ins-group</a>
Reference	<b>configure</b> <i>isa Ins-group number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **load-balance-method** *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	<b>configure</b> <i>router string l2tp group string Ins load-balance-method keyword</i>

Tree	<a href="#">load-balance-method</a>
Options	per-session, per-tunnel
Default	per-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mlppp

Synopsis	Enter the <b>mlppp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a>
Tree	<a href="#">mlppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

## **admin-state** *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

## endpoint

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <b>endpoint</b>
Tree	<a href="#">endpoint</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

## **ip** (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
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Context	<b>configure</b> <i>router string l2tp group string lns mlppp endpoint ip (ipv4-address   keyword)</i>
Tree	<a href="#">ip</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **mac** (*mac-address | keyword*)

Synopsis	Endpoint ID as a MAC address
Context	<b>configure</b> <i>router string l2tp group string lns mlppp endpoint mac (mac-address   keyword)</i>
Tree	<a href="#">mac</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **interleave** *boolean*

Synopsis	Enable link fragmentation and interleaving
Context	<b>configure</b> <i>router string l2tp group string lns mlppp interleave boolean</i>
Tree	<a href="#">interleave</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **max-fragment-delay** (*number | keyword*)

Synopsis	Maximum fragment delay caused by transmission on a link
Context	<b>configure</b> <i>router string l2tp group string lns mlppp max-fragment-delay (number   keyword)</i>
Tree	<a href="#">max-fragment-delay</a>
Range	5 to 1000
Units	milliseconds

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Options	no-fragmentation
Default	no-fragmentation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **max-links** *number*

Synopsis	Maximum MLPPP links
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">max-links</a> <i>number</i>
Tree	<a href="#">max-links</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **reassemble-timeout** *number*

Synopsis	Reassembly timeout
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">reassemble-timeout</a> <i>number</i>
Tree	<a href="#">reassemble-timeout</a>
Range	100   1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **short-sequence-numbers** *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">short-sequence-numbers</a> <i>boolean</i>
Tree	<a href="#">short-sequence-numbers</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

## ppp

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">lns</a> <a href="#">ppp</a>
Tree	<a href="#">ppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">authentication</a> <i>keyword</i>
Tree	<a href="#">authentication</a>
Options	pap, chap, pref-chap, pref-pap
Default	pref-chap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">authentication-policy</a> <i>string</i>
Tree	<a href="#">authentication-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## chap-challenge-length

Synopsis	Enter the <b>chap-challenge-length</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">chap-challenge-length</a>
Tree	<a href="#">chap-challenge-length</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the PPP CHAP challenge length
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">chap-challenge-length</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	8 to 64
Units	octets
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the PPP CHAP challenge length
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">chap-challenge-length</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	8 to 64
Units	octets
Default	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-group-interface**

Synopsis	Enter the <b>default-group-interface</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">default-group-interface</a>
Tree	<a href="#">default-group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface string**

Synopsis	Group interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">ins</a> <a href="#">ppp</a> <a href="#">default-group-interface</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>

String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service-name** *string*

Synopsis Administrative service name  
Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp default-group-interface](#) *service-name* *string*  
Tree [service-name](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipcp-subnet-negotiation** *boolean*

Synopsis Allow IPCP subnet negotiation for PPPoE hosts  
Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp ipcp-subnet-negotiation](#) *boolean*  
Tree [ipcp-subnet-negotiation](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keepalive**

Synopsis Enter the **keepalive** context  
Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp keepalive](#)  
Tree [keepalive](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis PPP keepalive interval  
Context **configure** [router](#) *string* [l2tp group](#) *string* [lns ppp keepalive interval](#) *number*  
Tree [interval](#)

Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multiplier** *number*

Synopsis	PPP keepalive multiplier
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">keepalive</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-force-ack-accm** *boolean*

Synopsis	Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">lcp-force-ack-accm</a> <i>boolean</i>
Tree	<a href="#">lcp-force-ack-accm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-ignore-magic-numbers** *boolean*

Synopsis	Check magic number in echo request and reply messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">lcp-ignore-magic-numbers</a> <i>boolean</i>
Tree	<a href="#">lcp-ignore-magic-numbers</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mtu number**

Synopsis	Maximum PPP MTU size
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>ins</b> <b>ppp</b> <b>mtu</b> <i>number</i>
Tree	<b>mtu</b>
Range	512 to 9212
Units	octets
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-authentication boolean**

Synopsis	Use authentication AVPs that are received from LAC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>ins</b> <b>ppp</b> <b>proxy-authentication</b> <i>boolean</i>
Tree	<b>proxy-authentication</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-lcp boolean**

Synopsis	Proxy LCP AVPs that are received from LAC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>ins</b> <b>ppp</b> <b>proxy-lcp</b> <i>boolean</i>
Tree	<b>proxy-lcp</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reject-disabled-ncp boolean**

Synopsis	Force LCP Protocol Reject for IPv6CP Configure Request
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>ins</b> <b>ppp</b> <b>reject-disabled-ncp</b> <i>boolean</i>
Tree	<b>reject-disabled-ncp</b>
Default	false
Introduced	16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **user-db string**

Synopsis Local user database for PPP PAP and CHAP authentication  
Context **configure** [router string](#) [l2tp group string](#) [lns ppp user-db string](#)  
Tree [user-db](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local-address string**

Synopsis Local address  
Context **configure** [router string](#) [l2tp group string](#) [local-address string](#)  
Tree [local-address](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-name string**

Synopsis Local host name used to distinguish tunnels  
Context **configure** [router string](#) [l2tp group string](#) [local-name string](#)  
Tree [local-name](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-estab number**

Synopsis Maximum retries for established tunnels  
Context **configure** [router string](#) [l2tp group string](#) [max-retries-estab number](#)  
Tree [max-retries-estab](#)  
Range 2 to 7  
Introduced 16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-not-estab** *number*

Synopsis Maximum retries for unestablished tunnels  
 Context **configure** *router string l2tp group string max-retries-not-estab number*  
 Tree [max-retries-not-estab](#)  
 Range 2 to 7  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis Password between L2TP LAC and LNS  
 Context **configure** *router string l2tp group string password string*  
 Tree [password](#)  
 String Length 1 to 115  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **protocol** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Protocol version  
 Context **configure** *router string l2tp group string protocol keyword*  
 Tree [protocol](#)  
 Options v2, v3, v3draft  
 Default v2  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>radius-accounting-policy</b> <i>reference</i>
Tree	<b>radius-accounting-policy</b>
Reference	<b>configure</b> <b>aaa</b> <b>radius</b> <b>l2tp-accounting-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**receive-window-size** *number*

Synopsis	L2TP receive window size
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>receive-window-size</b> <i>number</i>
Tree	<b>receive-window-size</b>
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-assign-method** *keyword*

Synopsis	Session assignment method
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>session-assign-method</b> <i>keyword</i>
Tree	<b>session-assign-method</b>
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-limit** (*number* | *keyword*)

Synopsis	Session limit
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>session-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>session-limit</b>
Range	1 to 250000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tunnel** [**tunnel-name**] *string*

Synopsis	Enter the <b>tunnel</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i>
Tree	<b>tunnel</b>
Max. Instances	31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[tunnel-name]** *string*

Synopsis	Tunnel name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i>
Tree	<b>tunnel</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the L2TP tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**auto-establish** *boolean*

Synopsis	Allow the tunnel to be automatically set up by the system
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>auto-establish</b> <i>boolean</i>
Tree	<b>auto-establish</b>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**avp-hiding** *keyword*

Synopsis	The AVP hiding algorithm
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>avp-hiding</b> <i>keyword</i>
Tree	<b>avp-hiding</b>
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**challenge** *keyword*

Synopsis	Enable use of challenge-response authentication
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>challenge</b> <i>keyword</i>
Tree	<b>challenge</b>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destruct-timeout** *number*

Synopsis	Destruction timeout
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>destruct-timeout</b> <i>number</i>

Tree	<a href="#">destruct-timeout</a>
Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>failover</b>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">failover</a> <a href="#">recovery-method</a> <i>keyword</i>
Tree	<a href="#">recovery-method</a>
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">failover</a> <a href="#">recovery-time</a> <i>number</i>
Tree	<a href="#">recovery-time</a>
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hello-interval** (*number* | *keyword*)

Synopsis	Hello interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>hello-interval</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hello-interval</a>
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**idle-timeout** (*number* | *keyword*)

Synopsis	Idle timeout
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>idle-timeout</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">idle-timeout</a>
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**l2tpv3**

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>l2tpv3</b>
Tree	<a href="#">l2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**private-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on private network
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">l2tpv3</a> <b>private-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">private-tcp-mss-adjust</a>

Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** (*number | keyword*)

Synopsis	TCP maximum segment size (MSS) on public network
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">l2tpv3</a> <b>public-tcp-mss-adjust</b> ( <i>number   keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lac**

Synopsis	Enter the <b>lac</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>lac</b>
Tree	<a href="#">lac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **df-bit** *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <i>group</i> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>lac</b> <b>df-bit</b> <i>keyword</i>
Tree	<a href="#">df-bit</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## Ins

Synopsis	Enter the <b>Ins</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a>
Tree	<a href="#">Ins</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## Ins-group *reference*

Synopsis	ISA LNS group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">Ins-group reference</a>
Tree	<a href="#">Ins-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">Ins-group</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">load-balance-method</a> <i>keyword</i>
Tree	<a href="#">load-balance-method</a>
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mlppp

Synopsis	Enter the <b>mlppp</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">Ins</a> <a href="#">mlppp</a>
Tree	<a href="#">mlppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s



**admin-state** *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b> <b>endpoint</b>
Tree	<b>endpoint</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**ip** (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b> <b>endpoint</b> <b>ip</b> ( <i>ipv4-address</i>   <i>keyword</i> )
Tree	<b>ip</b>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**mac** (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b> <b>endpoint</b> <b>mac</b> ( <i>mac-address</i>   <i>keyword</i> )
Tree	<b>mac</b>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **interleave** *keyword*

Synopsis Use of Link fragmentation and interleaving  
Context **configure** *router string l2tp group string tunnel string lns mlppp interleave keyword*  
Tree [interleave](#)  
Options false, true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **max-fragment-delay** *number*

Synopsis Maximum fragment delay caused by transmission on a link  
Context **configure** *router string l2tp group string tunnel string lns mlppp max-fragment-delay number*  
Tree [max-fragment-delay](#)  
Range 5 to 1000  
Units milliseconds  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **max-links** *number*

Synopsis Maximum MLPPP links  
Context **configure** *router string l2tp group string tunnel string lns mlppp max-links number*  
Tree [max-links](#)  
Range 1 to 8  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **reassembly-timeout** *number*

Synopsis Reassembly timeout

Context	<b>configure</b> <i>router string l2tp group string tunnel string lns mlppp reassembly-timeout number</i>
Tree	<a href="#">reassembly-timeout</a>
Range	100   1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **short-sequence-numbers** *keyword*

Synopsis	Request a peer to send short sequence numbers
Context	<b>configure</b> <i>router string l2tp group string tunnel string lns mlppp short-sequence-numbers keyword</i>
Tree	<a href="#">short-sequence-numbers</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> <i>router string l2tp group string tunnel string lns ppp</i>
Tree	<a href="#">ppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication** *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	<b>configure</b> <i>router string l2tp group string tunnel string lns ppp authentication keyword</i>
Tree	<a href="#">authentication</a>
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**authentication-policy** *string*

Synopsis	Authentication policy when a DHCP message is received
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns ppp authentication-policy</a> <i>string</i>
Tree	<a href="#">authentication-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**chap-challenge-length**

Synopsis	Enter the <b>chap-challenge-length</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns ppp chap-challenge-length</a>
Tree	<a href="#">chap-challenge-length</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end** *number*

Synopsis	Upper bound of the PPP CHAP challenge length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns ppp chap-challenge-length</a> <i>end number</i>
Tree	<a href="#">end</a>
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start** *number*

Synopsis	Lower bound of the PPP CHAP challenge length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns ppp chap-challenge-length</a> <i>start number</i>
Tree	<a href="#">start</a>
Range	8 to 64
Units	octets

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-group-interface**

Synopsis Enter the **default-group-interface** context  
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [default-group-interface](#)  
Tree [default-group-interface](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interface** *string*

Synopsis Group interface  
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [default-group-interface](#) [interface](#) *string*  
Tree [interface](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service-name** *string*

Synopsis Administrative service name  
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [default-group-interface](#) [service-name](#) *string*  
Tree [service-name](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipcp-subnet-negotiation** *keyword*

Synopsis Use of IPCP subnet negotiation for PPPoE hosts  
Context **configure** [router](#) *string* [l2tp](#) [group](#) *string* [tunnel](#) *string* [lns](#) [ppp](#) [ipcp-subnet-negotiation](#) *keyword*

Tree	<a href="#">ipcp-subnet-negotiation</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## keepalive

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## interval *number*

Synopsis	PPP keepalive interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">keepalive</a> <i>interval</i> <i>number</i>
Tree	<a href="#">interval</a>
Range	10 to 300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## multiplier *number*

Synopsis	PPP keepalive multiplier
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">keepalive</a> <i>multiplier</i> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lcp-force-ack-accm** *keyword*

Synopsis	Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns ppp</a> <b>lcp-force-ack-accm</b> <i>keyword</i>
Tree	<a href="#">lcp-force-ack-accm</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lcp-ignore-magic-numbers** *keyword*

Synopsis	Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns ppp</a> <b>lcp-ignore-magic-numbers</b> <i>keyword</i>
Tree	<a href="#">lcp-ignore-magic-numbers</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mtu** *number*

Synopsis	Maximum PPP MTU size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns ppp</a> <b>mtu</b> <i>number</i>
Tree	<a href="#">mtu</a>
Range	512 to 9212
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-authentication** *keyword*

Synopsis	Authentication AVPs that are received from LAC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lns ppp</a> <b>proxy-authentication</b> <i>keyword</i>

Tree	<a href="#">proxy-authentication</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **proxy-lcp** *keyword*

Synopsis	Use the Proxy LCP AVPs that are received from the LAC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <b>proxy-lcp</b> <i>keyword</i>
Tree	<a href="#">proxy-lcp</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reject-disabled-ncp** *keyword*

Synopsis	Force LCP Project Reject for IPv6CP Configure Request
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <b>reject-disabled-ncp</b> <i>keyword</i>
Tree	<a href="#">reject-disabled-ncp</a>
Options	false, true
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">ins</a> <a href="#">ppp</a> <b>user-db</b> <i>string</i>
Tree	<a href="#">user-db</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local-address** *string*

Synopsis	Local address
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Context        **configure router string l2tp group string tunnel string local-address string**  
 Tree            **local-address**  
 Introduced     16.0.R1  
 Platforms     7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-name string**

Synopsis        Local host name used to distinguish tunnels  
 Context        **configure router string l2tp group string tunnel string local-name string**  
 Tree            **local-name**  
 String Length 1 to 64  
 Introduced     16.0.R1  
 Platforms     7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-estab number**

Synopsis        Maximum retries for established tunnels  
 Context        **configure router string l2tp group string tunnel string max-retries-estab number**  
 Tree            **max-retries-estab**  
 Range          2 to 7  
 Introduced     16.0.R1  
 Platforms     7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-not-estab number**

Synopsis        Maximum retries for unestablished tunnels  
 Context        **configure router string l2tp group string tunnel string max-retries-not-estab number**  
 Tree            **max-retries-not-estab**  
 Range          2 to 7  
 Introduced     16.0.R1  
 Platforms     7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password string**

Synopsis        Password between L2TP LAC and LNS

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer** *string*

Synopsis	Peer address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">peer</a> <i>string</i>
Tree	<a href="#">peer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference** *number*

Synopsis	Tunnel preference number with its group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	0 to 16777215
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">radius-accounting-policy</a> <i>reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**receive-window-size** *number*

Synopsis	L2TP receive window size
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>receive-window-size</b> <i>number</i>
Tree	<b>receive-window-size</b>
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-name** *string*

Synopsis	Remote tunnel host name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>remote-name</b> <i>string</i>
Tree	<b>remote-name</b>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-limit** (*number* | *keyword*)

Synopsis	L2TP session limit for each tunnel of this router
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <i>group</i> <i>string</i> <b>tunnel</b> <i>string</i> <b>session-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>session-limit</b>
Range	1 to 65534
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-session-limit** *number*

Synopsis	L2TP session limit for each group of this router
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>group-session-limit</b> <i>number</i>
Tree	<b>group-session-limit</b>
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hello-interval** (*number* | *keyword*)

Synopsis	Hello interval
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>hello-interval</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>hello-interval</b>
Range	10 to 3600
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**idle-timeout** (*number* | *keyword*)

Synopsis	Idle timeout
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>idle-timeout</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>idle-timeout</b>
Range	0 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-avps**

Synopsis	Enter the <b>ignore-avps</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>ignore-avps</b>
Tree	<b>ignore-avps</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sequencing-required** *boolean*

Synopsis	Ignore Sequencing Required AVP
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Context	<b>configure router</b> <i>string</i> <a href="#">l2tp ignore-avps sequencing-required</a> <i>boolean</i>
Tree	<a href="#">sequencing-required</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **l2tpv3**

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">l2tp l2tpv3</a>
Tree	<a href="#">l2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cookie-length** *number*

Synopsis	Cookie field length
Context	<b>configure router</b> <i>string</i> <a href="#">l2tp l2tpv3 cookie-length</a> <i>number</i>
Tree	<a href="#">cookie-length</a>
Range	4   8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **digest-type** *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	<b>configure router</b> <i>string</i> <a href="#">l2tp l2tpv3 digest-type</a> <i>keyword</i>
Tree	<a href="#">digest-type</a>
Options	md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nonce-length** *number*

Synopsis	Length of the local L2TPv3 nonce (random number)
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>l2tp l2tpv3</i> <i>nonce-length</i> <i>number</i>
Tree	<a href="#">nonce-length</a>
Range	0   16 to 64
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis	L2TPv3 password
Context	<b>configure</b> <i>router</i> <i>string</i> <i>l2tp l2tpv3</i> <i>password</i> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** *number*

Synopsis	TCP maximum segment size (MSS) on private network
Context	<b>configure</b> <i>router</i> <i>string</i> <i>l2tp l2tpv3</i> <i>private-tcp-mss-adjust</i> <i>number</i>
Tree	<a href="#">private-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** *number*

Synopsis	TCP maximum segment size (MSS) on public network
Context	<b>configure</b> <i>router</i> <i>string</i> <i>l2tp l2tpv3</i> <i>public-tcp-mss-adjust</i> <i>number</i>
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## transport-type

Synopsis	Enter the <b>transport-type</b> context
Context	<b>configure</b> <i>router string l2tp l2tpv3 transport-type</i>
Tree	<i>transport-type</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip *boolean*

Synopsis	Use IP as the transport type for the L2TPv3 tunnel
Context	<b>configure</b> <i>router string l2tp l2tpv3 transport-type ip boolean</i>
Tree	<i>ip</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lac

Synopsis	Enter the <b>lac</b> context
Context	<b>configure</b> <i>router string l2tp lac</i>
Tree	<i>lac</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## calling-number-format *string*

Synopsis	Calling Number AVP for L2TP control messages
Context	<b>configure</b> <i>router string l2tp lac calling-number-format string</i>
Tree	<i>calling-number-format</i>
String Length	1 to 255
Default	%S %s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **cisco-nas-port**

Synopsis	Enter the <b>cisco-nas-port</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">lac</a> <a href="#">cisco-nas-port</a>
Tree	<a href="#">cisco-nas-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **ethernet** *string*

Synopsis	L2TP Cisco NAS port AVP with binary patterns for Ethernet
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">lac</a> <a href="#">cisco-nas-port</a> <a href="#">ethernet</a> <a href="#">string</a>
Tree	<a href="#">ethernet</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **df-bit** *boolean*

Synopsis	Send all L2TP packets with DF bit set to 1
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">lac</a> <a href="#">df-bit</a> <a href="#">boolean</a>
Tree	<a href="#">df-bit</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **local-address** *string*

Synopsis	Local address
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">local-address</a> <a href="#">string</a>
Tree	<a href="#">local-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**local-name** *string*

Synopsis	Local host name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>local-name</b> <i>string</i>
Tree	<b>local-name</b>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-retries-estab** *number*

Synopsis	Maximum retries for established tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>max-retries-estab</b> <i>number</i>
Tree	<b>max-retries-estab</b>
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-retries-not-estab** *number*

Synopsis	Maximum retries for unestablished tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>max-retries-not-estab</b> <i>number</i>
Tree	<b>max-retries-not-estab</b>
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**next-attempt** *keyword*

Synopsis	Tunnel that is selected when previous session setup failed
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>next-attempt</b> <i>keyword</i>
Tree	<b>next-attempt</b>
Options	same-preference-level, next-preference-level
Default	next-preference-level

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis L2TP password  
 Context **configure** [router](#) *string* [l2tp](#) [password](#) *string*  
 Tree [password](#)  
 String Length 1 to 115  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer-address-change-policy** *keyword*

Synopsis Reaction for L2TP response from a different address  
 Context **configure** [router](#) *string* [l2tp](#) [peer-address-change-policy](#) *keyword*  
 Tree [peer-address-change-policy](#)  
 Options accept, ignore, reject  
 Default reject  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy** *reference*

Synopsis RADIUS accounting policy  
 Context **configure** [router](#) *string* [l2tp](#) [radius-accounting-policy](#) *reference*  
 Tree [radius-accounting-policy](#)  
 Reference **configure** [aaa](#) [radius](#) [l2tp-accounting-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive-window-size** *number*

Synopsis L2TP receive window size  
 Context **configure** [router](#) *string* [l2tp](#) [receive-window-size](#) *number*

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Tree	<a href="#">receive-window-size</a>
Range	4 to 1024
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **replace-result-code**

Synopsis	Enter the <b>replace-result-code</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">replace-result-code</a>
Tree	<a href="#">replace-result-code</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-invalid-dst** *boolean*

Synopsis	Replace result code with general error code
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">replace-result-code</a> <a href="#">cdn-invalid-dst</a> <i>boolean</i>
Tree	<a href="#">cdn-invalid-dst</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-permanent-no-facilities** *boolean*

Synopsis	Replace result code with general error
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">replace-result-code</a> <a href="#">cdn-permanent-no-facilities</a> <i>boolean</i>
Tree	<a href="#">cdn-permanent-no-facilities</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-temporary-no-facilities** *boolean*

Synopsis	Replace result code with general error
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">replace-result-code</a> <a href="#">cdn-temporary-no-facilities</a> <i>boolean</i>
Tree	<a href="#">cdn-temporary-no-facilities</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rtm-debounce-time** (*number* | *keyword*)

Synopsis	Debounce timer that declares L2TP action for route table management events
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">rtm-debounce-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rtm-debounce-time</a>
Range	0 to 5000
Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-assign-method** *keyword*

Synopsis	Session assignment method
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">session-assign-method</a> <i>keyword</i>
Tree	<a href="#">session-assign-method</a>
Options	existing-first, weighted, weighted-random
Default	existing-first
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** *number*

Synopsis	L2TP session limit of this router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">l2tp</a> <a href="#">session-limit</a> <i>number</i>
Tree	<a href="#">session-limit</a>
Range	1 to 250000
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-selection-blacklist**

Synopsis Enter the **tunnel-selection-blacklist** context  
Context **configure** [router](#) *string* [l2tp](#) [tunnel-selection-blacklist](#)  
Tree [tunnel-selection-blacklist](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **add-tunnel-on**

Synopsis Enter the **add-tunnel-on** context  
Context **configure** [router](#) *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#)  
Tree [add-tunnel-on](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address-change-timeout** *boolean*

Synopsis Enable a timed-out tunnel to be forced to the denylist  
Context **configure** [router](#) *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#) [address-change-timeout](#) *boolean*  
Tree [address-change-timeout](#)  
Default false  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-err-code** *boolean*

Synopsis Add to deny if CDN is received with code: General error  
Context **configure** [router](#) *string* [l2tp](#) [tunnel-selection-blacklist](#) [add-tunnel-on](#) [cdn-err-code](#) *boolean*  
Tree [cdn-err-code](#)  
Default false  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-invalid-dst** *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 6

Context **configure** **router** *string* **I2tp** **tunnel-selection-blacklist** **add-tunnel-on** **cdn-invalid-dst** *boolean*

Tree [cdn-invalid-dst](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-permanent-no-facilities** *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 5

Context **configure** **router** *string* **I2tp** **tunnel-selection-blacklist** **add-tunnel-on** **cdn-permanent-no-facilities** *boolean*

Tree [cdn-permanent-no-facilities](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-temporary-no-facilities** *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 4

Context **configure** **router** *string* **I2tp** **tunnel-selection-blacklist** **add-tunnel-on** **cdn-temporary-no-facilities** *boolean*

Tree [cdn-temporary-no-facilities](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stop-ccn-err-code** *boolean*

Synopsis Add to denylist if received with general error code

Context **configure** **router** *string* **I2tp** **tunnel-selection-blacklist** **add-tunnel-on** **stop-ccn-err-code** *boolean*

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Tree	<a href="#">stop-ccn-err-code</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stop-ccn-other** *boolean*

Synopsis	Add to denylist if StopCCN received with general error
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp</a> <a href="#">tunnel-selection-blacklist</a> <a href="#">add-tunnel-on</a> <a href="#">stop-ccn-other</a> <i>boolean</i>
Tree	<a href="#">stop-ccn-other</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tx-cdn-not-established-in-time** *boolean*

Synopsis	Add to denylist if CDN transmitted with result code
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp</a> <a href="#">tunnel-selection-blacklist</a> <a href="#">add-tunnel-on</a> <a href="#">tx-cdn-not-established-in-time</a> <i>boolean</i>
Tree	<a href="#">tx-cdn-not-established-in-time</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-list-length** (*number* | *keyword*)

Synopsis	Number of tunnels or peers in the denylist
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">l2tp</a> <a href="#">tunnel-selection-blacklist</a> <a href="#">max-list-length</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-list-length</a>
Range	1 to 65535
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-time** *number*

Synopsis	Time that a tunnel or peer can remain in the denylist
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>tunnel-selection-blacklist</b> <b>max-time</b> <i>number</i>
Tree	<b>max-time</b>
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout-action** *keyword*

Synopsis	Action when a tunnel or peer exceeds time in denylist
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>tunnel-selection-blacklist</b> <b>timeout-action</b> <i>keyword</i>
Tree	<b>timeout-action</b>
Options	remove-from-blacklist, try-one-session
Default	remove-from-blacklist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tunnel-session-limit** *number*

Synopsis	L2TP session limit for each tunnel of this router
Context	<b>configure</b> <b>router</b> <i>string</i> <b>l2tp</b> <b>tunnel-session-limit</b> <i>number</i>
Tree	<b>tunnel-session-limit</b>
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ldp**

Synopsis	Enable the <b>ldp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b>
Tree	<b>ldp</b>



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Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of LDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **aggregate-prefix-match**

Synopsis	Enable the <b>aggregate-prefix-match</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>aggregate-prefix-match</b>
Tree	<b>aggregate-prefix-match</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the LDP aggregate prefix match
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>aggregate-prefix-match</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **prefix-exclude** *reference*

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>aggregate-prefix-match</b> <b>prefix-exclude</b> <i>reference</i>

Tree	<a href="#">prefix-exclude</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **class-forwarding** *keyword*

Synopsis	Forwarding mode for LDP over RSVP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">class-forwarding</a> <i>keyword</i>
Tree	<a href="#">class-forwarding</a>
Options	lsr – Class-based forwarding for LSR/SWAP only ler – Class-based forwarding for LER/PUSH only lsr-and-ler – Class-based forwarding for LER/PUSH and LSR/SWAP
Introduced	16.0.R1
Platforms	All

### **consider-system-ip-in-gep** *boolean*

Synopsis	Apply global export policy for system IP FEC creation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">consider-system-ip-in-gep</a> <i>boolean</i>
Tree	<a href="#">consider-system-ip-in-gep</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **egress-statistics**

Synopsis	Enter the <b>egress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">egress-statistics</a>
Tree	<a href="#">egress-statistics</a>
Introduced	16.0.R1
Platforms	All

**fec-prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>fec-prefix</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp egress-statistics</b> <a href="#">fec-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">fec-prefix</a>
Introduced	16.0.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp egress-statistics</b> <a href="#">fec-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">fec-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp egress-statistics</b> <a href="#">fec-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <b>log</b> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LDP egress statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp egress-statistics</b> <a href="#">fec-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
 Platforms All

### **collect-stats** *boolean*

Synopsis Collect statistics  
 Context **configure** **router** *string* **ldp** **egress-statistics** **fec-prefix** (*ipv4-prefix | ipv6-prefix*) **collect-stats** *boolean*  
 Tree [collect-stats](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **entropy-label-capability** *boolean*

Synopsis Enable entropy label capability on the LDP instance  
 Context **configure** **router** *string* **ldp** **entropy-label-capability** *boolean*  
 Tree [entropy-label-capability](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **export-policy** *reference*

Synopsis Export policies to determine routes exported to LDP  
 Context **configure** **router** *string* **ldp** **export-policy** *reference*  
 Tree [export-policy](#)  
 Reference **configure** **policy-options** **policy-statement** *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

**export-tunnel-table** *reference*

Synopsis	Tunnel table export policies to export tunneled routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>export-tunnel-table</b> <i>reference</i>
Tree	<a href="#">export-tunnel-table</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**fast-reroute**

Synopsis	Enable the <b>fast-reroute</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fast-reroute</b>
Tree	<a href="#">fast-reroute</a>
Introduced	16.0.R1
Platforms	All

**backup-sr-tunnel** *boolean*

Synopsis	Use SR tunnel as a remote LFA backup tunnel next-hop by an LDP FEC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fast-reroute</b> <b>backup-sr-tunnel</b> <i>boolean</i>
Tree	<a href="#">backup-sr-tunnel</a>
Default	false
Introduced	16.0.R1
Platforms	All

**fec-originate** [[fec-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>fec-originate</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">fec-originate</a>
Introduced	16.0.R1
Platforms	All

**[fec-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Static FEC IP prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>fec-originate</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertised-label** *number*

Synopsis	Label that is advertised to upstream peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>advertised-label</b> <i>number</i>
Tree	<b>advertised-label</b>
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

**interface** *string*

Synopsis	Interface name for this static FEC prefix
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	0 to 32
Notes	The following elements are part of a choice: ( <b>interface</b> , <b>next-hop</b> , and <b>swap-label</b> ) or <b>pop</b> .
Introduced	16.0.R1
Platforms	All

**next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the next hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>next-hop</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>next-hop</b>

Notes	The following elements are part of a choice: ( <b>interface</b> , <b>next-hop</b> , and <b>swap-label</b> ) or <b>pop</b> .
Introduced	16.0.R1
Platforms	All

### **pop** *boolean*

Synopsis	Pop the label and transmit without the label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>pop</b> <i>boolean</i>
Tree	<a href="#">pop</a>
Notes	The following elements are part of a choice: ( <b>interface</b> , <b>next-hop</b> , and <b>swap-label</b> ) or <b>pop</b> .
Introduced	16.0.R1
Platforms	All

### **swap-label** *number*

Synopsis	Value mapped to egress label associated with next-hop entry that LSR uses to swap incoming label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>fec-originate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>swap-label</b> <i>number</i>
Tree	<a href="#">swap-label</a>
Range	6 to 1048575
Notes	The following elements are part of a choice: ( <b>interface</b> , <b>next-hop</b> , and <b>swap-label</b> ) or <b>pop</b> .
Introduced	16.0.R1
Platforms	All

### **generate-basic-fec-only** *boolean*

Synopsis	Enable mLDP to generate a basic FEC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>generate-basic-fec-only</b> <i>boolean</i>
Tree	<a href="#">generate-basic-fec-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

## graceful-restart

Synopsis	Enter the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

## helper-mode *boolean*

Synopsis	Enable graceful restart helper
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp graceful-restart helper-mode</a> <i>boolean</i>
Tree	<a href="#">helper-mode</a>
Default	false
Introduced	16.0.R1
Platforms	All

## maximum-recovery-time *number*

Synopsis	Value for the local maximum recovery time
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp graceful-restart maximum-recovery-time</a> <i>number</i>
Tree	<a href="#">maximum-recovery-time</a>
Range	15 to 1800
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

## neighbor-liveness-time *number*

Synopsis	Value for the neighbor liveness timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp graceful-restart neighbor-liveness-time</a> <i>number</i>
Tree	<a href="#">neighbor-liveness-time</a>
Range	5 to 300
Units	seconds



Default	120
Introduced	16.0.R1
Platforms	All

### **implicit-null-label** *boolean*

Synopsis	Signal the implicit null label value for all LDP FECs for which the node is the egress LER
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <b>implicit-null-label</b> <i>boolean</i>
Tree	<a href="#">implicit-null-label</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **import-mcast-policy** *reference*

Synopsis	Import policy for mLDP FECs arriving on the node
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <b>import-mcast-policy</b> <i>reference</i>
Tree	<a href="#">import-mcast-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

### **import-pmsi-routes**

Synopsis	Enter the <b>import-pmsi-routes</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <b>import-pmsi-routes</b>
Tree	<a href="#">import-pmsi-routes</a>
Introduced	19.5.R1
Platforms	All

**mvpn *boolean***

Synopsis	Import BGP MVPN inter-AS routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">import-pmsi-routes</a> <a href="#">mvpn</a> <i>boolean</i>
Tree	<a href="#">mvpn</a>
Default	false
Introduced	19.5.R1
Platforms	All

**mvpn-no-export-community *boolean***

Synopsis	Import BGP MVPN intra-AS routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">import-pmsi-routes</a> <a href="#">mvpn-no-export-community</a> <i>boolean</i>
Tree	<a href="#">mvpn-no-export-community</a>
Default	false
Introduced	19.5.R1
Platforms	All

**import-policy *reference***

Synopsis	Import policies to filter LDP label bindings received from LDP peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**import-tunnel-table *reference***

Synopsis	Tunnel table import policies for non-host prefixes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">import-tunnel-table</a> <i>reference</i>
Tree	<a href="#">import-tunnel-table</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## interface-parameters

Synopsis	Enter the <b>interface-parameters</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a>
Tree	<a href="#">interface-parameters</a>
Introduced	16.0.R1
Platforms	All

## interface [[ip-int-name](#)] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

## [[ip-int-name](#)] *reference*

Synopsis	Interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the LDP interface
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **bfd-liveness**

Synopsis	Enter the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Allow BFD tracking of IPv4 LDP Session for interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6 boolean**

Synopsis	Allow BFD tracking of IPv6 LDP session for interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv4

Synopsis	Enable the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the LDP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## fec-type-capability

Synopsis	Enter the <b>fec-type-capability</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">fec-type-capability</a>
Tree	<a href="#">fec-type-capability</a>
Introduced	16.0.R1
Platforms	All

## p2mp-ipv4 *boolean*

Synopsis	Enable IPv4 P2MP FEC capability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">fec-type-capability</a> <a href="#">p2mp-ipv4</a> <i>boolean</i>
Tree	<a href="#">p2mp-ipv4</a>
Default	true
Introduced	16.0.R1

Platforms All

### **p2mp-ipv6** *boolean*

Synopsis Enable IPv6 P2MP FEC capability

Context **configure** [router](#) [string](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [fec-type-capability](#) [p2mp-ipv6](#) *boolean*

Tree [p2mp-ipv6](#)

Default true

Introduced 16.0.R1

Platforms All

### **prefix-ipv4** *boolean*

Synopsis Enable IPv4 prefix FEC capability

Context **configure** [router](#) [string](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [fec-type-capability](#) [prefix-ipv4](#) *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

### **prefix-ipv6** *boolean*

Synopsis Enable IPv6 prefix FEC capability

Context **configure** [router](#) [string](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [fec-type-capability](#) [prefix-ipv6](#) *boolean*

Tree [prefix-ipv6](#)

Default true

Introduced 16.0.R1

Platforms All

### **hello**

Synopsis Enable the **hello** context

Context **configure** [router](#) [string](#) [ldp](#) [interface-parameters](#) [interface](#) [reference](#) [ipv4](#) [hello](#)

Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

**factor number**

Synopsis	Factor value for Hello
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">hello</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**timeout number**

Synopsis	Timeout value for Hello
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">hello</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**keepalive**

Synopsis	Enable the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv4</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

**factor number**

Synopsis	Factor value for keepalive
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Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv4</b> <b>keepalive</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Time that LDP waits before tearing down session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv4</b> <b>keepalive</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **local-lsr-id**

Synopsis	Enter the <b>local-lsr-id</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv4</b> <b>local-lsr-id</b>
Tree	<b>local-lsr-id</b>
Introduced	16.0.R1
Platforms	All

### **interface-name** *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv4</b> <b>local-lsr-id</b> <b>interface-name</b> <i>reference</i>
Tree	<b>interface-name</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i>
Introduced	16.0.R1
Platforms	All



**transport-address** *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv4</b> <b>transport-address</b> <i>keyword</i>
Tree	<b>transport-address</b>
Options	interface, system
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LDP interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv6</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**fec-type-capability**

Synopsis	Enter the <b>fec-type-capability</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>interface</b> <i>reference</i> <b>ipv6</b> <b>fec-type-capability</b>
Tree	<b>fec-type-capability</b>
Introduced	16.0.R1

Platforms All

### **p2mp-ipv4** *boolean*

Synopsis Enable IPv4 P2MP FEC capability

Context **configure** **router** *string* **ldp** **interface-parameters** **interface** *reference* **ipv6** **fec-type-capability** **p2mp-ipv4** *boolean*

Tree [p2mp-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

### **p2mp-ipv6** *boolean*

Synopsis Enable IPv6 P2MP FEC capability

Context **configure** **router** *string* **ldp** **interface-parameters** **interface** *reference* **ipv6** **fec-type-capability** **p2mp-ipv6** *boolean*

Tree [p2mp-ipv6](#)

Default true

Introduced 16.0.R1

Platforms All

### **prefix-ipv4** *boolean*

Synopsis Enable IPv4 prefix FEC capability

Context **configure** **router** *string* **ldp** **interface-parameters** **interface** *reference* **ipv6** **fec-type-capability** **prefix-ipv4** *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

### **prefix-ipv6** *boolean*

Synopsis Enable IPv6 prefix FEC capability

Context **configure** **router** *string* **ldp** **interface-parameters** **interface** *reference* **ipv6** **fec-type-capability** **prefix-ipv6** *boolean*

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Tree	<a href="#">prefix-ipv6</a>
Default	true
Introduced	16.0.R1
Platforms	All

## hello

Synopsis	Enable the <b>hello</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <b>hello</b>
Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

## factor *number*

Synopsis	Factor value for Hello
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <b>hello</b> <b>factor</b> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <i>reference</i> <a href="#">ipv6</a> <b>hello</b> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## keepalive

Synopsis	Enable the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">ipv6</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

## factor *number*

Synopsis	Factor value for keepalive
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">ipv6</a> <a href="#">keepalive</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Time that LDP waits before tearing down session
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">ipv6</a> <a href="#">keepalive</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## local-lsr-id

Synopsis	Enter the <b>local-lsr-id</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">interface</a> <a href="#">reference</a> <a href="#">ipv6</a> <a href="#">local-lsr-id</a>
Tree	<a href="#">local-lsr-id</a>
Introduced	16.0.R1
Platforms	All

**format-32bit** *boolean*

Synopsis	Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>interface</i> <i>reference</i> <i>ipv6</i> <i>local-lsr-id</i> <i>format-32bit</i> <i>boolean</i>
Tree	<i>format-32bit</i>
Default	false
Introduced	16.0.R1
Platforms	All

**interface-name** *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>interface</i> <i>reference</i> <i>ipv6</i> <i>local-lsr-id</i> <i>interface-name</i> <i>reference</i>
Tree	<i>interface-name</i>
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>interface</i> <i>string</i>
Introduced	16.0.R1
Platforms	All

**transport-address** *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>interface</i> <i>reference</i> <i>ipv6</i> <i>transport-address</i> <i>keyword</i>
Tree	<i>transport-address</i>
Options	interface, system
Introduced	16.0.R1
Platforms	All

**load-balancing-weight** *number*

Synopsis	Load balancing weight for the LDP interface
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ldp</i> <i>interface-parameters</i> <i>interface</i> <i>reference</i> <i>load-balancing-weight</i> <i>number</i>
Tree	<i>load-balancing-weight</i>

---

Max. Range	0 to 4294967295
Introduced	20.2.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## hello

Synopsis	Enter the <b>hello</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">hello</a>
Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

## factor *number*

Synopsis	Value for the Hello factor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">hello</a> <i>factor</i> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">hello</a> <i>timeout</i> <i>number</i>
Tree	<a href="#">timeout</a>

Range	3 to 65535
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

## keepalive

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

## factor *number*

Synopsis	Value for the keep-alive factor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">keepalive</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Timeout value for keepalive
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">interface-parameters</a> <a href="#">ipv4</a> <a href="#">keepalive</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **transport-address** *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv4</b> <b>transport-address</b> <i>keyword</i>
Tree	<b>transport-address</b>
Options	interface, system
Default	system
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

### **hello**

Synopsis	Enter the <b>hello</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b> <b>hello</b>
Tree	<b>hello</b>
Introduced	16.0.R1
Platforms	All

### **factor** *number*

Synopsis	Value for the Hello factor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b> <b>hello</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All



**timeout** *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b> <b>hello</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	All

**keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b> <b>keepalive</b>
Tree	<b>keepalive</b>
Introduced	16.0.R1
Platforms	All

**factor** *number*

Synopsis	Value for the keep-alive factor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b> <b>keepalive</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Timeout value for keepalive
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b> <b>keepalive</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535

---

Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **transport-address** *keyword*

Synopsis	Transport address to set up the LDP TCP sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>interface-parameters</b> <b>ipv6</b> <b>transport-address</b> <i>keyword</i>
Tree	<a href="#">transport-address</a>
Options	interface, system
Default	system
Introduced	16.0.R1
Platforms	All

### **label-withdrawal-delay** *number*

Synopsis	Time interval during which LDP delays for the withdrawal of FEC-label binding
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>label-withdrawal-delay</b> <i>number</i>
Tree	<a href="#">label-withdrawal-delay</a>
Range	3 to 120
Units	seconds
Introduced	16.0.R1
Platforms	All

### **ldp-shortcut**

Synopsis	Enter the <b>ldp-shortcut</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>ldp-shortcut</b>
Tree	<a href="#">ldp-shortcut</a>
Introduced	16.0.R1
Platforms	All

**ipv4 *boolean***

Synopsis	Forward IPv4 packets by using LDP shortcuts
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>ldp-shortcut</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6 *boolean***

Synopsis	Forward IPv6 packets by using LDP shortcuts
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>ldp-shortcut</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**legacy-ipv4-lsr-interop *boolean***

Synopsis	Allow interoperability with legacy IPv4 LSR implementations
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>legacy-ipv4-lsr-interop</b> <i>boolean</i>
Tree	<a href="#">legacy-ipv4-lsr-interop</a>
Default	false
Introduced	16.0.R1
Platforms	All

**lsp-bfd [[prefix-list](#)] *reference***

Synopsis	Enter the <b>lsp-bfd</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>lsp-bfd</b> <i>reference</i>
Tree	<a href="#">lsp-bfd</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[prefix-list] reference**

Synopsis	Name of a router policy options prefix list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">lsp-bfd</a> <i>reference</i>
Tree	<a href="#">lsp-bfd</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bfd-liveness boolean**

Synopsis	Enable BFD on LDP LSPs with FECs that match the prefix list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">lsp-bfd</a> <i>reference</i> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-template reference**

Synopsis	BFD template to apply to BFD sessions associated with the prefix list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">lsp-bfd</a> <i>reference</i> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**failure-action keyword**

Synopsis	Reaction to BFD session failure for the prefix list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">lsp-bfd</a> <i>reference</i> <a href="#">failure-action</a> <i>keyword</i>
Tree	<a href="#">failure-action</a>
Options	down
Introduced	16.0.R1

Platforms All

### **lsp-ping-interval** (*number* | *keyword*)

Synopsis LSP ping transmit interval for periodic verification

Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **lsp-ping-interval** (*number* | *keyword*)

Tree **lsp-ping-interval**

Range 60 to 300

Units seconds

Options none

Default 60

Introduced 16.0.R1

Platforms All

### **priority** *number*

Synopsis Prefix list to control the search order

Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **priority** *number*

Tree **priority**

Range 1 to 99

Default 1

Introduced 16.0.R1

Platforms All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source address in LSP ping packets and BFD control packets associated with prefix list

Context **configure** **router** *string* **ldp** **lsp-bfd** *reference* **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **source-address**

Introduced 16.0.R1

Platforms All

### **max-ecmp-routes** *number*

Synopsis Maximum ECMP value for LDP

Context	<b>configure router</b> <i>string</i> <b>ldp max-ecmp-routes</b> <i>number</i>
Tree	<b>max-ecmp-routes</b>
Description	This command sets the maximum number of ECMP routes that LDP may use to resolve the next hop for a FEC as permitted by the RTM or TTM.  The system-wide maximum number of ECMP routes is set by the <b>configure router ecmp</b> command; therefore, the operational maximum number used by LDP is set to the lesser of the values configured by this command and the <b>configure router ecmp</b> command.
Range	1 to 64
Default	32
Introduced	19.10.R1
Platforms	All

### **mcast-upstream-asbr-frr** *boolean*

Synopsis	Enable ASBR MoFRR to allow local leaf to perform MoFRR for multiple ASBRs
Context	<b>configure router</b> <i>string</i> <b>ldp mcast-upstream-asbr-frr</b> <i>boolean</i>
Tree	<b>mcast-upstream-asbr-frr</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-upstream-frr** *boolean*

Synopsis	Use fast upstream switchover for mLDP FECs
Context	<b>configure router</b> <i>string</i> <b>ldp mcast-upstream-frr</b> <i>boolean</i>
Tree	<b>mcast-upstream-frr</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mp-mbb-time** *number*

Synopsis	MP MBB time
Context	<b>configure router</b> <i>string</i> <b>ldp mp-mbb-time</b> <i>number</i>
Tree	<b>mp-mbb-time</b>

Range	0 to 10
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

### **prefer-mcast-tunnel-in-tunnel** *boolean*

Synopsis	Use T-LDP session to the peer for FEC resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>prefer-mcast-tunnel-in-tunnel</b> <i>boolean</i>
Tree	<a href="#">prefer-mcast-tunnel-in-tunnel</a>
Default	true
Introduced	21.2.R1
Platforms	All

### **prefer-protocol-stitching** *boolean*

Synopsis	Stitch LDP ILM to SR NHLFE even if LDP NHLFE exists
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>prefer-protocol-stitching</b> <i>boolean</i>
Tree	<a href="#">prefer-protocol-stitching</a>
Description	When configured to <b>true</b> , an LDP ILM stitches to an SR NHLFE, even if an LDP NHLFE exists. When configured to <b>false</b> , the stitching preference of an LDP ILM is to an LDP NHLFE.
Default	false
Introduced	21.7.R1
Platforms	All

### **prefer-tunnel-in-tunnel** *boolean*

Synopsis	Preference tunnel-in-tunnel over a simple LDP tunnel
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>prefer-tunnel-in-tunnel</b> <i>boolean</i>
Tree	<a href="#">prefer-tunnel-in-tunnel</a>
Default	true
Introduced	16.0.R1
Platforms	All

**resolve-root-using** *keyword*

Synopsis	Resolution route table for multicast FECs
Context	<b>configure</b> <i>router string</i> <b>ldp</b> <b>resolve-root-using</b> <i>keyword</i>
Tree	<b>resolve-root-using</b>
Options	ucast-rtm, mcast-rtm
Default	ucast-rtm
Introduced	16.0.R1
Platforms	All

**session-parameters**

Synopsis	Enter the <b>session-parameters</b> context
Context	<b>configure</b> <i>router string</i> <b>ldp</b> <b>session-parameters</b>
Tree	<b>session-parameters</b>
Introduced	16.0.R1
Platforms	All

**peer** [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <i>router string</i> <b>ldp</b> <b>session-parameters</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the LDP peer
Context	<b>configure</b> <i>router string</i> <b>ldp</b> <b>session-parameters</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms All

### **adv-adj-addr-only** *boolean*

Synopsis Distribute only the local addresses used to establish the Hello adjacencies with a peer

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **adv-adj-addr-only** *boolean*

Tree [adv-adj-addr-only](#)

Default false

Introduced 16.0.R1

Platforms All

### **adv-local-lsr-id** *boolean*

Synopsis Advertise local LSR ID over a specified LDP session

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **adv-local-lsr-id** *boolean*

Tree [adv-local-lsr-id](#)

Default false

Introduced 16.0.R1

Platforms All

### **community** *string*

Synopsis Community string associated with a session to a specified peer

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **community** *string*

Tree [community](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

### **dod-label-distribution** *boolean*

Synopsis Use LDP Downstream-on-Demand (DoD) label distribution procedures

Context **configure** **router** *string* **ldp session-parameters peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **dod-label-distribution** *boolean*

Tree	<a href="#">dod-label-distribution</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **export-addresses** *reference*

Synopsis	Export policies to determine which local addresses should be distributed to this peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp session-parameters</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">export-addresses</a> <i>reference</i>
Tree	<a href="#">export-addresses</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **export-prefixes** *reference*

Synopsis	Export policies to determine which FEC prefixes are redistributed to LDP and TLDP peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp session-parameters</a> <a href="#">peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">export-prefixes</a> <i>reference</i>
Tree	<a href="#">export-prefixes</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **fec-limit**

Synopsis	Enter the <b>fec-limit</b> context
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Context	<b>configure router string ldp session-parameters peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>fec-limit</b>
Tree	<b>fec-limit</b>
Introduced	16.0.R1
Platforms	All

### **limit number**

Synopsis	Maximum number of FECs to be accepted from this peer LSR
Context	<b>configure router string ldp session-parameters peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>fec-limit limit number</b>
Tree	<b>limit</b>
Range	0   1 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

### **log-only boolean**

Synopsis	Trap and syslog message to generate when reaching the threshold and limit
Context	<b>configure router string ldp session-parameters peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>fec-limit log-only boolean</b>
Tree	<b>log-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **threshold number**

Synopsis	Threshold that generates trap and warning when reached
Context	<b>configure router string ldp session-parameters peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>fec-limit threshold number</b>
Tree	<b>threshold</b>
Range	1 to 100
Default	90
Introduced	16.0.R1

Platforms All

### **fec-type-capability**

Synopsis Enter the **fec-type-capability** context

Context **configure** [router](#) *string* [ldp session-parameters peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [fec-type-capability](#)

Tree [fec-type-capability](#)

Introduced 16.0.R1

Platforms All

### **p2mp** *boolean*

Synopsis Enable P2MP FEC capability for the session

Context **configure** [router](#) *string* [ldp session-parameters peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [fec-type-capability p2mp](#) *boolean*

Tree [p2mp](#)

Default true

Introduced 16.0.R1

Platforms All

### **prefix-ipv4** *boolean*

Synopsis Enable IPv4 prefix FEC capability for the session

Context **configure** [router](#) *string* [ldp session-parameters peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [fec-type-capability prefix-ipv4](#) *boolean*

Tree [prefix-ipv4](#)

Default true

Introduced 16.0.R1

Platforms All

### **prefix-ipv6** *boolean*

Synopsis Enable IPv6 prefix FEC capability

Context **configure** [router](#) *string* [ldp session-parameters peer](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [fec-type-capability prefix-ipv6](#) *boolean*

Tree [prefix-ipv6](#)

Default	true
Introduced	16.0.R1
Platforms	All

### **fec129-cisco-interop** *boolean*

Synopsis	Allow translation between non-compliant FEC 129 formats of Cisco
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>fec129-cisco-interop</b> <i>boolean</i>
Tree	<a href="#">fec129-cisco-interop</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-prefixes** *reference*

Synopsis	FEC prefixes to be redistributed to this LDP peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>import-prefixes</b> <i>reference</i>
Tree	<a href="#">import-prefixes</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **pe-id-mac-flush-interop** *boolean*

Synopsis	Send PE-ID TLV in LDP MAC withdrawal message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp session-parameters peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>pe-id-mac-flush-interop</b> <i>boolean</i>
Tree	<a href="#">pe-id-mac-flush-interop</a>
Default	false
Introduced	16.0.R1
Platforms	All

**shortcut-local-ttl-propagate** *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	<b>configure</b> <i>router string ldp shortcut-local-ttl-propagate boolean</i>
Tree	<a href="#">shortcut-local-ttl-propagate</a>
Default	true
Introduced	16.0.R1
Platforms	All

**shortcut-transit-ttl-propagate** *boolean*

Synopsis	Enable TTL propagation over LSP shortcut
Context	<b>configure</b> <i>router string ldp shortcut-transit-ttl-propagate boolean</i>
Tree	<a href="#">shortcut-transit-ttl-propagate</a>
Default	true
Introduced	16.0.R1
Platforms	All

**targeted-session**

Synopsis	Enter the <b>targeted-session</b> context
Context	<b>configure</b> <i>router string ldp targeted-session</i>
Tree	<a href="#">targeted-session</a>
Introduced	16.0.R1
Platforms	All

**auto-rx**

Synopsis	Enter the <b>auto-rx</b> context
Context	<b>configure</b> <i>router string ldp targeted-session auto-rx</i>
Tree	<a href="#">auto-rx</a>
Description	Commands in this context specify the LDP session configuration to accept targeted Hello messages from any peer.
Introduced	20.10.R1
Platforms	All

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">auto-rx</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">auto-rx</a> <a href="#">ipv4</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

**tunneling** *boolean*

Synopsis	Enable tunneling for targeted peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">auto-rx</a> <a href="#">ipv4</a> <b>tunneling</b> <i>boolean</i>
Tree	<a href="#">tunneling</a>
Description	<p>When configured to <b>true</b>, this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.</p> <p>If the <b>auto-rx</b> and <b>auto-tx</b> contexts are both administratively enabled, this command must be set to <b>true</b> for LDP rLFA to function properly.</p> <p>When configured to <b>false</b>, FEC label bindings are not sent via the LDP session.</p>
Default	false
Introduced	20.10.R1
Platforms	All

**auto-tx**

Synopsis	Enter the <b>auto-tx</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-tx</b>
Tree	<b>auto-tx</b>
Description	Commands in this context specify the LDP session configuration to send targeted Hello messages toward PQ nodes determined by the rLFA algorithm.
Introduced	20.10.R1
Platforms	All

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-tx</b> <b>ipv4</b>
Tree	<b>ipv4</b>
Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IPv4 capabilities for peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-tx</b> <b>ipv4</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

**tunneling** *boolean*

Synopsis	Enable tunneling for targeted peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>auto-tx</b> <b>ipv4</b> <b>tunneling</b> <i>boolean</i>
Tree	<b>tunneling</b>
Description	When configured to <b>true</b> , this command enables the local system to use the targeted LDP session to send FEC label bindings that are advertised to other LDP peers. For LDP rLFA, the source node requires the PQ node's label binding information in order to reach the destination.



If the **auto-rx** context is administratively disabled, this command should be set to **true** for LDP rLFA to function properly.

When configured to **false**, FEC label bindings are not sent via the LDP session.

Default	false
Introduced	20.10.R1
Platforms	All

### **export-prefixes** *reference*

Synopsis	Export route policy to determine which routes are exported to this targeted LDP session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">export-prefixes</a> <i>reference</i>
Tree	<a href="#">export-prefixes</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **import-prefixes** *reference*

Synopsis	Import route policy to determine which routes are accepted from targeted LDP neighbors
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">import-prefixes</a> <i>reference</i>
Tree	<a href="#">import-prefixes</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>

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Introduced	16.0.R1
Platforms	All

## hello

Synopsis	Enter the <b>hello</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">hello</a>
Tree	<a href="#">hello</a>
Introduced	16.0.R1
Platforms	All

## factor *number*

Synopsis	Factor value for Hello
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">hello</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">hello</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Default	45
Introduced	16.0.R1
Platforms	All

## hello-reduction

Synopsis	Enter the <b>hello-reduction</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">hello-reduction</a>
Tree	<a href="#">hello-reduction</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">hello-reduction</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R3
Platforms	All

### **factor** *number*

Synopsis	Hello reduction dampening factor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">hello-reduction</a> <a href="#">factor</a> <i>number</i>
Tree	<a href="#">factor</a>
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">ipv4</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	All

### **factor number**

Synopsis	Factor value for keepalive
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv4</b> <b>keepalive</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

### **timeout number**

Synopsis	Timeout value for keepalive
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv4</b> <b>keepalive</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Default	40
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

### **hello**

Synopsis	Enter the <b>hello</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b> <b>hello</b>
Tree	<b>hello</b>
Introduced	16.0.R1
Platforms	All

### **factor** *number*

Synopsis	Factor value for Hello
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b> <b>hello</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b> <b>hello</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Default	45
Introduced	16.0.R1
Platforms	All

### **hello-reduction**

Synopsis	Enter the <b>hello-reduction</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b> <b>hello-reduction</b>
Tree	<b>hello-reduction</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>ipv6</b> <b>hello-reduction</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable

Default	disable
Introduced	16.0.R3
Platforms	All

### **factor number**

Synopsis	Hello reduction dampening factor
Context	<b>configure router string ldp targeted-session ipv6 hello-reduction factor number</b>
Tree	<b>factor</b>
Range	3 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure router string ldp targeted-session ipv6 keepalive</b>
Tree	<b>keepalive</b>
Introduced	16.0.R1
Platforms	All

### **factor number**

Synopsis	Factor value for keepalive
Context	<b>configure router string ldp targeted-session ipv6 keepalive factor number</b>
Tree	<b>factor</b>
Range	1 to 255
Default	4
Introduced	16.0.R1
Platforms	All

### **timeout number**

Synopsis	Timeout value for keepalive
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Context	<b>configure</b> <i>router string ldp targeted-session ipv6 keepalive timeout number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Default	40
Introduced	16.0.R1
Platforms	All

### **peer** [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <i>router string ldp targeted-session peer (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">peer</a>
Introduced	16.0.R1
Platforms	All

### **[ip-address]** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the LDP peer
Context	<b>configure</b> <i>router string ldp targeted-session peer (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the LDP peer
Context	<b>configure</b> <i>router string ldp targeted-session peer (ipv4-address-no-zone   ipv6-address-no-zone) admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD tracking of LDP session for the peer

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **bfd-liveness** *boolean*

Tree [bfd-liveness](#)

Default false

Introduced 16.0.R1

Platforms All

### **hello**

Synopsis Enable the **hello** context

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello**

Tree [hello](#)

Introduced 16.0.R1

Platforms All

### **factor** *number*

Synopsis Factor value for Hello

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello** **factor** *number*

Tree [factor](#)

Range 1 to 255

Introduced 16.0.R1

Platforms All

### **timeout** *number*

Synopsis Timeout value for Hello

Context **configure** **router** *string* **ldp** **targeted-session** **peer** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **hello** **timeout** *number*

Tree [timeout](#)



Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## hello-reduction

Synopsis	Enable the <b>hello-reduction</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>hello-reduction</b>
Tree	<b>hello-reduction</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>hello-reduction</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R3
Platforms	All

## factor *number*

Synopsis	Hello reduction dampening factor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>hello-reduction</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	3 to 20
Introduced	16.0.R1
Platforms	All

## keepalive

Synopsis	Enable the <b>keepalive</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive</b>
Tree	<b>keepalive</b>
Introduced	16.0.R1
Platforms	All

## factor number

Synopsis	Factor value for keepalive
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

## timeout number

Synopsis	Time that LDP waits before tearing down session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>keepalive</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## local-lsr-id

Synopsis	Enter the <b>local-lsr-id</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>local-lsr-id</b>
Tree	<b>local-lsr-id</b>
Introduced	16.0.R1

Platforms All

### **format-32bit** *boolean*

Synopsis Use IPv4 address of local LSR-ID interface as LSR-ID of the LDP LSR

Context **configure** *router* *string* *ldp* *targeted-session* *peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *local-lsr-id* **format-32bit** *boolean*

Tree [format-32bit](#)

Default false

Introduced 16.0.R1

Platforms All

### **interface-name** *reference*

Synopsis Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP

Context **configure** *router* *string* *ldp* *targeted-session* *peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) *local-lsr-id* **interface-name** *reference*

Tree [interface-name](#)

Reference **configure** *router* *string* *interface* *string*

Introduced 16.0.R1

Platforms All

### **mcast-tunneling**

Synopsis Enable the **mcast-tunneling** context

Context **configure** *router* *string* *ldp* *targeted-session* *peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **mcast-tunneling**

Tree [mcast-tunneling](#)

Introduced 21.2.R1

Platforms All

### **lsp** [*lsp-name*] *string*

Synopsis Add a list entry for **lsp**

Context **configure** *router* *string* *ldp* *targeted-session* *peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **mcast-tunneling** **lsp** *string*

Tree	<a href="#">lsp</a>
Max. Instances	4
Introduced	21.2.R1
Platforms	All

**[lsp-name]** *string*

Synopsis	LSP name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">mcast-tunneling</a> <a href="#">lsp</a> <i>string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**tunneling**

Synopsis	Enable the <b>tunneling</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">tunneling</a>
Tree	<a href="#">tunneling</a>
Introduced	16.0.R1
Platforms	All

**lsp** [[lsp-name](#)] *string*

Synopsis	Add a list entry for <b>lsp</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">tunneling</a> <a href="#">lsp</a> <i>string</i>
Tree	<a href="#">lsp</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	All

**[lsp-name]** *string*

Synopsis	LSP name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunneling</b> <b>lsp</b> <i>string</i>
Tree	<b>lsp</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**peer-template** [**template-name**] *string*

Synopsis	Enter the <b>peer-template</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i>
Tree	<b>peer-template</b>
Max. Instances	500
Introduced	16.0.R1
Platforms	All

**[template-name]** *string*

Synopsis	Name for the targeted peer template
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i>
Tree	<b>peer-template</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the peer template
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**adv-local-lsr-id** *boolean*

Synopsis	Advertise local LSR ID over a specified LDP session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer-template</a> <i>string</i> <b>adv-local-lsr-id</b> <i>boolean</i>
Tree	<a href="#">adv-local-lsr-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD tracking of LDP session for sessions created by peer template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer-template</a> <i>string</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Default	false
Introduced	16.0.R1
Platforms	All

**community** *string*

Synopsis	Community string associated with a session to a specified peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ldp</a> <a href="#">targeted-session</a> <a href="#">peer-template</a> <i>string</i> <b>community</b> <i>string</i>
Tree	<a href="#">community</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

## hello

Synopsis	Enable the <b>hello</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello</b>
Tree	<b>hello</b>
Introduced	16.0.R1
Platforms	All

## factor *number*

Synopsis	Factor value for Hello
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Timeout value for Hello
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

## hello-reduction

Synopsis	Enable the <b>hello-reduction</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello-reduction</b>
Tree	<b>hello-reduction</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of suppression of Hello messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello-reduction</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R3
Platforms	All

**factor** *number*

Synopsis	Hello reduction dampening factor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>hello-reduction</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	3 to 20
Introduced	16.0.R1
Platforms	All

**keepalive**

Synopsis	Enable the <b>keepalive</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>keepalive</b>
Tree	<b>keepalive</b>
Introduced	16.0.R1
Platforms	All

**factor** *number*

Synopsis	Factor value for keepalive
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>keepalive</b> <b>factor</b> <i>number</i>
Tree	<b>factor</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All



**timeout** *number*

Synopsis	Time that LDP waits before tearing down session
Context	<b>configure</b> <i>router string ldp targeted-session peer-template string keepalive timeout number</i>
Tree	<a href="#">timeout</a>
Range	3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**local-lsr-id**

Synopsis	Enter the <b>local-lsr-id</b> context
Context	<b>configure</b> <i>router string ldp targeted-session peer-template string local-lsr-id</i>
Tree	<a href="#">local-lsr-id</a>
Introduced	16.0.R1
Platforms	All

**interface-name** *reference*

Synopsis	Name of network IP interface from which to obtain IP address to use as LSR-ID of LDP LSP
Context	<b>configure</b> <i>router string ldp targeted-session peer-template string local-lsr-id interface-name reference</i>
Tree	<a href="#">interface-name</a>
Reference	<b>configure</b> <i>router string interface string</i>
Introduced	16.0.R1
Platforms	All

**mcast-tunneling** *boolean*

Synopsis	Enable MLDP over RSVP-TE tunnels for the template
Context	<b>configure</b> <i>router string ldp targeted-session peer-template string mcast-tunneling boolean</i>
Tree	<a href="#">mcast-tunneling</a>

Default	false
Introduced	21.2.R1
Platforms	All

### **tunneling** *boolean*

Synopsis	Allow LDP over tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i> <b>tunneling</b> <i>boolean</i>
Tree	<b>tunneling</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **peer-template-map** [**template-map-name**] *reference*

Synopsis	Enter the <b>peer-template-map</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template-map</b> <i>reference</i>
Tree	<b>peer-template-map</b>
Max. Instances	500
Introduced	16.0.R1
Platforms	All

### **[template-map-name]** *reference*

Synopsis	Name to identify the targeted peer template
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template-map</b> <i>reference</i>
Tree	<b>peer-template-map</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**policy-map** *reference*

Synopsis	Targeted peer template to apply to the given policies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>peer-template-map</b> <i>reference</i> <b>policy-map</b> <i>reference</i>
Tree	<b>policy-map</b>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**resolve-v6-prefix-over-shortcut** *boolean*

Synopsis	Resolve IPv6 prefix over IGP shortcuts
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>resolve-v6-prefix-over-shortcut</b> <i>boolean</i>
Tree	<b>resolve-v6-prefix-over-shortcut</b>
Description	When configured to <b>true</b> , the system enables the resolution of IPv6 LDP unicast prefix FECs over IGP shortcuts. When configured to <b>false</b> , the resolution is not allowed.
Default	false
Introduced	22.7.R1
Platforms	All

**sdp-auto-targeted-session** *boolean*

Synopsis	Allow auto-creation of targeted sessions by SDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>targeted-session</b> <b>sdp-auto-targeted-session</b> <i>boolean</i>
Tree	<b>sdp-auto-targeted-session</b>
Default	true
Introduced	16.0.R1
Platforms	All

## tcp-session-parameters

Synopsis	Enter the <b>tcp-session-parameters</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tcp-session-parameters</b>
Tree	<b>tcp-session-parameters</b>
Introduced	16.0.R1
Platforms	All

## authentication-key *string*

Synopsis	Authentication key between LDP peers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tcp-session-parameters</b> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
Description	This command specifies the authentication key used to establish a session between LDP peers.

Authentication uses the MD-5 message-based digest. The peer address used in authentication must be the TCP session transport address. If one or more transport addresses used in the Hello adjacencies to the same peer LSR are different from the LSR ID value, the user must add each transport address to the authentication key configuration as a separate peer. As a result, when the TCP connection is bootstrapped by a specific Hello adjacency, the authentication can operate over that TCP connection by using its specific transport address.

The per-peer authentication configuration takes precedence over global authentication configuration, and authentication keychain configuration takes precedence over authentication key configuration.

String Length	1 to 370
Introduced	21.2.R1
Platforms	All

## authentication-keychain *reference*

Synopsis	Authentication keychain to use for the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tcp-session-parameters</b> <b>authentication-keychain</b> <i>reference</i>
Tree	<b>authentication-keychain</b>
Description	This command configures the authentication keychain to use for the TCP session.  The per-peer authentication configuration takes precedence over the global authentication configuration.
Reference	<b>configure</b> <b>system</b> <b>security</b> <b>keychains</b> <b>keychain</b> <i>string</i>
Introduced	21.2.R1

Platforms All

### **peer-transport** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **peer-transport** list instance

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [peer-transport](#)

Introduced 16.0.R1

Platforms All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the TCP connection to the LDP peer

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [peer-transport](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **authentication-key** *string*

Synopsis Authentication key between LDP peers

Context **configure** [router](#) *string* [ldp](#) [tcp-session-parameters](#) [peer-transport](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [authentication-key](#) *string*

Tree [authentication-key](#)

Description This command specifies the authentication key used to establish a session between LDP peers.

Authentication uses the MD-5 message-based digest. The peer address used in authentication must be the TCP session transport address. If one or more transport addresses used in the Hello adjacencies to the same peer LSR are different from the LSR ID value, the user must add each transport address to the authentication key configuration as a separate peer. As a result, when the TCP connection is bootstrapped by a specific Hello adjacency, the authentication can operate over that TCP connection by using its specific transport address.

The per-peer authentication configuration takes precedence over global authentication configuration, and authentication keychain configuration takes precedence over authentication key configuration.

String Length	1 to 370
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	Authentication keychain to use for the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tcp-session-parameters</b> <b>peer-transport</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>authentication-keychain</b> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command configures the authentication keychain to use for the TCP session. The per-peer authentication configuration takes precedence over the global authentication configuration.
Reference	<b>configure</b> <b>system</b> <b>security</b> <b>keychains</b> <b>keychain</b> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **path-mtu-discovery** *boolean*

Synopsis	Allow Path MTU Discovery for associated TCP connections
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tcp-session-parameters</b> <b>peer-transport</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>path-mtu-discovery</b> <i>boolean</i>
Tree	<a href="#">path-mtu-discovery</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ttl-security** *number*

Synopsis	Minimum TTL value for incoming packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tcp-session-parameters</b> <b>peer-transport</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>ttl-security</b> <i>number</i>
Tree	<a href="#">ttl-security</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **tunnel-down-damp-time** *number*

Synopsis	Time interval for an LDP to damp a tunnel down event before posting to the Route Table Manager (RTM)
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tunnel-down-damp-time</b> <i>number</i>
Tree	<b>tunnel-down-damp-time</b>
Range	0 to 20
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

### **tunnel-table-pref** *number*

Synopsis	Tunnel table preference value for address FECs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>tunnel-table-pref</b> <i>number</i>
Tree	<b>tunnel-table-pref</b>
Description	<p>This command configures the tunnel table preference for an LDP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the <b>mixed-lsp-mode</b> option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	9
Introduced	21.10.R1
Platforms	All

### **weighted-ecmp** *boolean*

Synopsis	Allow weighted ECMP load-balancing
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ldp</b> <b>weighted-ecmp</b> <i>boolean</i>
Tree	<b>weighted-ecmp</b>

Description	When configured to <b>true</b> , the system allows weighted ECMP on LDP using RSVP LSPs or SR-TE LSPs. LDP labeled packets are sprayed across the RSVP or SR-TE LSP ECMP set in proportion to the configured load-balancing weight of LSPs. When configured to <b>false</b> , the system removes weighted ECMP load-balancing.
Default	false
Introduced	16.0.R1
Platforms	All

## leak-export

Synopsis	Enter the <b>leak-export</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>leak-export</b>
Tree	<b>leak-export</b>
Introduced	16.0.R4
Platforms	All

## leak-export-limit *number*

Synopsis	Maximum limit on number of GRT routes leaked into VPRNs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>leak-export</b> <b>leak-export-limit</b> <i>number</i>
Tree	<b>leak-export-limit</b>
Range	1 to 10000
Default	5
Introduced	16.0.R4
Platforms	All

## policy-name (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>leak-export</b> <b>policy-name</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy-name</b>
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4



Platforms All

## **lsp-bfd**

Synopsis Enter the **lsp-bfd** context  
Context **configure router string lsp-bfd**  
Tree [lsp-bfd](#)  
Introduced 16.0.R1  
Platforms All

## **bfd-sessions number**

Synopsis Maximum number of LSP BFD session tail-ends  
Context **configure router string lsp-bfd bfd-sessions number**  
Tree [bfd-sessions](#)  
Range 1 to 4294967295  
Introduced 16.0.R1  
Platforms All

## **tail-end**

Synopsis Enter the **tail-end** context  
Context **configure router string lsp-bfd tail-end**  
Tree [tail-end](#)  
Introduced 20.10.R1  
Platforms All

## **multiplier number**

Synopsis Missed message threshold before session is set to down  
Context **configure router string lsp-bfd tail-end multiplier number**  
Tree [multiplier](#)  
Range 1 to 20  
Default 3  
Introduced 20.10.R1

Platforms All

### **receive-interval** *number*

Synopsis The BFD receive interval for LSP tail-end

Context **configure** *router string lsp-bfd tail-end receive-interval number*

Tree [receive-interval](#)

Range 100 to 1000

Units milliseconds

Default 1000

Introduced 20.10.R1

Platforms All

### **transmit-interval** *number*

Synopsis The BFD transmit interval for LSP tail-end

Context **configure** *router string lsp-bfd tail-end transmit-interval number*

Tree [transmit-interval](#)

Range 100 to 1000

Units milliseconds

Default 1000

Introduced 20.10.R1

Platforms All

### **mc-maximum-routes**

Synopsis Enter the **mc-maximum-routes** context

Context **configure** *router string mc-maximum-routes*

Tree [mc-maximum-routes](#)

Introduced 16.0.R1

Platforms All

### **log-only** *boolean*

Synopsis Log and allow learning of new multicast routes

Context	<b>configure</b> <i>router</i> <i>string</i> <i>mc-maximum-routes</i> <i>log-only</i> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Maximum multicast routes which the VRF holds
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mc-maximum-routes</i> <i>threshold</i> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mc-maximum-routes</i> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

### **mld**

Synopsis	Enable the <b>mld</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i>
Tree	<a href="#">mld</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MLD
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference*

Synopsis	Enter the <b>forwarding-group-interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i>
Tree	<b>forwarding-group-interface</b>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**forwarding-service** *string*

Synopsis	Forwarding service for the subscriber interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i>
Tree	<b>forwarding-group-interface</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-interface-name** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i>
Tree	<b>forwarding-group-interface</b>
Reference	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i>

Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the MLD interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis	Import policy to filter MLD packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>maximum-number-group-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000

Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis Maximum number of groups for this interface  
 Context **configure** *router string mld forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-groups number*  
 Tree [maximum-number-groups](#)  
 Range 1 to 16000  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis Maximum number of sources that are allowed per group  
 Context **configure** *router string mld forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-sources number*  
 Tree [maximum-number-sources](#)  
 Range 1 to 1000  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mcac**

Synopsis Enter the **mcac** context  
 Context **configure** *router string mld forwarding-group-interface forwarding-service string group-interface-name reference mcac*  
 Tree [mcac](#)  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth**

Synopsis Enter the **bandwidth** context  
 Context **configure** *router string mld forwarding-group-interface forwarding-service string group-interface-name reference mcac bandwidth*

Tree	<a href="#">bandwidth</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b> <b>mandatory</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac</b> <b>bandwidth</b> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>mcac</b> <b>interface-policy</b> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <b>mcac</b> <b>interface-policy</b> <i>string</i>
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>mcac</i> <i>policy</i> <i>reference</i>
Tree	<i>policy</i>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <i>mcac</i> <i>policy</i> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>forwarding-group-interface</i> <i>forwarding-service</i> <i>string</i> <i>group-interface-name</i> <i>reference</i> <i>query-interval</i> <i>number</i>
Tree	<i>query-interval</i>
Range	2 to 1024
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-last-member-interval</b> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-response-interval</b> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-source-address** *string*

Synopsis	Source address for MLD queries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-source-address</b> <i>string</i>
Tree	<a href="#">query-source-address</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>forwarding-group-interface</b> <b>forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>router-alert-check</b> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-hosts-only** *boolean*

Synopsis Allow MLD traffic from known hosts only

Context **configure** **router** *string* **mld** **forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference* **sub-hosts-only** *boolean*

Tree [sub-hosts-only](#)

Default true

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet-check** *boolean*

Synopsis Enable subnet checking

Context **configure** **router** *string* **mld** **forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference* **subnet-check** *boolean*

Tree [subnet-check](#)

Default true

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **version** *keyword*

Synopsis MLD protocol version

Context **configure** **router** *string* **mld** **forwarding-group-interface** **forwarding-service** *string* **group-interface-name** *reference* **version** *keyword*

Tree [version](#)

Options 1, 2

Default 2

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-if-query-source-address** *string*

Synopsis Source address in queries for group interfaces when not configured at group interface level

Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>group-if-query-source-address</i> <i>string</i>
Tree	<a href="#">group-if-query-source-address</a>
Introduced	16.0.R1
Platforms	All

### **group-interface** [[group-interface-name](#)] *reference*

Synopsis	Enter the <b>group-interface</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>group-interface</i> <i>reference</i>
Tree	<a href="#">group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[group-interface-name]** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>group-interface</i> <i>reference</i>
Tree	<a href="#">group-interface</a>
Reference	<b>configure</b> <i>service</i> <i>ies</i> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the MLD interface
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>group-interface</i> <i>reference</i> <i>admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**import-policy** *reference*

Synopsis	Import policy to filter MLD packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i>

Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mcac

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">group-interface</a> <a href="#">reference</a> <a href="#">mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bandwidth

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">group-interface</a> <a href="#">reference</a> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">group-interface</a> <a href="#">reference</a> <a href="#">mcac</a> <a href="#">bandwidth</a> <a href="#">mandatory</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>group-interface</i> <i>reference</i> <i>mcac</i> <i>bandwidth</i> <i>total</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>group-interface</i> <i>reference</i> <i>mcac</i> <i>interface-policy</i> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <i>mcac</i> <i>interface-policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mld</i> <i>group-interface</i> <i>reference</i> <i>mcac</i> <i>policy</i> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>

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Reference	<b>configure</b> <a href="#">mcac policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">router string mld group-interface reference query-interval number</a>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">router string mld group-interface reference query-last-member-interval number</a>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">router string mld group-interface reference query-response-interval number</a>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis	Source address for MLD queries
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Context        **configure** [router](#) *string* [mld](#) [group-interface](#) *reference* [query-source-address](#) *string*  
Tree            [query-source-address](#)  
Introduced     16.0.R1  
Platforms      7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis        Enable router alert checking for IGMP or MLD messages  
Context        **configure** [router](#) *string* [mld](#) [group-interface](#) *reference* [router-alert-check](#) *boolean*  
Tree            [router-alert-check](#)  
Default        true  
Introduced     16.0.R1  
Platforms      7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-hosts-only** *boolean*

Synopsis        Allow MLD traffic from known hosts only  
Context        **configure** [router](#) *string* [mld](#) [group-interface](#) *reference* [sub-hosts-only](#) *boolean*  
Tree            [sub-hosts-only](#)  
Default        true  
Introduced     16.0.R1  
Platforms      7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet-check** *boolean*

Synopsis        Enable subnet checking  
Context        **configure** [router](#) *string* [mld](#) [group-interface](#) *reference* [subnet-check](#) *boolean*  
Tree            [subnet-check](#)  
Default        true  
Introduced     16.0.R1  
Platforms      7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **version** *keyword*

Synopsis        MLD protocol version



Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface** [[ip-interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

### **[ip-interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the MLD interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Import policy to filter MLD packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">maximum-number-sources</a> <i>number</i>

Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

## mcac

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

## bandwidth

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	All

## mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <a href="#">mandatory</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

## total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
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Context	<b>configure router</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac bandwidth total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure router</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac interface-policy</b> <i>reference</i>
Tree	<b>interface-policy</b>
Reference	<b>configure mcac interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure router</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac mc-constraints</b>
Tree	<b>mc-constraints</b>
Introduced	16.0.R1
Platforms	All

### **level** [**level-id**] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure router</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac mc-constraints level</b> <i>number</i>
Tree	<b>level</b>
Introduced	16.0.R1
Platforms	All

**[level-id] number**

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>level</b> <i>number</i>
Tree	<b>level</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bandwidth number**

Synopsis	Bandwidth available for this level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>level</b> <i>number</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**number-down [number-lag-port-down] number**

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i>
Tree	<b>number-down</b>
Introduced	16.0.R1
Platforms	All

**[number-lag-port-down] number**

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i>
Tree	<b>number-down</b>
Range	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level number**

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">mcac mc-constraints</a> <a href="#">number-down</a> <i>number level number</i>
Tree	<a href="#">level</a>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **use-lag-port-weight boolean**

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">mcac mc-constraints</a> <a href="#">use-lag-port-weight</a> <i>boolean</i>
Tree	<a href="#">use-lag-port-weight</a>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">policy reference</a>
Tree	<a href="#">policy</a>

Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure mcac policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure router</b> <i>string mld interface string query-interval number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure router</b> <i>string mld interface string query-last-member-interval number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>query-response-interval</b> <i>number</i>
Tree	<b>query-response-interval</b>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

**router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>router-alert-check</b> <i>boolean</i>
Tree	<b>router-alert-check</b>
Default	true
Introduced	16.0.R1
Platforms	All

**ssm-translate**

Synopsis	Enter the <b>ssm-translate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>ssm-translate</b>
Tree	<b>ssm-translate</b>
Introduced	16.0.R1
Platforms	All

**group-range** *start string end string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>ssm-translate</b> <b>group-range</b> <i>start string end string</i>
Tree	<b>group-range</b>
Introduced	16.0.R1
Platforms	All



**start string**

Synopsis	Lower bound of the group range
Context	<b>configure</b> <a href="#">router string mld interface string ssm-translate group-range start string end string</a>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	Upper bound of the group range
Context	<b>configure</b> <a href="#">router string mld interface string ssm-translate group-range start string end string</a>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source [source-address] string**

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">router string mld interface string ssm-translate group-range start string end string source string</a>
Tree	<a href="#">source</a>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**[source-address] string**

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">router string mld interface string ssm-translate group-range start string end string source string</a>
Tree	<a href="#">source</a>

Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

## static

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>static</b>
Tree	<a href="#">static</a>
Introduced	16.0.R1
Platforms	All

## group [[group-address](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>static</b> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

## [[group-address](#)] *string*

Synopsis	Group address of multicast channel
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>static</b> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## source [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>static</b> <a href="#">group</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .

Introduced 16.0.R1  
 Platforms All

### **[source-address]** *string*

Synopsis Source IP address  
 Context **configure** *router string mld interface string static group string source string*  
 Tree *source*  
 Notes This element is part of a list key.  
 Introduced 16.0.R2  
 Platforms All

### **starg**

Synopsis any source address (\*,G)  
 Context **configure** *router string mld interface string static group string starg*  
 Tree *starg*  
 Notes The following elements are part of a mandatory choice: **source** or **starg**.  
 Introduced 16.0.R2  
 Platforms All

### **group-range** *start string end string step string*

Synopsis Enter the **group-range** list instance  
 Context **configure** *router string mld interface string static group-range start string end string step string*  
 Tree *group-range*  
 Introduced 16.0.R1  
 Platforms All

### **start** *string*

Synopsis Lower bound of the static multicast group  
 Context **configure** *router string mld interface string static group-range start string end string step string*  
 Tree *group-range*

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	Upper bound of the static multicast group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>static</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**step string**

Synopsis	Step interval for the group-range addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>static</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i>
Tree	<a href="#">group-range</a>
MD-CLI Default	::1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>interface</b> <i>string</i> <b>static</b> <b>group-range</b> <b>start</b> <i>string</i> <b>end</b> <i>string</i> <b>step</b> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address
Context	<b>configure</b> <i>router string mld interface string static group-range start string end string step string source string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	any source address (*,G)
Context	<b>configure</b> <i>router string mld interface string static group-range start string end string step string starg</i>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

**version** *keyword*

Synopsis	MLD protocol version
Context	<b>configure</b> <i>router string mld interface string version keyword</i>
Tree	<a href="#">version</a>
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <i>router string mld query-interval number</i>
Tree	<a href="#">query-interval</a>

---

Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>query-last-member-interval</b> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>query-response-interval</b> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mld</b> <b>robust-count</b> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	2 to 10
Default	2

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Introduced	16.0.R1
Platforms	All

## **ssm-translate**

Synopsis	Enter the <b>ssm-translate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">ssm-translate</a>
Tree	<a href="#">ssm-translate</a>
Introduced	16.0.R1
Platforms	All

## **group-range** [start](#) *string* [end](#) *string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">group-range</a>
Introduced	16.0.R1
Platforms	All

## **start** *string*

Synopsis	Lower bound of the group range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## **end** *string*

Synopsis	Upper bound of the group range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mld</a> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **source** [[source-address](#)] *string*

Synopsis Add a list entry for **source**

Context **configure** [router](#) *string* [mld](#) [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string* [source](#) *string*

Tree [source](#)

Min. Instances 1

Introduced 16.0.R1

Platforms All

### **[source-address]** *string*

Synopsis Source IP address

Context **configure** [router](#) *string* [mld](#) [ssm-translate](#) [group-range](#) [start](#) *string* [end](#) *string* [source](#) *string*

Tree [source](#)

Notes This element is part of a list key.

Introduced 16.0.R2

Platforms All

### **mpls**

Synopsis Enable the **mpls** context

Context **configure** [router](#) *string* [mpls](#)

Tree [mpls](#)

Introduced 16.0.R1

Platforms All

### **admin-group-frr** *boolean*

Synopsis Use admin group constraints for FRR path computation

Context **configure** [router](#) *string* [mpls](#) [admin-group-frr](#) *boolean*

Tree [admin-group-frr](#)



Default	false
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the MPLS instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **auto-bandwidth-multipliers**

Synopsis	Enter the <b>auto-bandwidth-multipliers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>auto-bandwidth-multipliers</b>
Tree	<a href="#">auto-bandwidth-multipliers</a>
Introduced	16.0.R1
Platforms	All

### **adjust-multiplier** *number*

Synopsis	Collection intervals in a sample interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>auto-bandwidth-multipliers</b> <b>adjust-multiplier</b> <i>number</i>
Tree	<a href="#">adjust-multiplier</a>
Range	1 to 16383
Default	288
Introduced	16.0.R1
Platforms	All

### **sample-multiplier** *number*

Synopsis	Collection intervals in a sample interval
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls</i> <i>auto-bandwidth-multipliers</i> <i>sample-multiplier</i> <i>number</i>
Tree	<a href="#">sample-multiplier</a>
Range	1 to 511
Default	1
Introduced	16.0.R1
Platforms	All

### **auto-lsp** [[template-name](#)] *reference*

Synopsis	Enter the <b>auto-lsp</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls</i> <i>auto-lsp</i> <i>reference</i>
Tree	<a href="#">auto-lsp</a>
Max. Instances	500
Introduced	16.0.R1
Platforms	All

### **[template-name]** *reference*

Synopsis	LSP template name
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls</i> <i>auto-lsp</i> <i>reference</i>
Tree	<a href="#">auto-lsp</a>
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>mpls</i> <i>lsp-template</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **one-hop** *boolean*

Synopsis	Enable one-hop point-to-point LSP automatic signaling
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls</i> <i>auto-lsp</i> <i>reference</i> <b>one-hop</b> <i>boolean</i>
Tree	<a href="#">one-hop</a>
Description	This command enables the automatic signaling of one-hop point-to-point LSPs.
Default	false
Notes	The following elements are part of a choice: <b>one-hop</b> or <b>policy</b> .

Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Peer prefix policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls auto-lsp</a> <i>reference</i> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	The following elements are part of a choice: <b>one-hop</b> or <b>policy</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **aux-stats**

Synopsis	Enable the <b>aux-stats</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls aux-stats</a>
Tree	<a href="#">aux-stats</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **sr boolean**

Synopsis	Traffic type count in MPLS statistics table
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls aux-stats sr</a> <i>boolean</i>
Tree	<a href="#">sr</a>
Description	This command configures the type of traffic to count in the auxiliary MPLS statistics table. It refers to any type of segment routing traffic (SR-OSPF, SR-ISIS, SR-TE, and so on).
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**bypass-resignal-timer** *number*

Synopsis	Resignal timer for bypass
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>bypass-resignal-timer</b> <i>number</i>
Tree	<a href="#">bypass-resignal-timer</a>
Range	1 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

**class-forwarding-policy** [[policy-name](#)] *string*

Synopsis	Enter the <b>class-forwarding-policy</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>class-forwarding-policy</b> <i>string</i>
Tree	<a href="#">class-forwarding-policy</a>
Max. Instances	15
Introduced	16.0.R1
Platforms	All

**[policy-name]** *string*

Synopsis	Name of class forwarding policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>class-forwarding-policy</b> <i>string</i>
Tree	<a href="#">class-forwarding-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**default-set** *number*

Synopsis	Default forwarding set ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>class-forwarding-policy</b> <i>string</i> <b>default-set</b> <i>number</i>
Tree	<a href="#">default-set</a>

Range	1 to 6
Default	1
Introduced	16.0.R1
Platforms	All

**fc** [**fc-name**] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls class-forwarding-policy</b> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class name for LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls class-forwarding-policy</b> <i>string</i> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**forwarding-set** *number*

Synopsis	Forwarding set ID for forwarding classes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls class-forwarding-policy</b> <i>string</i> <b>fc</b> <i>keyword</i> <b>forwarding-set</b> <i>number</i>
Tree	<b>forwarding-set</b>
Range	1 to 6
Default	1
Introduced	16.0.R1
Platforms	All

**cspf-on-loose-hop** *boolean*

Synopsis	Calculate CSPF until next loose hop on LSR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>cspf-on-loose-hop</b> <i>boolean</i>
Tree	<a href="#">cspf-on-loose-hop</a>
Default	false
Introduced	16.0.R1
Platforms	All

**dynamic-bypass** *boolean*

Synopsis	Create dynamic bypass LSPs in FRR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>dynamic-bypass</b> <i>boolean</i>
Tree	<a href="#">dynamic-bypass</a>
Default	true
Introduced	16.0.R1
Platforms	All

**entropy-label**

Synopsis	Enter the <b>entropy-label</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>entropy-label</b>
Tree	<a href="#">entropy-label</a>
Introduced	16.0.R1
Platforms	All

**rsvp-te** *boolean*

Synopsis	Apply entropy labels to RSVP-TE LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>entropy-label</b> <b>rsvp-te</b> <i>boolean</i>
Tree	<a href="#">rsvp-te</a>
Introduced	16.0.R1
Platforms	All

**sr-te** *boolean*

Synopsis	Apply entropy labels to SR-TE LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>entropy-label</b> <b>sr-te</b> <i>boolean</i>
Tree	<a href="#">sr-te</a>
Introduced	16.0.R1
Platforms	All

**exponential-backoff-retry** *boolean*

Synopsis	Use exponential back-off timer when retrying an LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>exponential-backoff-retry</b> <i>boolean</i>
Tree	<a href="#">exponential-backoff-retry</a>
Default	false
Introduced	16.0.R1
Platforms	All

**forwarding-policies**

Synopsis	Enable the <b>forwarding-policies</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>forwarding-policies</b>
Tree	<a href="#">forwarding-policies</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MPLS forwarding policies
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>forwarding-policies</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**forwarding-policy** [*policy-name*] *string*

Synopsis	Enter the <b>forwarding-policy</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i>
Tree	<b>forwarding-policy</b>
Max. Instances	65536
Introduced	16.0.R1
Platforms	All

**[policy-name]** *string*

Synopsis	Forwarding policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i>
Tree	<b>forwarding-policy</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the MPLS forwarding policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**binding-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Binding label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>binding-label</b> <i>number</i>
Tree	<b>binding-label</b>
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

### **egress-statistics**

Synopsis	Enable the <b>egress-statistics</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>egress-statistics</b>
Tree	<b>egress-statistics</b>
Introduced	19.7.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of egress or ingress statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>egress-statistics admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	All

### **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure endpoint address.
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>endpoint</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )

Tree	<a href="#">endpoint</a>
Introduced	16.0.R4
Platforms	All

## ingress-statistics

Synopsis	Enable the <b>ingress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">ingress-statistics</a>
Tree	<a href="#">ingress-statistics</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of egress or ingress statistics
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">ingress-statistics admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## metric *number*

Synopsis	Metric of an MPLS forwarding policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">metric</a> <i>number</i>
Tree	<a href="#">metric</a>
Range	1 to 16777215
Introduced	16.0.R4
Platforms	All

## next-hop-group [[index](#)] *number*

Synopsis	Enter the <b>next-hop-group</b> list instance
----------	---

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">next-hop-group number</a>
Tree	<a href="#">next-hop-group</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[index]** *number*

Synopsis	Index for next hop group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">next-hop-group number</a>
Tree	<a href="#">next-hop-group</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of NHG in MPLS forwarding policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">next-hop-group number</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**backup-next-hop**

Synopsis	Enable the <b>backup-next-hop</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">next-hop-group number</a> <b>backup-next-hop</b>
Tree	<a href="#">backup-next-hop</a>

Introduced 16.0.R1  
 Platforms All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Next hop address  
 Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop next-hop (ipv4-address-no-zone | ipv6-address-no-zone)*  
 Tree [next-hop](#)  
 Introduced 16.0.R1  
 Platforms All

### **pushed-labels** [[index](#)] *number*

Synopsis Enter the **pushed-labels** list instance  
 Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop pushed-labels number*  
 Tree [pushed-labels](#)  
 Max. Instances 10  
 Introduced 16.0.R4  
 Platforms All

### **[index]** *number*

Synopsis Index for push label  
 Context **configure** *router string mpls forwarding-policies forwarding-policy string next-hop-group number backup-next-hop pushed-labels number*  
 Tree [pushed-labels](#)  
 Range 1 to 10  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

**label number**

Synopsis	Label value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">next-hop-group number backup-next-hop pushed-labels</a> <i>number</i> <a href="#">label</a> <i>number</i>
Tree	<a href="#">label</a>
Range	1 to 1048575
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**load-balancing-weight number**

Synopsis	Load balancing weight of an NHG entry
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">next-hop-group number load-balancing-weight</a> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>
Range	1 to 4294967295
Introduced	16.0.R4
Platforms	All

**primary-next-hop**

Synopsis	Enable the <b>primary-next-hop</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">next-hop-group number primary-next-hop</a>
Tree	<a href="#">primary-next-hop</a>
Introduced	16.0.R1
Platforms	All

**next-hop (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	Next hop address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls forwarding-policies forwarding-policy</a> <i>string</i> <a href="#">next-hop-group number primary-next-hop next-hop</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Introduced	16.0.R1

Platforms All

### **pushed-labels** [[index](#)] *number*

Synopsis Enter the **pushed-labels** list instance

Context **configure** *router* *string* *mpls forwarding-policies forwarding-policy* *string* *next-hop-group* *number* *primary-next-hop* *pushed-labels* *number*

Tree [pushed-labels](#)

Max. Instances 10

Introduced 16.0.R4

Platforms All

### **[index]** *number*

Synopsis Index for push label

Context **configure** *router* *string* *mpls forwarding-policies forwarding-policy* *string* *next-hop-group* *number* *primary-next-hop* *pushed-labels* *number*

Tree [pushed-labels](#)

Range 1 to 10

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **label** *number*

Synopsis Label value

Context **configure** *router* *string* *mpls forwarding-policies forwarding-policy* *string* *next-hop-group* *number* *primary-next-hop* *pushed-labels* *number* *label* *number*

Tree [label](#)

Range 1 to 1048575

Notes This element is mandatory.

Introduced 16.0.R4

Platforms All

**resolution-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Resolution type for next hop group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>next-hop-group</b> <i>number</i> <b>resolution-type</b> <i>keyword</i>
Tree	<b>resolution-type</b>
Options	direct, indirect
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**preference** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference number
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

**revert-timer** *number*

Synopsis	Revert timer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>revert-timer</b> <i>number</i>
Tree	<b>revert-timer</b>
Range	1 to 600
Units	seconds

Introduced	16.0.R1
Platforms	All

### **tunnel-table-pref** *number*

Synopsis	Tunnel table preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies forwarding-policy</b> <i>string</i> <b>tunnel-table-pref</b> <i>number</i>
Tree	<b>tunnel-table-pref</b>
Description	<p>This command configures the TTM preference value of an MPLS forwarding policy. It is used by applications to select one tunnel type to bind to in TTM when multiple tunnel types are enabled for the application.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

### **reserved-label-block** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls forwarding-policies reserved-label-block</b> <i>reference</i>
Tree	<b>reserved-label-block</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>mpls-labels reserved-label-block</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **frr-object** *boolean*

Synopsis	Signal with fast reroute object
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls frr-object</b> <i>boolean</i>



Tree	<a href="#">frr-object</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **hold-timer** *number*

Synopsis	Hold timer value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>hold-timer</b> <i>number</i>
Tree	<a href="#">hold-timer</a>
Range	0 to 1000
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **ingress-statistics**

Synopsis	Enter the <b>ingress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>ingress-statistics</b>
Tree	<a href="#">ingress-statistics</a>
Introduced	16.0.R1
Platforms	All

### **lsp sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **lsp-name** *string*

Synopsis	Enter the <b>lsp</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <b>ingress-statistics</b> <b>lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>lsp-name</b> <i>string</i>
Tree	<a href="#">lsp</a>
Introduced	16.0.R1
Platforms	All

### **sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Sender address
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Context	<b>configure router string mpls ingress-statistics lsp sender</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>lsp-name string</b>
Tree	<b>lsp</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **lsp-name string**

Synopsis	LSP name
Context	<b>configure router string mpls ingress-statistics lsp sender</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>lsp-name string</b>
Tree	<b>lsp</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **accounting-policy reference**

Synopsis	Accounting policy ID
Context	<b>configure router string mpls ingress-statistics lsp sender</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>lsp-name string accounting-policy reference</b>
Tree	<b>accounting-policy</b>
Reference	<b>configure log accounting-policy number</b>
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of statistics for the LSP
Context	<b>configure router string mpls ingress-statistics lsp sender</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>lsp-name string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
 Platforms All

### **collect-stats** *boolean*

Synopsis Collect statistics  
 Context **configure** **router** *string* **mpls ingress-statistics lsp sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **lsp-name** *string* **collect-stats** *boolean*  
 Tree **collect-stats**  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **stat-mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Stat mode  
 Context **configure** **router** *string* **mpls ingress-statistics lsp sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **lsp-name** *string* **stat-mode** *keyword*  
 Tree **stat-mode**  
 Options per-fc, aggregate  
 Introduced 21.10.R1  
 Platforms All

### **p2mp-template-lsp** **sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **rsvp-session-name** *string*

Synopsis Enter the **p2mp-template-lsp** list instance  
 Context **configure** **router** *string* **mpls ingress-statistics p2mp-template-lsp sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **rsvp-session-name** *string*  
 Tree **p2mp-template-lsp**  
 Introduced 16.0.R1  
 Platforms All

**sender** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Sender address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2mp-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i>
Tree	<b>p2mp-template-lsp</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**rsvp-session-name** *string*

Synopsis	RSVP session name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2mp-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i>
Tree	<b>p2mp-template-lsp</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**accounting-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2mp-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>accounting-policy</b> <i>reference</i>
Tree	<b>accounting-policy</b>
Reference	<b>configure</b> <b>log</b> <b>accounting-policy</b> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2mp-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2mp-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<b>collect-stats</b>
Default	false
Introduced	16.0.R1
Platforms	All

**max-stats** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of statistic indices
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2mp-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>max-stats</b> <i>number</i>
Tree	<b>max-stats</b>
Range	1 to 8191
Default	8191
Introduced	16.0.R1

Platforms All

### **stat-mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Stat mode

Context **configure** *router string mpls ingress-statistics p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string stat-mode keyword*

Tree [stat-mode](#)

Options per-fc, aggregate

Introduced 21.10.R1

Platforms All

### **p2p-template-lsp** *sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string*

Synopsis Enter the **p2p-template-lsp** list instance

Context **configure** *router string mpls ingress-statistics p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string*

Tree [p2p-template-lsp](#)

Introduced 16.0.R1

Platforms All

### **sender** *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis Sender address

Context **configure** *router string mpls ingress-statistics p2p-template-lsp sender (ipv4-address-no-zone | ipv6-address-no-zone) rsvp-session-name string*

Tree [p2p-template-lsp](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**rsvp-session-name** *string*

Synopsis	RSVP session name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2p-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i>
Tree	<b>p2p-template-lsp</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**accounting-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2p-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>accounting-policy</b> <i>reference</i>
Tree	<b>accounting-policy</b>
Reference	<b>configure</b> <b>log</b> <b>accounting-policy</b> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>ingress-statistics</b> <b>p2p-template-lsp</b> <b>sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls ingress-statistics p2p-template-lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<b>collect-stats</b>
Default	false
Introduced	16.0.R1
Platforms	All

**max-stats** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of statistic indices
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls ingress-statistics p2p-template-lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>max-stats</b> <i>number</i>
Tree	<b>max-stats</b>
Range	1 to 8191
Default	8191
Introduced	16.0.R1
Platforms	All

**stat-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Stat mode
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls ingress-statistics p2p-template-lsp sender</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>rsvp-session-name</b> <i>string</i> <b>stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>



Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

### **interface** [[interface-name](#)] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Description	<p>Commands in this context configure the attributes for MPLS protocol support on an IP interface.</p> <p>MPLS commands are not executed on an IP interface where MPLS is not enabled. An MPLS interface must be explicitly enabled (admin-state enabled).</p> <p>The MPLS interface must be admin-state disabled to delete the interface definition.</p> <p>A corresponding RSVP interface must also be configured. The MPLS interface cannot be deleted without also deleting the RSVP interface.</p>
Introduced	16.0.R1
Platforms	All

### **[interface-name]** *reference*

Synopsis	Router interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-group** *reference*

Synopsis	Administrative groups supported by the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">interface</a> <i>reference</i> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Description	This command specifies the administrative groups that the interface supports.

This information is advertised as part of OSPF and IS-IS to help CSPF compute constrained LSPs that must include or exclude certain administrative groups. An MPLS interface is assumed to belong to all the administrative groups unless this command is issued under the interface configuration. With this command configured, the interface is assumed to belong to only the groups specifically configured in this command.

Only the administrative groups bound to an MPLS interface are advertised in TE link TLVs and sub-TLVs when the **traffic-engineering** option is enabled in IS-IS or OSPF. IES and VPRN interfaces do not have their attributes advertised in TE TLVs.

Reference	<b>configure</b> <a href="#">routing-options if-attribute admin-group string</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the MPLS interface
Context	<b>configure</b> <a href="#">router string mpls interface reference admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **label-map** [[in-label](#)] *number*

Synopsis	Enter the <b>label-map</b> list instance
Context	<b>configure</b> <a href="#">router string mpls interface reference label-map number</a>
Tree	<a href="#">label-map</a>
Introduced	16.0.R1
Platforms	All

### **[in-label]** *number*

Synopsis	Match the incoming MPLS label
Context	<b>configure</b> <a href="#">router string mpls interface reference label-map number</a>
Tree	<a href="#">label-map</a>

Range	32 to 1048575
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the label map
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls interface</b> <i>reference</i> <b>label-map</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **pop**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Pop (remove) the incoming label and forward packet based on service header
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls interface</b> <i>reference</i> <b>label-map</b> <i>number</i> <b>pop</b>
Tree	<b>pop</b>
Notes	The following elements are part of a choice: <b>pop</b> or <b>swap</b> .
Introduced	16.0.R1
Platforms	All

### **swap**

Synopsis	Enable the <b>swap</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls interface</b> <i>reference</i> <b>label-map</b> <i>number</i> <b>swap</b>

Tree	<a href="#">swap</a>
Notes	The following elements are part of a choice: <b>pop</b> or <b>swap</b> .
Introduced	16.0.R1
Platforms	All

### **next-hop** *string*

Synopsis	IP address for the next hop
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface reference</a> <a href="#">label-map</a> <i>number</i> <a href="#">swap</a> <a href="#">next-hop</a> <i>string</i>
Tree	<a href="#">next-hop</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **out-label** (*number* | *keyword*)

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface reference</a> <a href="#">label-map</a> <i>number</i> <a href="#">swap</a> <a href="#">out-label</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">out-label</a>
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **srlg-group** [[name](#)] *reference*

Synopsis	Add a list entry for <b>srlg-group</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls interface reference</a> <a href="#">srlg-group</a> <i>reference</i>
Tree	<a href="#">srlg-group</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	All

**[name]** *reference*

Synopsis	Shared Risk Link Group (SRLG) name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>interface</b> <i>reference</i> <b>srlg-group</b> <i>reference</i>
Tree	<b>srlg-group</b>
Reference	<b>configure</b> <b>routing-options</b> <b>if-attribute</b> <b>srlg-group</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**te-metric** *number*

Synopsis	TE metric for the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>interface</b> <i>reference</i> <b>te-metric</b> <i>number</i>
Tree	<b>te-metric</b>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**least-fill-min-thd** *number*

Synopsis	Percentage of the least fill minimum threshold value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>least-fill-min-thd</b> <i>number</i>
Tree	<b>least-fill-min-thd</b>
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

**least-fill-reoptim-thd** *number*

Synopsis	Percentage of the least fill reoptimization threshold value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>least-fill-reoptim-thd</b> <i>number</i>
Tree	<b>least-fill-reoptim-thd</b>

Range	0 to 100
Units	percent
Default	10
Introduced	16.0.R1
Platforms	All

### **logger-event-bundling** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Merge and bundle MPLS traps
Context	<b>configure</b> <i>router string mpls logger-event-bundling boolean</i>
Tree	<a href="#">logger-event-bundling</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **lsp** [*lsp-name*] *string*

Synopsis	Enter the <b>lsp</b> list instance
Context	<b>configure</b> <i>router string mpls lsp string</i>
Tree	<a href="#">lsp</a>
Introduced	16.0.R1
Platforms	All

### **[lsp-name]** *string*

Synopsis	Labeled Switch path name
Context	<b>configure</b> <i>router string mpls lsp string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptive** *boolean*

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <i>router string mpls lsp string adaptive boolean</i>
Tree	<a href="#">adaptive</a>
Default	true
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LSP
Context	<b>configure</b> <i>router string mpls lsp string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**admin-tag** [[name](#)] *reference*

Synopsis	Add a list entry for <b>admin-tag</b>
Context	<b>configure</b> <i>router string mpls lsp string admin-tag reference</i>
Tree	<a href="#">admin-tag</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	All

**[name]** *reference*

Synopsis	Name of the admin tags
Context	<b>configure</b> <i>router string mpls lsp string admin-tag reference</i>
Tree	<a href="#">admin-tag</a>
Reference	<b>configure</b> <i>routing-options admin-tags admin-tag string</i>

---

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adspec** *boolean*

Synopsis	Include ADSPEC object in RSVP messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">adspec</a> <i>boolean</i>
Tree	<a href="#">adspec</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **auto-bandwidth**

Synopsis	Enable the <b>auto-bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a>
Tree	<a href="#">auto-bandwidth</a>
Introduced	16.0.R1
Platforms	All

### **adjust-down**

Synopsis	Enter the <b>adjust-down</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">adjust-down</a>
Tree	<a href="#">adjust-down</a>
Introduced	16.0.R1
Platforms	All

### **bw** *number*

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">adjust-down</a> <a href="#">bw</a> <i>number</i>
Tree	<a href="#">bw</a>
Range	0 to 6400000



Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

### **percent** *number*

Synopsis	Minimum difference in percent
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth adjust-down percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

### **adjust-up**

Synopsis	Enter the <b>adjust-up</b> context
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth adjust-up</i>
Tree	<i>adjust-up</i>
Introduced	16.0.R1
Platforms	All

### **bw** *number*

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth adjust-up bw number</i>
Tree	<i>bw</i>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

**percent** *number*

Synopsis	Minimum difference in percent
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth adjust-up percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

**fc** [*fc-name*] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth fc keyword</i>
Tree	<i>fc</i>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class name for LSP
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth fc keyword</i>
Tree	<i>fc</i>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sampling-weight** *number*

Synopsis	Forwarding class weight for LSP
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth fc keyword sampling-weight number</i>

Tree	<a href="#">sampling-weight</a>
Range	0 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

### **max-bandwidth** *number*

Synopsis	Maximum bandwidth of auto-bandwidth to request for LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">max-bandwidth</a> <i>number</i>
Tree	<a href="#">max-bandwidth</a>
Range	0 to 6400000
Units	megabps
Default	100000
Introduced	16.0.R1
Platforms	All

### **min-bandwidth** *number*

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">min-bandwidth</a> <i>number</i>
Tree	<a href="#">min-bandwidth</a>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

### **monitor-bandwidth** *boolean*

Synopsis	Collect and display auto-bandwidth measurements for the LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">monitor-bandwidth</a> <i>boolean</i>
Tree	<a href="#">monitor-bandwidth</a>
Default	false

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Introduced	16.0.R1
Platforms	All

## multipliers

Synopsis	Enter the <b>multipliers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">multipliers</a>
Tree	<a href="#">multipliers</a>
Introduced	16.0.R1
Platforms	All

## adjust-multiplier *number*

Synopsis	Number of collection intervals in the adjust interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">multipliers</a> <a href="#">adjust-multiplier</a> <i>number</i>
Tree	<a href="#">adjust-multiplier</a>
Range	1 to 16383
Introduced	16.0.R1
Platforms	All

## sample-multiplier *number*

Synopsis	Multiplier for collection intervals in a sample interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">multipliers</a> <a href="#">sample-multiplier</a> <i>number</i>
Tree	<a href="#">sample-multiplier</a>
Range	1 to 511
Introduced	16.0.R1
Platforms	All

## overflow-limit

Synopsis	Enable the <b>overflow-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">overflow-limit</a>
Tree	<a href="#">overflow-limit</a>

Introduced	16.0.R1
Platforms	All

**bw number**

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <a href="#">router string</a> <a href="#">mpls lsp string</a> <a href="#">auto-bandwidth overflow-limit bw number</a>
Tree	<a href="#">bw</a>
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

**number number**

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	<b>configure</b> <a href="#">router string</a> <a href="#">mpls lsp string</a> <a href="#">auto-bandwidth overflow-limit number number</a>
Tree	<a href="#">number</a>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**threshold number**

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	<b>configure</b> <a href="#">router string</a> <a href="#">mpls lsp string</a> <a href="#">auto-bandwidth overflow-limit threshold number</a>
Tree	<a href="#">threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

**underflow-limit**

Synopsis	Enable the <b>underflow-limit</b> context
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth underflow-limit</i>
Tree	<a href="#">underflow-limit</a>
Introduced	16.0.R1
Platforms	All

**bw number**

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth underflow-limit bw number</i>
Tree	<a href="#">bw</a>
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

**number number**

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth underflow-limit number number</i>
Tree	<a href="#">number</a>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**threshold number**

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	<b>configure</b> <i>router string mpls lsp string auto-bandwidth underflow-limit threshold number</i>
Tree	<a href="#">threshold</a>
Range	0 to 100
Units	percent
Default	0

Introduced	16.0.R1
Platforms	All

### **use-last-adj-bw**

Synopsis	Enable the <b>use-last-adj-bw</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">use-last-adj-bw</a>
Tree	<a href="#">use-last-adj-bw</a>
Introduced	16.0.R5
Platforms	All

### **secondary-retry-limit** (*number* | *keyword*)

Synopsis	Maximum number of retry limits for secondary paths
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">use-last-adj-bw</a> <a href="#">secondary-retry-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">secondary-retry-limit</a>
Description	This command configures the maximum number of retry attempts for secondary paths. After each successful attempt, the counter is reset to zero.
Range	1 to 10000
Options	infinite
Default	5
Introduced	16.0.R5
Platforms	All

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>bfd</b> <b>bfd-liveness</b> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, LSP BFD is enabled on the RSVP LSP or S-BFD is enabled for the SR-TE LSP.</p> <p>LSP BFD must also be configured under the <b>configure router</b> context. The named BFD template provides the configuration settings for the BFD session, which must be configured and associated with the service using the BFD template.</p> <p>When configured to <b>false</b>, LSP BFD is disabled on the RSVP LSP or S-BFD on the SR-TE LSP.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>bfd</b> <b>bfd-template</b> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <b>bfd</b> <b>bfd-template</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**failure-action** *keyword*

Synopsis	Action when LSP BFD fails on the RSVP SR-TE LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>bfd</b> <b>failure-action</b> <i>keyword</i>
Tree	<a href="#">failure-action</a>
Description	<p>The command specifies the action when LSP BFD fails on an RSVP, SR-TE, or LDP LSP.</p> <p>Regardless of the failure action specified, when the BFD session goes down on the LSP, the system generates an SNMP trap.</p>
Options	none, down, failover, failover-or-down
Default	none
Introduced	16.0.R1



Platforms All

### **lsp-ping-interval** (*number* | *keyword*)

Synopsis Interval for periodic LSP ping for BFD bootstrapping

Context **configure** **router** *string* **mpls** **lsp** *string* **bfd** **lsp-ping-interval** (*number* | *keyword*)

Tree **lsp-ping-interval**

Range 60 to 300

Units seconds

Options none

Default 60

Introduced 16.0.R1

Platforms All

### **return-path-label** *number*

Synopsis S-BFD return-path label

Context **configure** **router** *string* **mpls** **lsp** *string* **bfd** **return-path-label** *number*

Tree **return-path-label**

Description This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.

The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.

If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.

Range 32 to 1048512

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-for-up-timer** *number*

Synopsis Time to wait for BFD to become operationally available

Context **configure** **router** *string* **mpls** **lsp** *string* **bfd** **wait-for-up-timer** *number*

Tree **wait-for-up-timer**

Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> <li>• a path undergoing MBB when BFD is up</li> <li>• the initial administrative state of the LSP</li> <li>• the retry signaling of non-standby secondary paths</li> </ul>
Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	All

### **bgp-shortcut** *boolean*

Synopsis	Include LSP for BGP routes
Context	<b>configure</b> <i>router string mpls lsp string bgp-shortcut boolean</i>
Tree	<a href="#">bgp-shortcut</a>
Introduced	16.0.R1
Platforms	All

### **bgp-transport-tunnel** *boolean*

Synopsis	Include LSP as transport LSP for labeled BGP routes
Context	<b>configure</b> <i>router string mpls lsp string bgp-transport-tunnel boolean</i>
Tree	<a href="#">bgp-transport-tunnel</a>
Introduced	16.0.R1
Platforms	All

### **binding-sid** *number*

Synopsis	Binding SID for the LSP
Context	<b>configure</b> <i>router string mpls lsp string binding-sid number</i>

Tree	<a href="#">binding-sid</a>
Description	This command binds a label to the LSP. The label value must belong to the reserved label block that is configured with the <b>configure router mpls lsp-bsid-block</b> command.
Range	32 to 1048575
Introduced	22.10.R1
Platforms	All

## class-forwarding

Synopsis	Enable the <b>class-forwarding</b> context
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>class-forwarding</b>
Tree	<a href="#">class-forwarding</a>
Introduced	16.0.R1
Platforms	All

## forwarding-set

Synopsis	Enter the <b>forwarding-set</b> context
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>class-forwarding forwarding-set</b>
Tree	<a href="#">forwarding-set</a>
Notes	The following elements are part of a choice: ( <b>default-lsp</b> and <b>fc</b> ) or <b>forwarding-set</b> .
Introduced	16.0.R1
Platforms	All

## policy reference

Synopsis	Name for the class based forwarding policy for LSP instances
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>class-forwarding forwarding-set policy reference</b>
Tree	<a href="#">policy</a>
Reference	<b>configure router</b> <i>string</i> <b>mpls class-forwarding-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **set number**

Synopsis	Forwarding set ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">class-forwarding forwarding-set</a> <i>set number</i>
Tree	<a href="#">set</a>
Range	1 to 6
Introduced	16.0.R1
Platforms	All

### **class-type number**

Synopsis	Class type for an LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">class-type</a> <i>number</i>
Tree	<a href="#">class-type</a>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

### **egress-statistics**

Synopsis	Enable the <b>egress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">egress-statistics</a>
Tree	<a href="#">egress-statistics</a>
Introduced	16.0.R1
Platforms	All

### **accounting-policy reference**

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">egress-statistics</a> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of statistics for the LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>egress-statistics</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Collect LSP statistics
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>egress-statistics</b> <b>collect-stats</b> <i>boolean</i>
Tree	<b>collect-stats</b>
Description	<p>When configured to <b>true</b>, this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.</p> <p>When configured to <b>false</b>, the forwarding engine still accumulates statistics. However, the CPU does not write them to the billing file. If you subsequently re-enable this command, the counters written to the billing file include all the traffic collected while the command was disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**stat-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>egress-statistics</b> <b>stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>
Options	per-fc, aggregate
Introduced	21.10.R1

Platforms All

### **entropy-label** *keyword*

Synopsis Entropy label  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [entropy-label](#) *keyword*  
 Tree [entropy-label](#)  
 Options false, true  
 Introduced 16.0.R1  
 Platforms All

### **exclude-admin-group** *reference*

Synopsis Name of admin group excluded when LSP is set up  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [exclude-admin-group](#) *reference*  
 Tree [exclude-admin-group](#)  
 Reference **configure** [routing-options](#) *if-attribute* [admin-group](#) *string*  
 Max. Instances 32  
 Introduced 16.0.R1  
 Platforms All

### **exclude-node** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Exclude Routers object to be included in the bypass path message  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [exclude-node](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)  
 Tree [exclude-node](#)  
 Introduced 16.0.R1  
 Platforms All

### **fallback-path-computation-method** *keyword*

Synopsis Fallback path computation method  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [fallback-path-computation-method](#) *keyword*  
 Tree [fallback-path-computation-method](#)

Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.2.R1
Platforms	All

## fast-reroute

Synopsis	Enable the <b>fast-reroute</b> context
Context	<b>configure</b> <i>router string mpls lsp string fast-reroute</i>
Tree	<a href="#">fast-reroute</a>
Introduced	16.0.R1
Platforms	All

## frr-method *keyword*

Synopsis	Fast Reroute method
Context	<b>configure</b> <i>router string mpls lsp string fast-reroute frr-method keyword</i>
Tree	<a href="#">frr-method</a>
Options	one-to-one, facility
Introduced	16.0.R1
Platforms	All

## hop-limit *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	<b>configure</b> <i>router string mpls lsp string fast-reroute hop-limit number</i>
Tree	<a href="#">hop-limit</a>
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

**node-protect** *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>fast-reroute</b> <b>node-protect</b> <i>boolean</i>
Tree	<b>node-protect</b>
Introduced	16.0.R1
Platforms	All

**propagate-admin-group** *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>fast-reroute</b> <b>propagate-admin-group</b> <i>boolean</i>
Tree	<b>propagate-admin-group</b>
Default	false
Introduced	16.0.R1
Platforms	All

**from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address of this LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>from</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>from</b>
Introduced	16.0.R1
Platforms	All

**hop-limit** *number*

Synopsis	Maximum number of hops that an LSP can traverse including ingress and egress routers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>hop-limit</b> <i>number</i>
Tree	<b>hop-limit</b>
Range	2 to 255



Default	255
Introduced	16.0.R1
Platforms	All

## igp-shortcut

Synopsis	Enter the <b>igp-shortcut</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">igp-shortcut</a>
Tree	<a href="#">igp-shortcut</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">igp-shortcut</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

## allow-sr-over-srte *boolean*

Synopsis	Use as eligible SRv4 or SRv6 IGP shortcut
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">igp-shortcut</a> <a href="#">allow-sr-over-srte</a> <i>boolean</i>
Tree	<a href="#">allow-sr-over-srte</a>
Description	When configured to <b>true</b> , the router performs the local SPF and the SR-TE LSP is used as an eligible IGP SR-MPLS shortcut for SR-MPLS SRv4 or SRv6 only if the SR-TE is explicitly allowed using this command when the top SID in the SR-TE LSP is an adjacency SID.
Default	false
Introduced	23.3.R1
Platforms	All

**lfa-type** *keyword*

Synopsis	LSP usage in LFA SPF
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>igp-shortcut</b> <b>lfa-type</b> <i>keyword</i>
Tree	<b>lfa-type</b>
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: <b>lfa-type</b> or <b>relative-metric</b> .
Introduced	16.0.R1
Platforms	All

**relative-metric** *number*

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>igp-shortcut</b> <b>relative-metric</b> <i>number</i>
Tree	<b>relative-metric</b>
Range	-10 to 10
Notes	The following elements are part of a choice: <b>lfa-type</b> or <b>relative-metric</b> .
Introduced	16.0.R1
Platforms	All

**include-admin-group** *reference*

Synopsis	Admin group name included when LSP is set up
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>include-admin-group</b> <i>reference</i>
Tree	<b>include-admin-group</b>
Reference	<b>configure</b> <b>routing-options</b> <b>if-attribute</b> <b>admin-group</b> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**label-stack-reduction** *boolean*

Synopsis	Enable/disable label compression for LSP path.
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>label-stack-reduction</b> <i>boolean</i>
Tree	<b>label-stack-reduction</b>

Default	false
Introduced	19.7.R1
Platforms	All

### **ldp-over-rsvp** *boolean*

Synopsis	Include this LSP in LDP over RSVP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">ldp-over-rsvp</a> <i>boolean</i>
Tree	<a href="#">ldp-over-rsvp</a>
Introduced	16.0.R1
Platforms	All

### **least-fill** *boolean*

Synopsis	Enable least-fill path selection for this LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">least-fill</a> <i>boolean</i>
Tree	<a href="#">least-fill</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **load-balancing-weight** *number*

Synopsis	Load balancing weight for an MPLS LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">load-balancing-weight</a> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **local-sr-protection** *keyword*

Synopsis	Local SR protection preference for LSP path computation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">local-sr-protection</a> <i>keyword</i>
Tree	<a href="#">local-sr-protection</a>

Options	none, preferred, mandatory
Default	preferred
Introduced	19.7.R1
Platforms	All

### **lsp-self-ping** *keyword*

Synopsis	LSP Self Ping activation status on the RSVP-TE LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp</a> <i>string</i> <a href="#">lsp-self-ping</a> <i>keyword</i>
Tree	<a href="#">lsp-self-ping</a>
Description	When configured, the system uses this setting for the LSP regardless of the value configured under <b>configure router mpls lsp-self-ping rsvp-te</b> . When unconfigured, the command inherits the value configured under <b>configure router mpls lsp-self-ping rsvp-te</b> .
Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **main-ct-retry-limit** *number*

Synopsis	Maximum number of retries before reverting to backup CT
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp</a> <i>string</i> <a href="#">main-ct-retry-limit</a> <i>number</i>
Tree	<a href="#">main-ct-retry-limit</a>
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

### **max-sr-labels**

Synopsis	Enter the <b>max-sr-labels</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp</a> <i>string</i> <a href="#">max-sr-labels</a>
Tree	<a href="#">max-sr-labels</a>
Introduced	16.0.R1
Platforms	All

**additional-frr-labels** *number*

Synopsis	Value for the maximum additional overhead labels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">max-sr-labels</a> <a href="#">additional-frr-labels</a> <i>number</i>
Tree	<a href="#">additional-frr-labels</a>
Range	0 to 4
Default	1
Introduced	16.0.R1
Platforms	All

**label-stack-size** *number*

Synopsis	Maximum label stack size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">max-sr-labels</a> <a href="#">label-stack-size</a> <i>number</i>
Tree	<a href="#">label-stack-size</a>
Description	This command configures the maximum label stack size of the primary path of the SR-TE LSP.
Range	1 to 11
Introduced	16.0.R1
Platforms	All

**metric** *number*

Synopsis	LSP metric that forces to a constant value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">metric</a> <i>number</i>
Tree	<a href="#">metric</a>
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

**metric-type** *keyword*

Synopsis	Metric type used for LSP path computation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">metric-type</a> <i>keyword</i>
Tree	<a href="#">metric-type</a>
Options	igp, te

Default	igp
Introduced	19.7.R1
Platforms	All

### **override-tunnel-elc** *boolean*

Synopsis	Override any received entropy label capability
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <b>override-tunnel-elc</b> <i>boolean</i>
Tree	<a href="#">override-tunnel-elc</a>
Description	When configured to <b>true</b> , this command allows the system to override any received entropy label capability advertisement. When configured to <b>false</b> , this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

### **p2mp-id** *number*

Synopsis	Unique identifier as Point-to-Multipoint (P2MP) identifier
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <b>p2mp-id</b> <i>number</i>
Tree	<a href="#">p2mp-id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **path-computation-method** *keyword*

Synopsis	Path computation method
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <b>path-computation-method</b> <i>keyword</i>
Tree	<a href="#">path-computation-method</a>
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP.

See "SR-TE LSP path computation using hop-to-label translation" in the *7750 Service Router and 7950 Extensible Routing System Segment Routing nad PCE User Guide* for more information.

Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

### **path-profile** [[profile-id](#)] *number*

Synopsis	Enter the <b>path-profile</b> list instance
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>path-profile</b> <i>number</i>
Tree	<a href="#">path-profile</a>
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	16.0.R1
Platforms	All

### **[profile-id]** *number*

Synopsis	Profile ID for the specified LSP
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>path-profile</b> <i>number</i>
Tree	<a href="#">path-profile</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **path-group** *number*

Synopsis	Path-group ID for the specified LSP
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>path-profile</b> <i>number</i> <b>path-group</b> <i>number</i>
Tree	<a href="#">path-group</a>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1

Platforms All

## **pce-associations**

Synopsis Enter the **pce-associations** context

Context **configure** [router](#) *string* [mpls lsp](#) *string* [pce-associations](#)

Tree [pce-associations](#)

Description Commands in this context configure the LSP binding with one or more PCEP associations.

Introduced 22.5.R1

Platforms All

## **diversity** [[diversity-name](#)] *reference*

Synopsis Add a list entry for **diversity**

Context **configure** [router](#) *string* [mpls lsp](#) *string* [pce-associations](#) [diversity](#) *reference*

Tree [diversity](#)

Description Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.

Max. Instances 5

Introduced 22.5.R1

Platforms All

## **[diversity-name]** *reference*

Synopsis Name of the PCE association configured under the PCC

Context **configure** [router](#) *string* [mpls lsp](#) *string* [pce-associations](#) [diversity](#) *reference*

Tree [diversity](#)

Reference **configure** [router](#) *string* [pcep pcc](#) [pce-associations](#) [diversity](#) *string*

Notes This element is part of a list key.

Introduced 22.5.R1

Platforms All



**policy** [*policy-name*] *reference*

Synopsis	Add a list entry for <b>policy</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>pce-associations</b> <b>policy</b> <i>reference</i>
Tree	<b>policy</b>
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

**[policy-name]** *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>pce-associations</b> <b>policy</b> <i>reference</i>
Tree	<b>policy</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>pcep pcc</b> <b>pce-associations</b> <b>policy</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**pce-control** *boolean*

Synopsis	Enable PCE controlled LSP mode of operation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>pce-control</b> <i>boolean</i>
Tree	<b>pce-control</b>
Description	<p>When configured to <b>true</b>, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router.</p> <p>When configured to <b>false</b>, the PCE-controlled mode of operation for the LSP has no effect.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**pce-report** *keyword*

Synopsis	Global configuration of reporting to PCE to override
Context	<b>configure</b> <i>router string mpls lsp string pce-report keyword</i>
Tree	<a href="#">pce-report</a>
Options	false, true
Introduced	16.0.R1
Platforms	All

**primary** [[path-name](#)] *reference*

Synopsis	Enter the <b>primary</b> list instance
Context	<b>configure</b> <i>router string mpls lsp string primary reference</i>
Tree	<a href="#">primary</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[path-name]** *reference*

Synopsis	Path name
Context	<b>configure</b> <i>router string mpls lsp string primary reference</i>
Tree	<a href="#">primary</a>
Reference	<b>configure</b> <i>router string mpls path string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptive** *boolean*

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <i>router string mpls lsp string primary reference adaptive boolean</i>
Tree	<a href="#">adaptive</a>
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the LSP path  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **backup-class-type** *number*

Synopsis Class-type for the LSP or LSP path  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [backup-class-type](#) *number*  
 Tree [backup-class-type](#)  
 Range 0 to 7  
 Introduced 16.0.R1  
 Platforms All

### **bandwidth** *number*

Synopsis Amount of bandwidth to be reserved  
 Context **configure** [router](#) *string* [mpls lsp](#) *string* [primary](#) *reference* [bandwidth](#) *number*  
 Tree [bandwidth](#)  
 Range 0 to 6400000  
 Units megabps  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

### **bfd**

Synopsis Enter the **bfd** context

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, LSP BFD is enabled on the RSVP LSP or S-BFD is enabled for the SR-TE LSP.</p> <p>LSP BFD must also be configured under the <b>configure router</b> context. The named BFD template provides the configuration settings for the BFD session, which must be configured and associated with the service using the BFD template.</p> <p>When configured to <b>false</b>, LSP BFD is disabled on the RSVP LSP or S-BFD on the SR-TE LSP.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **bfd-template** *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **lsp-ping-interval** (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">lsp-ping-interval</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">lsp-ping-interval</a>
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	16.0.R1
Platforms	All

### **return-path-label** *number*

Synopsis	S-BFD return-path label
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">return-path-label</a> <i>number</i>
Tree	<a href="#">return-path-label</a>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-for-up-timer** *number*

Synopsis	Time to wait for BFD to become operationally available
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">wait-for-up-timer</a> <i>number</i>
Tree	<a href="#">wait-for-up-timer</a>
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p>

- a path undergoing MBB when BFD is up
- the initial administrative state of the LSP
- the retry signaling of non-standby secondary paths

Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	All

### **class-type** *number*

Synopsis	Class-type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>class-type</b> <i>number</i>
Tree	<b>class-type</b>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **exclude-admin-group**

Synopsis	Enable the <b>exclude-admin-group</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>exclude-admin-group</b>
Tree	<b>exclude-admin-group</b>
Introduced	16.0.R1
Platforms	All

### **group** *reference*

Synopsis	Groups to exclude when the LSP path is setup
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>exclude-admin-group</b> <b>group</b> <i>reference</i>
Tree	<b>group</b>
Reference	<b>configure</b> <b>routing-options</b> <b>if-attribute</b> <b>admin-group</b> <i>string</i>
Max. Instances	32

Min. Instances	1
Introduced	16.0.R1
Platforms	All

### **hop-limit** *number*

Synopsis	Total number of hops that an LSP traverses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">hop-limit</a> <i>number</i>
Tree	<a href="#">hop-limit</a>
Range	2 to 255
Introduced	16.0.R1
Platforms	All

### **include-admin-group**

Synopsis	Enable the <b>include-admin-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">include-admin-group</a>
Tree	<a href="#">include-admin-group</a>
Introduced	16.0.R1
Platforms	All

### **group** *reference*

Synopsis	Groups that are included when LSP path is setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary</a> <i>reference</i> <a href="#">include-admin-group</a> <a href="#">group</a> <i>reference</i>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

## priority

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>priority</b>
Tree	<b>priority</b>
Introduced	16.0.R1
Platforms	All

## hold-priority *number*

Synopsis	Priority of an LSP session at preemption action
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>priority</b> <b>hold-priority</b> <i>number</i>
Tree	<b>hold-priority</b>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

## setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>priority</b> <b>setup-priority</b> <i>number</i>
Tree	<b>setup-priority</b>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

## record *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>record</b> <i>boolean</i>
Tree	<b>record</b>
Default	true
Introduced	16.0.R1
Platforms	All



**record-label** *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary</b> <i>reference</i> <b>record-label</b> <i>boolean</i>
Tree	<b>record-label</b>
Default	true
Introduced	16.0.R1
Platforms	All

**primary-p2mp-instance** [*instance-name*] *string*

Synopsis	Enter the <b>primary-p2mp-instance</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i>
Tree	<b>primary-p2mp-instance</b>
Max. Instances	1
Introduced	16.0.R4
Platforms	All

**[instance-name]** *string*

Synopsis	P2MP LSP instance name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i>
Tree	<b>primary-p2mp-instance</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**adaptive** *boolean*

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>adaptive</b> <i>boolean</i>
Tree	<b>adaptive</b>
Introduced	16.0.R4

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the LSP path

Context **configure** *router string mpls lsp string primary-p2mp-instance string admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R4

Platforms All

### **bandwidth** *number*

Synopsis Amount of bandwidth to be reserved

Context **configure** *router string mpls lsp string primary-p2mp-instance string bandwidth number*

Tree [bandwidth](#)

Range 0 to 6400000

Units megabps

Default 0

Introduced 16.0.R4

Platforms All

### **exclude-admin-group**

Synopsis Enable the **exclude-admin-group** context

Context **configure** *router string mpls lsp string primary-p2mp-instance string exclude-admin-group*

Tree [exclude-admin-group](#)

Introduced 16.0.R4

Platforms All

### **group** *reference*

Synopsis Groups to exclude when the LSP path is setup

Context	<b>configure</b> <i>router string mpls lsp string primary-p2mp-instance string exclude-admin-group group reference</i>
Tree	<i>group</i>
Reference	<b>configure</b> <i>routing-options if-attribute admin-group string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

### hop-limit *number*

Synopsis	Total number of hops that an LSP traverses
Context	<b>configure</b> <i>router string mpls lsp string primary-p2mp-instance string hop-limit number</i>
Tree	<i>hop-limit</i>
Range	2 to 255
Introduced	16.0.R4
Platforms	All

### include-admin-group

Synopsis	Enable the <b>include-admin-group</b> context
Context	<b>configure</b> <i>router string mpls lsp string primary-p2mp-instance string include-admin-group</i>
Tree	<i>include-admin-group</i>
Introduced	16.0.R4
Platforms	All

### group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	<b>configure</b> <i>router string mpls lsp string primary-p2mp-instance string include-admin-group group reference</i>
Tree	<i>group</i>
Reference	<b>configure</b> <i>routing-options if-attribute admin-group string</i>

Max. Instances	32
Min. Instances	1
Introduced	16.0.R4
Platforms	All

## priority

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">priority</a>
Tree	<a href="#">priority</a>
Introduced	21.10.R1
Platforms	All

## hold-priority *number*

Synopsis	Hold priority when not enough bandwidth for LSP setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">priority</a> <a href="#">hold-priority</a> <i>number</i>
Tree	<a href="#">hold-priority</a>
Range	0 to 7
Default	0
Introduced	21.10.R1
Platforms	All

## setup-priority *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">priority</a> <a href="#">setup-priority</a> <i>number</i>
Tree	<a href="#">setup-priority</a>
Range	0 to 7
Default	7
Introduced	21.10.R1
Platforms	All

**record** *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>record</b> <i>boolean</i>
Tree	<b>record</b>
Default	true
Introduced	16.0.R4
Platforms	All

**record-label** *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>record-label</b> <i>boolean</i>
Tree	<b>record-label</b>
Default	true
Introduced	16.0.R4
Platforms	All

**s2l-path** [**path-name**] *reference to (ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Enter the <b>s2l-path</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>s2l-path</b> <i>reference to (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<b>s2l-path</b>
Max. Instances	650
Introduced	16.0.R4
Platforms	All

**[path-name]** *reference*

Synopsis	P2MP LSP name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>primary-p2mp-instance</b> <i>string</i> <b>s2l-path</b> <i>reference to (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<b>s2l-path</b>

Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">path</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **to** ([ipv4-address-no-zone](#) | [ipv6-address-no-zone](#))

Synopsis	System IP address of the egress router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">s2l-path</a> <i>reference</i> <a href="#">to</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Tree	<a href="#">s2l-path</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the S2L sub-LSP for a P2MP LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp</a> <i>string</i> <a href="#">primary-p2mp-instance</a> <i>string</i> <a href="#">s2l-path</a> <i>reference</i> <a href="#">to</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

### **propagate-admin-group** *boolean*

Synopsis	Enable admin groups via session attribute object
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp</a> <i>string</i> <a href="#">propagate-admin-group</a> <i>boolean</i>
Tree	<a href="#">propagate-admin-group</a>
Default	false
Introduced	16.0.R1
Platforms	All

**retry-limit** *number*

Synopsis	Number of attempts to re-establish LSP after it fails
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>retry-limit</b> <i>number</i>
Tree	<b>retry-limit</b>
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

**retry-timer** *number*

Synopsis	Time for LSP re-establishment attempts after failure
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>retry-timer</b> <i>number</i>
Tree	<b>retry-timer</b>
Range	1 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**revert-timer** *number*

Synopsis	Revert timer for the LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>revert-timer</b> <i>number</i>
Tree	<b>revert-timer</b>
Range	1 to 4320
Units	minutes
Introduced	16.0.R1
Platforms	All

**rsvp-resv-style** *keyword*

Synopsis	Reservation style for RSVP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>rsvp-resv-style</b> <i>keyword</i>
Tree	<b>rsvp-resv-style</b>
Options	se, ff

Default	se
Introduced	16.0.R1
Platforms	All

### **secondary** [\[path-name\]](#) *reference*

Synopsis	Enter the <b>secondary</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i>
Tree	<a href="#">secondary</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### [\[path-name\]](#) *reference*

Synopsis	Path name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i>
Tree	<a href="#">secondary</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls path</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptive** *boolean*

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">adaptive</a> <i>boolean</i>
Tree	<a href="#">adaptive</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the LSP path
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **bandwidth** *number*

Synopsis	Amount of bandwidth to be reserved
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">bandwidth</a> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	19.7.R1
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , LSP BFD is enabled on the RSVP LSP or S-BFD is enabled for the SR-TE LSP.

LSP BFD must also be configured under the **configure router** context. The named BFD template provides the configuration settings for the BFD session, which must be configured and associated with the service using the BFD template.

When configured to **false**, LSP BFD is disabled on the RSVP LSP or S-BFD on the SR-TE LSP.

Default	false
Introduced	19.7.R1
Platforms	All

### **bfd-template** *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>bfd</b> <i>bfd-template</i> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <b>bfd</b> <i>bfd-template</i> <i>string</i>
Introduced	19.7.R1
Platforms	All

### **lsp-ping-interval** (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>bfd</b> <i>lsp-ping-interval</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">lsp-ping-interval</a>
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	19.7.R1
Platforms	All

### **return-path-label** *number*

Synopsis	S-BFD return-path label
Context	<b>configure router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>bfd</b> <i>return-path-label</i> <i>number</i>
Tree	<a href="#">return-path-label</a>

Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-for-up-timer** *number*

Synopsis	Time to wait for BFD to become operationally available
Context	<b>configure</b> <i>router string mpls lsp string secondary reference bfd wait-for-up-timer number</i>
Tree	<a href="#">wait-for-up-timer</a>
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> <li>• a path undergoing MBB when BFD is up</li> <li>• the initial administrative state of the LSP</li> <li>• the retry signaling of non-standby secondary paths</li> </ul>
Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1
Platforms	All

### **class-type** *number*

Synopsis	Class-type
Context	<b>configure</b> <i>router string mpls lsp string secondary reference class-type number</i>

Tree	<a href="#">class-type</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	All

### **exclude-admin-group**

Synopsis	Enable the <b>exclude-admin-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">exclude-admin-group</a>
Tree	<a href="#">exclude-admin-group</a>
Introduced	16.0.R1
Platforms	All

### **group reference**

Synopsis	Groups to exclude when the LSP path is setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">exclude-admin-group</a> <a href="#">group</a> <a href="#">reference</a>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

### **hop-limit number**

Synopsis	Total number of hops that an LSP traverses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">hop-limit</a> <i>number</i>
Tree	<a href="#">hop-limit</a>
Range	2 to 255
Introduced	16.0.R1
Platforms	All

## include-admin-group

Synopsis	Enable the <b>include-admin-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">include-admin-group</a>
Tree	<a href="#">include-admin-group</a>
Introduced	16.0.R1
Platforms	All

## group *reference*

Synopsis	Groups that are included when LSP path is setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">include-admin-group</a> <a href="#">group</a> <a href="#">reference</a>
Tree	<a href="#">group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Min. Instances	1
Introduced	16.0.R1
Platforms	All

## path-preference *number*

Synopsis	Path preference for the secondary standby path
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">path-preference</a> <i>number</i>
Tree	<a href="#">path-preference</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

## priority

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <a href="#">reference</a> <a href="#">priority</a>

Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	All

### **hold-priority** *number*

Synopsis	Priority of an LSP session at preemption action
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">priority</a> <a href="#">hold-priority</a> <i>number</i>
Tree	<a href="#">hold-priority</a>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

### **setup-priority** *number*

Synopsis	Priority when insufficient bandwidth for LSP setup
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">priority</a> <a href="#">setup-priority</a> <i>number</i>
Tree	<a href="#">setup-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

### **record** *boolean*

Synopsis	Enable recording of all hops that an LSP path traverses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp</a> <i>string</i> <a href="#">secondary</a> <i>reference</i> <a href="#">record</a> <i>boolean</i>
Tree	<a href="#">record</a>
Default	true
Introduced	16.0.R1
Platforms	All

**record-label** *boolean*

Synopsis	Enable recording of labels at each node or instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>record-label</b> <i>boolean</i>
Tree	<b>record-label</b>
Default	true
Introduced	16.0.R1
Platforms	All

**srlg** *boolean*

Synopsis	Use SRLG constraint in secondary path computation for an LSP at the head-end LER
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>srlg</b> <i>boolean</i>
Tree	<b>srlg</b>
Default	false
Introduced	16.0.R1
Platforms	All

**standby** *boolean*

Synopsis	Keep secondary path indefinitely in hot standby state
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>secondary</b> <i>reference</i> <b>standby</b> <i>boolean</i>
Tree	<b>standby</b>
Default	false
Introduced	16.0.R1
Platforms	All

**soft-preemption** *boolean*

Synopsis	Enable soft preemption
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp</b> <i>string</i> <b>soft-preemption</b> <i>boolean</i>
Tree	<b>soft-preemption</b>
Description	When configured to <b>true</b> , the P2MP LSP preemption is governed by the <b>configure router rsvp preemption-timer</b> value. When configured to <b>false</b> , the preemption timer value is set to 0 and the P2MP LSPs are hard preempted.

For P2P LSPs, soft preemption is always enabled and cannot be disabled.

Introduced 22.2.R1  
Platforms All

### **to** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Destination IP address or the egress router for the LSP  
Context **configure** *router string mpls lsp string to* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
Tree **to**  
Introduced 16.0.R1  
Platforms All

### **type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis LSP for bypass protection, point to multipoint, segment routing or MPLS-TP static LSP  
Context **configure** *router string mpls lsp string type keyword*  
Tree **type**  
Options p2p-rsvp, p2p-static-mpls, p2p-rsvp-bypass, p2mp-rsvp, p2mp-rsvp-auto, p2p-rsvp-mesh, p2p-rsvp-one-hop, p2p-sr-te, p2p-sr-te-mesh, p2p-sr-te-one-hop, p2p-sr-te-pce-init, p2p-sr-te-on-demand  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

### **vprn-auto-bind** *boolean*

Synopsis Include this LSP in auto-bind for VPRN services  
Context **configure** *router string mpls lsp string vprn-auto-bind boolean*  
Tree **vprn-auto-bind**



Introduced	16.0.R1
Platforms	All

### **lsp-bsid-block** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block for binding SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-bsid-block</a> <i>reference</i>
Tree	<a href="#">lsp-bsid-block</a>
Description	This command references a pre-existing reserved label block for statically configured binding SIDs.
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Introduced	22.7.R1
Platforms	All

### **lsp-history**

Synopsis	Enable the <b>lsp-history</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-history</a>
Tree	<a href="#">lsp-history</a>
Description	<p>Commands in this context control the recording of LSP history events.</p> <p>When the context is created, memory is allocated for storing up to 100 of the most recent LSP history events.</p> <p>When the context is deleted, memory is deallocated.</p>
Introduced	22.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of LSP history recording
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-history</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	enable
Introduced	22.10.R1
Platforms	All

### **lsp-init-retry-timeout** *number*

Synopsis	LSP initial retry timeout
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-init-retry-timeout</b> <i>number</i>
Tree	<a href="#">lsp-init-retry-timeout</a>
Range	10 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **lsp-self-ping**

Synopsis	Enter the <b>lsp-self-ping</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-self-ping</b>
Tree	<a href="#">lsp-self-ping</a>
Description	<p>Commands in this context configure LSP Self Ping parameters.</p> <p>LSP Self Ping checks that the datapath of an RSVP LSP has been programmed by all LSRs along its path before switching the traffic to it. If enabled, LSP Self Ping packets are sent periodically at a configurable interval following the receipt of the RESV message for an RSVP LSP path following an MBB or other event where the active path changes while the previous active path stayed up. The router will not switch traffic to the new path until an LSP Self Ping reply is received from the far-end LER.</p> <p>When configured under the MPLS context, LSP Self Ping is enabled for all RSVP LSPs, unless it is explicitly disabled for a given LSP.</p>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*

Synopsis	MPLS periodic LSP Self Ping interval
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-self-ping</b> <b>interval</b> <i>number</i>
Tree	<a href="#">interval</a>

Description	This command configures the interval at which LSP Self Ping packets are periodically sent on a candidate path of an RSVP LSP. This value is used for all LSPs that have LSP Self Ping enabled.
Range	1 to 10
Units	seconds
Default	1
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rsvp-te boolean**

Synopsis	Activate LSP Self Ping on RSVP-TE LSPs
Context	<b>configure</b> <i>router string</i> <b>mpls lsp-self-ping rsvp-te boolean</b>
Tree	<b>rsvp-te</b>
Description	When configured to <b>true</b> , this command enables LSP Self Ping on all RSVP-TE LSPs, unless an individual LSP has this explicitly disabled under the <b>configure router mpls lsp lsp-self-ping</b> command or in the LSP template. When configured to <b>false</b> , this command disables LSP Self Ping on all RSVP-TE LSPs.
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **timeout number**

Synopsis	MPLS LSP Self Ping timeout
Context	<b>configure</b> <i>router string</i> <b>mpls lsp-self-ping timeout number</b>
Tree	<b>timeout</b>
Description	This command configures a timeout value for the LSP Self Ping timer. The LSP Self Ping timer starts when the RESV message is received for an LSP. The system periodically sends LSP Self Ping packets until the timer expires or the first LSP Self Ping reply is received, whichever comes first. If the timer expires before an LSP Self Ping packet is received, the configured timeout action is performed.
Range	3 to 3600
Units	seconds
Default	300
Introduced	19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **timeout-action** *keyword*

Synopsis Action taken when LSP Self Ping timer expires  
 Context **configure** *router string mpls lsp-self-ping timeout-action keyword*  
 Tree [timeout-action](#)  
 Options retry, switch  
 Default retry  
 Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lsp-template** [[template-name](#)] *string*

Synopsis Enter the **lsp-template** list instance  
 Context **configure** *router string mpls lsp-template string*  
 Tree [lsp-template](#)  
 Description Commands in this context configure the attributes of an LSP template that can be referenced by a client application when dynamic LSPs must be created.  
 Max. Instances 4096  
 Introduced 16.0.R1  
 Platforms All

### **[template-name]** *string*

Synopsis LSP template name  
 Context **configure** *router string mpls lsp-template string*  
 Tree [lsp-template](#)  
 Description This command specifies the name of the LSP template. An LSP template name and LSP name must not be the same.  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

**adaptive** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable make-before-break functionality
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">adaptive</a> <i>boolean</i>
Tree	<a href="#">adaptive</a>
Default	true
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**admin-tag** [[name](#)] *reference*

Synopsis	Add a list entry for <b>admin-tag</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">admin-tag</a> <i>reference</i>
Tree	<a href="#">admin-tag</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	All

**[name]** *reference*

Synopsis	Name of the admin tags
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">admin-tag</a> <i>reference</i>
Tree	<a href="#">admin-tag</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adspec** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include ADSPEC objects in RSVP messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">adspec</a> <i>boolean</i>
Tree	<a href="#">adspec</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **auto-bandwidth**

Synopsis	Enable the <b>auto-bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a>
Tree	<a href="#">auto-bandwidth</a>
Introduced	16.0.R1
Platforms	All

### **adjust-down**

Synopsis	Enter the <b>adjust-down</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">adjust-down</a>
Tree	<a href="#">adjust-down</a>
Introduced	16.0.R1
Platforms	All

**bw number**

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth adjust-down bw number</i>
Tree	<i>bw</i>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

**percent number**

Synopsis	Minimum difference in percent
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth adjust-down percent number</i>
Tree	<i>percent</i>
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

**adjust-up**

Synopsis	Enter the <b>adjust-up</b> context
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth adjust-up</i>
Tree	<i>adjust-up</i>
Introduced	16.0.R1
Platforms	All

**bw number**

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <i>router string mpls lsp-template string auto-bandwidth adjust-up bw number</i>

Tree	<a href="#">bw</a>
Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

**percent** *number*

Synopsis	Minimum difference in percent
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">adjust-up</a> <a href="#">percent</a> <i>number</i>
Tree	<a href="#">percent</a>
Range	0 to 100
Units	percent
Default	5
Introduced	16.0.R1
Platforms	All

**fc** [[fc-name](#)] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[fc-name]** *keyword*

Synopsis	Forwarding class name for LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc



Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **sampling-weight** *number*

Synopsis	Forwarding class weight for LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>auto-bandwidth</b> <b>fc</b> <i>keyword</i> <b>sampling-weight</b> <i>number</i>
Tree	<b>sampling-weight</b>
Range	0 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	All

### **max-bandwidth** *number*

Synopsis	Maximum bandwidth of auto-bandwidth to request for LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>auto-bandwidth</b> <b>max-bandwidth</b> <i>number</i>
Tree	<b>max-bandwidth</b>
Range	0 to 6400000
Units	megabps
Default	100000
Introduced	16.0.R1
Platforms	All

### **min-bandwidth** *number*

Synopsis	Minimum bandwidth of auto-bandwidth to request for the LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>auto-bandwidth</b> <b>min-bandwidth</b> <i>number</i>
Tree	<b>min-bandwidth</b>
Range	0 to 6400000
Units	megabps
Default	0

Introduced 16.0.R1  
Platforms All

### **monitor-bandwidth** *boolean*

Synopsis Collect and display auto-bandwidth measurements for the LSP  
Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [auto-bandwidth](#) [monitor-bandwidth](#) *boolean*  
Tree [monitor-bandwidth](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **multipliers**

Synopsis Enter the **multipliers** context  
Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [auto-bandwidth](#) [multipliers](#)  
Tree [multipliers](#)  
Introduced 16.0.R1  
Platforms All

### **adjust-multiplier** *number*

Synopsis Number of collection intervals in the adjust interval  
Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [auto-bandwidth](#) [multipliers](#) [adjust-multiplier](#) *number*  
Tree [adjust-multiplier](#)  
Range 1 to 16383  
Introduced 16.0.R1  
Platforms All

### **sample-multiplier** *number*

Synopsis Multiplier for collection intervals in a sample interval  
Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [auto-bandwidth](#) [multipliers](#) [sample-multiplier](#) *number*

Tree	<a href="#">sample-multiplier</a>
Range	1 to 511
Introduced	16.0.R1
Platforms	All

## overflow-limit

Synopsis	Enable the <b>overflow-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">overflow-limit</a>
Tree	<a href="#">overflow-limit</a>
Introduced	16.0.R1
Platforms	All

## bw *number*

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">overflow-limit</a> <a href="#">bw</a> <i>number</i>
Tree	<a href="#">bw</a>
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

## number *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <a href="#">overflow-limit</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth overflow-limit</a> <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

**underflow-limit**

Synopsis	Enable the <b>underflow-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth</a> <b>underflow-limit</b>
Tree	<a href="#">underflow-limit</a>
Introduced	16.0.R1
Platforms	All

**bw** *number*

Synopsis	Minimum difference in absolute bandwidth
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth underflow-limit</a> <b>bw</b> <i>number</i>
Tree	<a href="#">bw</a>
Range	1 to 6400000
Units	megabps
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number of overflow samples to trigger an overflow auto-bandwidth adjustment attempt
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">auto-bandwidth underflow-limit</a> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>

Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Minimum difference in percent between the LSP bandwidth and the sampled data rate
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i> <b>auto-bandwidth</b> <b>underflow-limit</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **backup-class-type** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup class type for this LSP template
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i> <b>backup-class-type</b> <i>number</i>
Tree	<b>backup-class-type</b>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

### **bandwidth** *number*

Synopsis	Amount of bandwidth reserved for the P2MP instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>

Range	0 to 6400000
Units	megabps
Default	0
Introduced	16.0.R1
Platforms	All

## bfd



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure BFD on RSVP LSPs or Seamless BFD on SR-TE LSPs.
Introduced	16.0.R1
Platforms	All

## bfd-liveness *boolean*

Synopsis	Enable BFD on the RSVP LSP or S-BFD on the SR-TE LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, LSP BFD is enabled on the RSVP LSP or S-BFD is enabled for the SR-TE LSP.</p> <p>LSP BFD must also be configured under the <b>configure router</b> context. The named BFD template provides the configuration settings for the BFD session, which must be configured and associated with the service using the BFD template.</p> <p>When configured to <b>false</b>, LSP BFD is disabled on the RSVP LSP or S-BFD on the SR-TE LSP.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template to be used by LSP BFD sessions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i> <b>bfd</b> <b>bfd-template</b> <i>reference</i>
Tree	<b>bfd-template</b>
Reference	<b>configure</b> <b>bfd</b> <b>bfd-template</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**failure-action** *keyword*

Synopsis	Action to take when LSP BFD session fails
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i> <b>bfd</b> <b>failure-action</b> <i>keyword</i>
Tree	<b>failure-action</b>
Options	none, down, failover-or-down
Default	none
Introduced	16.0.R1
Platforms	All

**lsp-ping-interval** (*number* | *keyword*)

Synopsis	Interval for periodic LSP ping for BFD bootstrapping
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i> <b>bfd</b> <b>lsp-ping-interval</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>lsp-ping-interval</b>
Range	60 to 300
Units	seconds
Options	none
Default	60
Introduced	16.0.R1
Platforms	All

**return-path-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>bfd return-path-label</b> <i>number</i>
Tree	<b>return-path-label</b>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-for-up-timer** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to wait for BFD to become operationally available
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>bfd wait-for-up-timer</b> <i>number</i>
Tree	<b>wait-for-up-timer</b>
Description	<p>This command configures the time to wait for BFD to become operationally up. The timer is applicable to SR-TE LSPs, including auto LSPs and PCE-initiated LSPs, as well as RSVP-TE LSPs.</p> <p>For SR-TE LSPs, the timer takes effect when BFD is first enabled on a path or when BFD transitions from up to down. Upon expiration, if BFD is not up, the path is torn down, removed from the TTM and the IOM, and the system starts the retry timer.</p> <p>For RSVP-TE LSPs, the timer controls the following:</p> <ul style="list-style-type: none"> <li>• a path undergoing MBB when BFD is up</li> <li>• the initial administrative state of the LSP</li> <li>• the retry signaling of non-standby secondary paths</li> </ul>
Range	1 to 60
Units	seconds
Default	4
Introduced	19.7.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bgp-shortcut** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable/disable use of RSVP LSP for IPv4 BGP routes.  
 Context **configure** *router string mpls lsp-template string bgp-shortcut boolean*  
 Tree [bgp-shortcut](#)  
 Introduced 16.0.R1  
 Platforms All

### **bgp-transport-tunnel** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Allow use of RSVP-TE LSP as transport for tunnel routes  
 Context **configure** *router string mpls lsp-template string bgp-transport-tunnel boolean*  
 Tree [bgp-transport-tunnel](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **binding-sid** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Request to allocate and bind a label  
 Context **configure** *router string mpls lsp-template string binding-sid boolean*  
 Tree [binding-sid](#)  
 Description When configured to **true**, the system allocates and binds a label to any LSP that is created using the template.

When configured to **false**, this command removes the configuration but this does not affect LSPs that were already created using the template.

Default	false
Introduced	22.10.R1
Platforms	All

## class-forwarding



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>class-forwarding</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">class-forwarding</a>
Tree	<a href="#">class-forwarding</a>
Introduced	16.0.R1
Platforms	All

## forwarding-set



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>forwarding-set</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">class-forwarding forwarding-set</a>
Tree	<a href="#">forwarding-set</a>
Notes	The following elements are part of a choice: ( <b>default-lsp</b> and <b>fc</b> ) or <b>forwarding-set</b> .
Introduced	16.0.R1
Platforms	All

## policy reference



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name for the class based forwarding policy for LSP instances
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">class-forwarding</a> <a href="#">forwarding-set</a> <a href="#">policy</a> <a href="#">reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">class-forwarding-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### set number



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Forwarding set ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">class-forwarding</a> <a href="#">forwarding-set</a> <a href="#">set</a> <a href="#">number</a>
Tree	<a href="#">set</a>
Range	1 to 6
Introduced	16.0.R1
Platforms	All

### class-type number



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Class type for an LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i> <a href="#">class-type</a> <a href="#">number</a>
Tree	<a href="#">class-type</a>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

## default-path *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default path to be used for signaling LSP instances
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls lsp-template</a> <a href="#">string</a> <a href="#">default-path</a> <a href="#">reference</a>
Tree	<a href="#">default-path</a>
Reference	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls path</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

## egress-statistics

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>egress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls lsp-template</a> <a href="#">string</a> <a href="#">egress-statistics</a>
Tree	<a href="#">egress-statistics</a>
Introduced	16.0.R1
Platforms	All

## accounting-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">mpls lsp-template</a> <a href="#">string</a> <a href="#">egress-statistics</a> <a href="#">accounting-policy</a> <a href="#">reference</a>
Tree	<a href="#">accounting-policy</a>

Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

### **collect-stats** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Collect LSP statistics
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">egress-statistics</a> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Description	<p>When configured to <b>true</b>, this command enables LSP statistics collection. When you apply accounting policies, the forwarding engine collects data in the appropriate records and by default the CPU obtains and writes the results to the designated billing file.</p> <p>When configured to <b>false</b>, the forwarding engine still accumulates statistics. However, the CPU does not write them to the billing file. If you subsequently re-enable this command, the counters written to the billing file include all the traffic collected while the command was disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **stat-mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Statistics collection mode
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">egress-statistics</a> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	per-fc, aggregate
Introduced	21.10.R1
Platforms	All

**entropy-label** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Entropy label for an LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">entropy-label</a> <i>keyword</i>
Tree	<a href="#">entropy-label</a>
Options	false, true
Introduced	16.0.R1
Platforms	All

**exclude-admin-group** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Admin group name excluded when LSP is set up
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">exclude-admin-group</a> <i>reference</i>
Tree	<a href="#">exclude-admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <i>if-attribute</i> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**fallback-path-computation-method** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fallback path computation method
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">fallback-path-computation-method</a> <i>keyword</i>
Tree	<a href="#">fallback-path-computation-method</a>

Description	This command specifies the fallback path computation method used if all configured PCEs are down or are signaling overload and the redelegation timer has expired. This method is used regardless of whether the LSP is PCE-controlled and PCE-computed, or only PCE-computed.
Options	none, local-cspf
Introduced	21.10.R1
Platforms	All

### family keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address family that specifies template use in SR-TE LSP
Context	<b>configure router string mpls lsp-template string family keyword</b>
Tree	<b>family</b>
Description	This command specifies the address family for which the LSP template applies in an SR-TE LSP. An LSP template is required for each address family.
Options	ipv4, ipv6
Default	ipv4
Introduced	20.5.R1
Platforms	All

### fast-reroute



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>fast-reroute</b> context
Context	<b>configure router string mpls lsp-template string fast-reroute</b>
Tree	<b>fast-reroute</b>
Introduced	16.0.R1
Platforms	All

**frr-method** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Fast Reroute method for the LSPs that are dynamically created using this LSP template
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>fast-reroute</b> <b>frr-method</b> <i>keyword</i>
Tree	<b>frr-method</b>
Options	one-to-one, facility
Default	facility
Introduced	16.0.R1
Platforms	All

**hop-limit** *number*

Synopsis	Total number of hops a detour or backup LSP can take
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>fast-reroute</b> <b>hop-limit</b> <i>number</i>
Tree	<b>hop-limit</b>
Range	0 to 255
Default	16
Introduced	16.0.R1
Platforms	All

**node-protect** *boolean*

Synopsis	Enable node and link protection for the specified LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>fast-reroute</b> <b>node-protect</b> <i>boolean</i>
Tree	<b>node-protect</b>
Default	false
Introduced	16.0.R1
Platforms	All

**propagate-admin-group** *boolean*

Synopsis	Enable admin group constraints on a FRR backup LSP
----------	--



Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>fast-reroute</i> <i>propagate-admin-group</i> <i>boolean</i>
Tree	<i>propagate-admin-group</i>
Default	false
Introduced	16.0.R1
Platforms	All

### **from** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the ingress router for the LSP template
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>from</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<i>from</i>
Introduced	16.0.R1
Platforms	All

### **hop-limit** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum hops for an LSP created using this LSP template
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mpls lsp-template</i> <i>string</i> <i>hop-limit</i> <i>number</i>
Tree	<i>hop-limit</i>
Range	2 to 255
Introduced	16.0.R1
Platforms	All

## igp-shortcut



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>igp-shortcut</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">igp-shortcut</a>
Tree	<a href="#">igp-shortcut</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of LSP for shortcut or forwarding
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">igp-shortcut</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## allow-sr-over-srte *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use as eligible SRv4 or SRv6 IGP shortcut
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">igp-shortcut</a> <a href="#">allow-sr-over-srte</a> <i>boolean</i>
Tree	<a href="#">allow-sr-over-srte</a>
Description	When configured to <b>true</b> , the router performs local SPF and the SR-TE LSP template is used as an eligible IGP SR-MPLS shortcut for SR-MPLS SRv4 or SRv6 only if the SR-TE is explicitly allowed using this command and when the top SID in the SR-TE LSP is an adjacency SID.

Default	false
Introduced	23.3.R1
Platforms	All

### **lfa-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP usage in LFA SPF
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">igp-shortcut</a> <a href="#">lfa-type</a> <i>keyword</i>
Tree	<a href="#">lfa-type</a>
Options	lfa-protect, lfa-only
Notes	The following elements are part of a choice: <b>lfa-type</b> or <b>relative-metric</b> .
Introduced	16.0.R1
Platforms	All

### **relative-metric** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Shortest IGP cost between the endpoints of the LSP plus the configured offset
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">igp-shortcut</a> <a href="#">relative-metric</a> <i>number</i>
Tree	<a href="#">relative-metric</a>
Range	-10 to 10
Notes	The following elements are part of a choice: <b>lfa-type</b> or <b>relative-metric</b> .
Introduced	16.0.R1
Platforms	All

## include-admin-group *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Admin group name included when LSP is set up
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">include-admin-group</a> <i>reference</i>
Tree	<a href="#">include-admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

## label-stack-reduction *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable label compression for LSP path
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">label-stack-reduction</a> <i>boolean</i>
Tree	<a href="#">label-stack-reduction</a>
Default	false
Introduced	19.7.R1
Platforms	All

## ldp-over-rsvp *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include this LSP in LDP over RSVP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">ldp-over-rsvp</a> <i>boolean</i>
Tree	<a href="#">ldp-over-rsvp</a>
Default	true

Introduced 16.0.R1  
 Platforms All

### least-fill *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable least-fill path selection for this LSP template  
 Context **configure** *router string mpls lsp-template string least-fill boolean*  
 Tree [least-fill](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### load-balancing-weight *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Load balancing weight for an MPLS LSP template  
 Context **configure** *router string mpls lsp-template string load-balancing-weight number*  
 Tree [load-balancing-weight](#)  
 Range 1 to 4294967295  
 Introduced 16.0.R1  
 Platforms All

### local-sr-protection *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Local SR protection preference for LSP path computation  
 Context **configure** *router string mpls lsp-template string local-sr-protection keyword*  
 Tree [local-sr-protection](#)

Options	none, preferred, mandatory
Default	preferred
Introduced	19.7.R1
Platforms	All

### **lsp-self-ping** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	LSP Self Ping activation status on RSVP-TE LSP template
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i> <b>lsp-self-ping</b> <i>keyword</i>
Tree	<b>lsp-self-ping</b>
Description	When configured, the system uses this setting for the LSP template regardless of the value configured under <b>configure router mpls lsp-self-ping rsvp-te</b> . When unconfigured, the command inherits the value configured under <b>configure router mpls lsp-self-ping rsvp-te</b> .
Options	false, true
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **main-ct-retry-limit** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of retries before reverting to backup CT
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>lsp-template</b> <i>string</i> <b>main-ct-retry-limit</b> <i>number</i>
Tree	<b>main-ct-retry-limit</b>
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

## max-sr-labels

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>max-sr-labels</b> context
Context	<b>configure</b> <i>router string mpls lsp-template string max-sr-labels</i>
Tree	<a href="#">max-sr-labels</a>
Introduced	16.0.R1
Platforms	All

## additional-frr-labels *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of additional overhead labels
Context	<b>configure</b> <i>router string mpls lsp-template string max-sr-labels additional-frr-labels number</i>
Tree	<a href="#">additional-frr-labels</a>
Range	0 to 4
Default	1
Introduced	16.0.R1
Platforms	All

## label-stack-size *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size for the maximum segment routing label stack
Context	<b>configure</b> <i>router string mpls lsp-template string max-sr-labels label-stack-size number</i>
Tree	<a href="#">label-stack-size</a>
Range	1 to 11
Introduced	16.0.R1

Platforms All

### **metric number**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis LSP template metric  
 Context **configure** *router string mpls lsp-template string metric number*  
 Tree [metric](#)  
 Range 0 to 16777215  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

### **metric-type keyword**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Metric type used for LSP path computation  
 Context **configure** *router string mpls lsp-template string metric-type keyword*  
 Tree [metric-type](#)  
 Options igp, te  
 Default igp  
 Introduced 19.7.R1  
 Platforms All

### **override-tunnel-elic boolean**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Override any received entropy label capability  
 Context **configure** *router string mpls lsp-template string override-tunnel-elic boolean*



Tree	<a href="#">override-tunnel-enc</a>
Description	When configured to <b>true</b> , this command allows the system to override any received entropy label capability advertisement. When configured to <b>false</b> , this command disables the override.
Default	false
Introduced	21.10.R1
Platforms	All

### **path-computation-method** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Path computation method
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">path-computation-method</a> <i>keyword</i>
Tree	<a href="#">path-computation-method</a>
Description	This command configures the path computation method of an RSVP-TE or SR-TE LSP. If this command is not configured to one of the supported options, the default path computation method is used depending on the type of LSP; the hop-to-label translation is used for the SR-TE LSP template and the IGP-based path is used for the RSVP-TE-LSP. See "SR-TE LSP path computation using hop-to-label translation" in the <i>7750 Service Router and 7950 Extensible Routing System Segment Routing and PCE User Guide</i> for more information.
Options	local-cspf, pce
Introduced	19.7.R1
Platforms	All

### **path-profile** [[profile-id](#)] *number*

Synopsis	Enter the <b>path-profile</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">path-profile</a> <i>number</i>
Tree	<a href="#">path-profile</a>
Description	Commands in this context configure the attributes of the PCE path profile.
Max. Instances	5
Introduced	21.10.R1

Platforms All

### **[profile-id]** *number*

Synopsis Profile ID for the specified LSP

Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [path-profile](#) *number*

Tree [path-profile](#)

Range 1 to 4294967295

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms All

### **path-group** *number*

Synopsis Path-group ID for the specified LSP

Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [path-profile](#) *number* [path-group](#) *number*

Tree [path-group](#)

Max. Range 0 to 4294967295

Default 0

Introduced 21.10.R1

Platforms All

### **pce-associations**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **pce-associations** context

Context **configure** [router](#) *string* [mpls lsp-template](#) *string* [pce-associations](#)

Tree [pce-associations](#)

Description Commands in this context configure the LSP binding with one or more PCEP associations.

Introduced 22.5.R1

Platforms All

**diversity** [[diversity-name](#)] *reference*

Synopsis	Add a list entry for <b>diversity</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">pce-associations</a> <a href="#">diversity</a> <i>reference</i>
Tree	<a href="#">diversity</a>
Description	Commands in this context bind the LSP to a named diversity association. The diversity association must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

**[diversity-name]** *reference*

Synopsis	Name of the PCE association configured under the PCC
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">pce-associations</a> <a href="#">diversity</a> <i>reference</i>
Tree	<a href="#">diversity</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep pcc</a> <a href="#">pce-associations</a> <a href="#">diversity</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**policy** [[policy-name](#)] *reference*

Synopsis	Add a list entry for <b>policy</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">pce-associations</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	Commands in this context bind the LSP to a named policy association. The policy association name must exist under the PCC.
Max. Instances	5
Introduced	22.5.R1
Platforms	All

**[policy-name] reference**

Synopsis	Name of the PCE association configured under the PCC
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>pce-associations</b> <b>policy</b> <i>reference</i>
Tree	<b>policy</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>pcep pcc pce-associations</b> <b>policy</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**pce-control boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PCE controlled LSP mode of operation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>pce-control</b> <i>boolean</i>
Tree	<b>pce-control</b>
Description	<p>When configured to <b>true</b>, this command enables a PCE-controlled mode of operation for the LSP. In this mode, the router delegates full control of the LSP to the PCE (PCE controlled). The PCE acts in stateful-active mode for this LSP and is able to reroute the path following a failure or to re-optimize the path and update the router without a request from the router.</p> <p>When configured to <b>false</b>, the PCE-controlled mode of operation for the LSP has no effect.</p>
Default	false
Introduced	21.10.R1
Platforms	All

**pce-report keyword****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable reporting modes to PCE for RSVP-TE or SR-TE LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>pce-report</b> <i>keyword</i>
Tree	<b>pce-report</b>

Options	false, true
Introduced	16.0.R1
Platforms	All

## priority



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <i>router string mpls lsp-template string priority</i>
Tree	<i>priority</i>
Introduced	16.0.R1
Platforms	All

## hold-priority *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold priority when insufficient bandwidth is available to set up LSP
Context	<b>configure</b> <i>router string mpls lsp-template string priority hold-priority number</i>
Tree	<i>hold-priority</i>
Range	0 to 7
Default	0
Introduced	16.0.R1
Platforms	All

## setup-priority *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Setup priority when insufficient bandwidth is available to set up LSP
Context	<b>configure</b> <i>router string mpls lsp-template string priority setup-priority number</i>

Tree	<a href="#">setup-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	All

### **propagate-admin-group** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable admin groups via session attribute object
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">propagate-admin-group</a> <i>boolean</i>
Tree	<a href="#">propagate-admin-group</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **record** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable recording of all hops for this LSP template
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls lsp-template</a> <i>string</i> <a href="#">record</a> <i>boolean</i>
Tree	<a href="#">record</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **record-label** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable recording of labels at each node or instance
Context	<b>configure</b> <i>router string mpls lsp-template string record-label boolean</i>
Tree	<a href="#">record-label</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **retry-limit** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of attempts to re-establish LSP after it fails
Context	<b>configure</b> <i>router string mpls lsp-template string retry-limit number</i>
Tree	<a href="#">retry-limit</a>
Range	1 to 10000
Introduced	16.0.R1
Platforms	All

### **retry-timer** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time for LSP re-establishment attempts after failure
Context	<b>configure</b> <i>router string mpls lsp-template string retry-timer number</i>
Tree	<a href="#">retry-timer</a>
Range	1 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**soft-preemption** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable soft preemption
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>soft-preemption</b> <i>boolean</i>
Tree	<b>soft-preemption</b>
Description	When configured to <b>true</b> , the P2MP LSP preemption is governed by the <b>configure router rsvp preemption-timer</b> value.  When configured to <b>false</b> , the preemption timer value is set to 0 and the P2MP LSPs are hard preempted.  For P2P LSPs, soft preemption is always enabled and cannot be disabled.
Introduced	22.2.R1
Platforms	All

**template-id** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Template ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls lsp-template</b> <i>string</i> <b>template-id</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>template-id</b>
Description	This command specifies the value that is signaled in the PCE to identify the LSP template.
Range	1 to 4294967295
Options	default
Introduced	16.0.R5
Platforms	All



**type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	LSP template type
Context	<b>configure</b> <i>router string mpls lsp-template string type keyword</i>
Tree	<i>type</i>
Description	This command configures the type of a template that can be referenced by a client application where dynamic LSP creation is required. The LSP template type is mandatory.
Options	p2mp-rsvp, p2p-rsvp-one-hop, p2p-rsvp-mesh, p2p-sr-te-one-hop, p2p-sr-te-mesh, p2p-sr-te-pce-init, p2p-sr-te-on-demand
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**vprn-auto-bind** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include LSP template in auto-bind for VPRN services
Context	<b>configure</b> <i>router string mpls lsp-template string vprn-auto-bind boolean</i>
Tree	<i>vprn-auto-bind</i>
Default	true
Introduced	16.0.R1
Platforms	All

**max-bypass-associations** *number*

Synopsis	Maximum number of LSPs associated with a bypass tunnel
Context	<b>configure</b> <i>router string mpls max-bypass-associations number</i>

Tree	<a href="#">max-bypass-associations</a>
Range	100 to 131072
Default	1000
Introduced	16.0.R1
Platforms	All

### **max-bypass-plr-associations** *number*

Synopsis	Maximum number of PLRs per RSVP-TE bypass LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">max-bypass-plr-associations</a> <i>number</i>
Tree	<a href="#">max-bypass-plr-associations</a>
Range	1 to 16
Default	16
Introduced	19.10.R1
Platforms	All

### **mbb-prefer-current-hops** *boolean*

Synopsis	Select preference to use the current hops for Make-Before-Break (MBB)
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">mbb-prefer-current-hops</a> <i>boolean</i>
Tree	<a href="#">mbb-prefer-current-hops</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **p2mp-resignal-timer** *number*

Synopsis	Resignal timer for P2MP LSPs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">p2mp-resignal-timer</a> <i>number</i>
Tree	<a href="#">p2mp-resignal-timer</a>
Range	60 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

**p2mp-s2l-fast-retry** *number*

Synopsis	Fast retry timer for P2MP S2L paths
Context	<b>configure</b> <i>router string mpls p2mp-s2l-fast-retry number</i>
Tree	<a href="#">p2mp-s2l-fast-retry</a>
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

**p2mp-ttl-propagate** *boolean*

Synopsis	Use uniform mode for TTL propagation for RSVP P2MP LSPs
Context	<b>configure</b> <i>router string mpls p2mp-ttl-propagate boolean</i>
Tree	<a href="#">p2mp-ttl-propagate</a>
Description	<p>When configured to <b>true</b>, the router configures the uniform mode of operation for P2MP LSPs.</p> <p>When configured to <b>false</b>, the router configures the pipe mode of operation for RSVP P2MP LSPs.</p> <p>When the propagation mode is modified, the new configuration applies to future RSVP P2MP LSPs only and the existing operational LSPs are not affected.</p>
Default	true
Introduced	23.7.R1
Platforms	All

**p2p-active-path-fast-retry** *number*

Synopsis	Fast retry timer for P2P active paths
Context	<b>configure</b> <i>router string mpls p2p-active-path-fast-retry number</i>
Tree	<a href="#">p2p-active-path-fast-retry</a>
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

**path** [*path-name*] *string*

Synopsis	Enter the <b>path</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>path</b> <i>string</i>
Tree	<b>path</b>
Max. Instances	65535
Introduced	16.0.R1
Platforms	All

**[path-name]** *string*

Synopsis	Name for this LSP path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>path</b> <i>string</i>
Tree	<b>path</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the path used for LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>path</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**hop** [*hop-index*] *number*

Synopsis	Enter the <b>hop</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>path</b> <i>string</i> <b>hop</b> <i>number</i>
Tree	<b>hop</b>

Max. Instances	255
Introduced	16.0.R1
Platforms	All

### **[hop-index]** *number*

Synopsis	Index to identify a particular hop
Context	<b>configure</b> <i>router string mpls path string hop number</i>
Tree	<a href="#">hop</a>
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the transit router
Context	<b>configure</b> <i>router string mpls path string hop number ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a mandatory choice: ( <b>ip-address</b> and <b>type</b> ) or <b>sid-label</b> .
Introduced	16.0.R1
Platforms	All

### **sid-label** *number*

Synopsis	MPLS label for tunnel hop in the path of an SR-TE LSP
Context	<b>configure</b> <i>router string mpls path string hop number sid-label number</i>
Tree	<a href="#">sid-label</a>
Range	32 to 1048575

Notes	The following elements are part of a mandatory choice: ( <b>ip-address</b> and <b>type</b> ) or <b>sid-label</b> .
Introduced	19.10.R1
Platforms	All

### **type** *keyword*

Synopsis	Tunnel hop type
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <i>path</i> <i>string</i> <b>hop</b> <i>number</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	strict, loose
Notes	The following elements are part of a mandatory choice: ( <b>ip-address</b> and <b>type</b> ) or <b>sid-label</b> .
Introduced	16.0.R1
Platforms	All

### **pce-init-lsp**

Synopsis	Enable the <b>pce-init-lsp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>pce-init-lsp</b>
Tree	<b>pce-init-lsp</b>
Introduced	16.0.R5
Platforms	All

### **sr-te**

Synopsis	Enable the <b>sr-te</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>pce-init-lsp</b> <b>sr-te</b>
Tree	<b>sr-te</b>
Introduced	16.0.R5
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of SR-TE PCE-initiated LSP support
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>pce-init-lsp</b> <b>sr-te</b> <b>admin-state</b> <i>keyword</i>

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Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R5
Platforms	All

### **pce-report**

Synopsis	Enter the <b>pce-report</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">pce-report</a>
Tree	<a href="#">pce-report</a>
Introduced	16.0.R1
Platforms	All

### **rsvp-te boolean**

Synopsis	Allow PCE reporting for all TE LSPs of RSVP-TE type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">pce-report</a> <a href="#">rsvp-te</a> <i>boolean</i>
Tree	<a href="#">rsvp-te</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-te boolean**

Synopsis	Allow PCE reporting for all TE LSPs of SR-TE type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">pce-report</a> <a href="#">sr-te</a> <i>boolean</i>
Tree	<a href="#">sr-te</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **resignal-on-igp-overload boolean**

Synopsis	Resignal all RSVP-TE LSPs upon IGP overload
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Context	<b>configure</b> <i>router string mpls resignal-on-igp-overload boolean</i>
Tree	<a href="#">resignal-on-igp-overload</a>
Description	<p>When configured to <b>true</b>, the receipt of the IS-IS overload bit in the TE-DB triggers the immediate resignaling of all RSVP-TE LSPs. MPLS forces the expiry of the resignal timer and the TE-DB computes a new CSPF for each RSVP-TE LSP active path. The re-optimization causes the immediate transition of RSVP-TE LSP paths away from the IS-IS node in overload using the MBB operation.</p> <p>This command cannot be configured to <b>true</b> when the <b>retry-on-igp-overload</b> command is configured to <b>true</b>.</p> <p>When configured to <b>false</b>, the default behavior is maintained where MBB re-optimization occurs only when a timer-based resignal is performed or a manual resignal is executed.</p>
Default	false
Introduced	20.10.R1
Platforms	All

### **resignal-timer** *number*

Synopsis	Resignal timer for RSVP LSPs
Context	<b>configure</b> <i>router string mpls resignal-timer number</i>
Tree	<a href="#">resignal-timer</a>
Range	30 to 10080
Units	minutes
Introduced	16.0.R1
Platforms	All

### **retry-on-igp-overload** *boolean*

Synopsis	Tear down LSPs when IGP is in overload state
Context	<b>configure</b> <i>router string mpls retry-on-igp-overload boolean</i>
Tree	<a href="#">retry-on-igp-overload</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **secondary-fast-retry-timer** *number*

Synopsis	Fast retry timer for secondary paths
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Context	<b>configure</b> <i>router string mpls secondary-fast-retry-timer number</i>
Tree	<a href="#">secondary-fast-retry-timer</a>
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	All

### **shortcut-local-ttl-propagate** *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets
Context	<b>configure</b> <i>router string mpls shortcut-local-ttl-propagate boolean</i>
Tree	<a href="#">shortcut-local-ttl-propagate</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **shortcut-transit-ttl-propagate** *boolean*

Synopsis	Propagate TTL over LSP shortcut for local packets for transit packets
Context	<b>configure</b> <i>router string mpls shortcut-transit-ttl-propagate boolean</i>
Tree	<a href="#">shortcut-transit-ttl-propagate</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **sr-te-resignal**

Synopsis	Enter the <b>sr-te-resignal</b> context
Context	<b>configure</b> <i>router string mpls sr-te-resignal</i>
Tree	<a href="#">sr-te-resignal</a>
Introduced	19.10.R1
Platforms	All

**resignal-on-igp-event** *boolean*

Synopsis	Re-optimize SR-TE LSPs upon IGP link events
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls sr-te-resignal</b> <b>resignal-on-igp-event</b> <i>boolean</i>
Tree	<a href="#">resignal-on-igp-event</a>
Description	<p>When configured to <b>true</b>, the system signals the re-optimization of all SR-TE LSPs when one or more IGP link down events are received in the TE-DB. The triggered behavior is identical to the timer-based or resignal behavior or the manual-based resignal behavior used with a delay option. MPLS forces the expiry of the resignal timer and all active paths of all SR-TE LSPs are re-evaluated.</p> <p>When configured to <b>false</b>, re-optimization is not triggered by IGP events.</p>
Default	false
Introduced	19.10.R1
Platforms	All

**resignal-on-igp-overload** *boolean*

Synopsis	Enable resignaling of SR-TE LSPs upon IGP overload
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls sr-te-resignal</b> <b>resignal-on-igp-overload</b> <i>boolean</i>
Tree	<a href="#">resignal-on-igp-overload</a>
Description	<p>When configured to <b>true</b>, the system enables ad-hoc re-optimization of the CSPF paths of all SR-TE LSPs when IS-IS receives an IS-IS overload bit advertisement from a remote router.</p> <p>When this command is enabled on the router and an IGP overload bit is set in a Layer 1 or Layer 2 IS-IS LSP received from a remote router, MPLS performs an ad-hoc re-optimization of all the paths of all the SR-TE LSPs that have paths computed by the local CSPF. For each SR-TE LSP current path that transits the router in overload, the CSPF looks for a new path that avoids the router. For each SR-TE LSP current path that terminates on the router in overload, the CSPF checks if a better path exists. In both cases, if a new path is not found the system maintains the current path when operationally up.</p> <p>The ad-hoc re-optimization triggers the timer-based re-optimization by forcing the resignal timer to expire. Therefore, the user must use the <b>configure router mpls sr-te-resignal resignal-timer</b> command to configure the resignal timer for the SR-TE application.</p> <p>When configured to <b>false</b>, MPLS does not act immediately on an IS-IS overload bit from a remote router. MPLS acts on it at the next timer-based or manual re-optimization of the SR-TE LSPs.</p>
Default	false
Introduced	23.3.R1
Platforms	All

**resignal-timer** *number*

Synopsis	Resignal timer for SR-TE LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls sr-te-resignal</b> <b>resignal-timer</b> <i>number</i>
Tree	<a href="#">resignal-timer</a>
Description	This command configures the time the system waits before signaling the re-optimization of all SR-TE LSPs.
Range	30 to 10080
Units	minutes
Introduced	19.10.R1
Platforms	All

**srlg-database**

Synopsis	Enter the <b>srlg-database</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls srlg-database</b>
Tree	<a href="#">srlg-database</a>
Introduced	16.0.R1
Platforms	All

**router-id** [[router-address](#)] *string*

Synopsis	Enter the <b>router-id</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls srlg-database</b> <b>router-id</b> <i>string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

**[router-address]** *string*

Synopsis	Router ID for the system
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls srlg-database</b> <b>router-id</b> <i>string</i>
Tree	<a href="#">router-id</a>
Notes	This element is part of a list key.
Introduced	16.0.R2

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the interface entry

Context **configure** [router](#) *string* [mpls srlg-database](#) [router-id](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **interface** [[interface-address](#)] *string* [srlg-group](#) *reference*

Synopsis Add a list entry for **interface**

Context **configure** [router](#) *string* [mpls srlg-database](#) [router-id](#) *string* **interface** *string* [srlg-group](#) *reference*

Tree [interface](#)

Introduced 16.0.R1

Platforms All

### **[interface-address]** *string*

Synopsis IP address of the interface

Context **configure** [router](#) *string* [mpls srlg-database](#) [router-id](#) *string* **interface** *string* [srlg-group](#) *reference*

Tree [interface](#)

Notes This element is part of a list key.

Introduced 16.0.R2

Platforms All

### **srlg-group** *reference*

Synopsis SRLG group name

Context **configure** [router](#) *string* [mpls srlg-database](#) [router-id](#) *string* **interface** *string* [srlg-group](#) *reference*

Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">srlg-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **srlg-frr** *keyword*

Synopsis	Use of SRLG constraint for FRR path computation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">srlg-frr</a> <i>keyword</i>
Tree	<a href="#">srlg-frr</a>
Options	loose, strict
Introduced	16.0.R1
Platforms	All

### **static-lsp** [[lsp-name](#)] *string*

Synopsis	Enter the <b>static-lsp</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">static-lsp</a> <i>string</i>
Tree	<a href="#">static-lsp</a>
Max. Instances	1000
Introduced	16.0.R1
Platforms	All

### [[lsp-name](#)] *string*

Synopsis	Labeled Switch path name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">static-lsp</a> <i>string</i>
Tree	<a href="#">static-lsp</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the static LSP
Context	<b>configure</b> <i>router string mpls static-lsp string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**metric** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MPLS static LSP metric to select an LSP
Context	<b>configure</b> <i>router string mpls static-lsp string metric number</i>
Tree	<a href="#">metric</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**push**

Synopsis	Enable the <b>push</b> context
Context	<b>configure</b> <i>router string mpls static-lsp string push</i>
Tree	<a href="#">push</a>
Introduced	16.0.R1
Platforms	All

**next-hop** *string*

Synopsis	IP address for the next hop
Context	<b>configure</b> <i>router string mpls static-lsp string push next-hop string</i>
Tree	<a href="#">next-hop</a>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **out-label** (*number* | *keyword*)

Synopsis	Push specific label onto the top of the outgoing packet's label stack
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls static-lsp</b> <i>string</i> <b>push out-label</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>out-label</b>
Range	16 to 1048575
Options	implicit-null-label
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **to string**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination IP address or the egress router for the LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls static-lsp</b> <i>string</i> <b>to string</b>
Tree	<b>to</b>
Introduced	16.0.R1
Platforms	All

### **static-lsp-fast-retry** *number*

Synopsis	Fast retry timer for static LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls static-lsp-fast-retry</b> <i>number</i>
Tree	<b>static-lsp-fast-retry</b>
Range	1 to 30
Units	seconds
Default	30
Introduced	16.0.R1

Platforms All

### **strict-ero-nhop-direct-resolution** *boolean*

Synopsis	Resolves RSVP-TE LSP ERO to local and host routes only
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>strict-ero-nhop-direct-resolution</b> <i>boolean</i>
Tree	<b>strict-ero-nhop-direct-resolution</b>
Description	<p>When configured to <b>true</b>, the router enables the strict Explicit Route Object (ERO) next-hop direct resolution. The feature restricts the routes used to resolve the next hop of an ERO address to local and host routes. This command avoids using a next hop over a parallel link when a half link is up in the routing table.</p> <p>This command applies to an ERO when all of the following conditions are met:</p> <ul style="list-style-type: none"> <li>• the ERO next hop is an IPv4 address</li> <li>• the ERO object is a strict hop</li> <li>• the IPv4 address matches the primary subnet of a local numbered interface</li> </ul> <p>If no such route exists, RSVP rejects the PATH message with ErrCode = Routing Error (24) and SubErrCode = Bad Strict Node (2).</p> <p>When configured to <b>false</b>, the router disables the strict ERO next-hop direct resolution.</p>
Default	false
Introduced	22.5.R1
Platforms	All

### **tunnel-table-pref**

Synopsis	Enter the <b>tunnel-table-pref</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>tunnel-table-pref</b>
Tree	<b>tunnel-table-pref</b>
Description	Commands in this context configure the tunnel table preference for RSVP-TE LSP and SR-TE LSP tunnel types.
Introduced	21.10.R1
Platforms	All

### **rsvp-te** *number*

Synopsis	RSVP-TE tunnel table preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls</b> <b>tunnel-table-pref</b> <b>rsvp-te</b> <i>number</i>
Tree	<b>rsvp-te</b>



Description	<p>This command configures the tunnel table preference for RSVP-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the <b>mixed-lsp-mode</b> option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>Nokia recommends that tunnel types have unique preference values. In a situation where two or more tunnel types are set to the same preference value, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	7
Introduced	21.10.R1
Platforms	All

### **sr-te number**

Synopsis	SR-TE tunnel table preference
Context	<b>configure router</b> <i>string</i> <b>mpls tunnel-table-pref sr-te number</b>
Tree	<b>sr-te</b>
Description	<p>This command configures the tunnel table preference for SR-TE LSP tunnel type.</p> <p>The tunnel table preference applies to next-hop resolution of BGP routes for: EVPN, IPv4, IPv6, VPN-IPv4, VPN-IPv6, label-IPv4, and label-IPV6 in the tunnel table.</p> <p>This feature does not apply to a VPRN, VPLS, or VLL service with explicit binding to an SDP that enabled the <b>mixed-lsp-mode</b> option. The service manager controls and fixes the tunnel preference in such an SDP. The tunnel table preference configuration does not modify the SDP behavior, nor the services that bind to it.</p> <p>It is recommended to not set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.</p>
Range	1 to 255
Default	8
Introduced	21.10.R1
Platforms	All

### **user-srlg-db boolean**

Synopsis	Enable the use of user SRLG database
Context	<b>configure router</b> <i>string</i> <b>mpls user-srlg-db boolean</b>

Tree	<a href="#">user-srlg-db</a>
Default	false
Introduced	16.0.R1
Platforms	All

## mpls-labels

Synopsis	Enter the <b>mpls-labels</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a>
Tree	<a href="#">mpls-labels</a>
Introduced	16.0.R1
Platforms	All

## bgp-labels-hold-timer *number*

Synopsis	BGP labels hold timer for the ingress router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">bgp-labels-hold-timer</a> <i>number</i>
Tree	<a href="#">bgp-labels-hold-timer</a>
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

## reserved-label-block [[label-block-name](#)] *string*

Synopsis	Enter the <b>reserved-label-block</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Tree	<a href="#">reserved-label-block</a>
Description	<p>Commands in this context configure a block of labels from the dynamic range to be locally assigned for specific applications, such as segment routing adjacency SIDs. The reserved label block is not advertised by the IGP.</p> <p><b>Note:</b> Changes to the reserved label block range do not impact the actual MPLS datapath table sizes.</p>
Max. Instances	16
Introduced	16.0.R1

Platforms All

### **[label-block-name]** *string*

Synopsis Name for the reserved label block  
Context **configure** **router** *string* **mpls-labels reserved-label-block** *string*  
Tree **reserved-label-block**  
String Length 1 to 64  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **end-label** *number*

Synopsis Upper bound of the reserved label block range  
Context **configure** **router** *string* **mpls-labels reserved-label-block** *string* **end-label** *number*  
Tree **end-label**  
Range 32 to 1048575  
Introduced 16.0.R1  
Platforms All

### **start-label** *number*

Synopsis Lower bound of the reserved label block range  
Context **configure** **router** *string* **mpls-labels reserved-label-block** *string* **start-label** *number*  
Tree **start-label**  
Range 32 to 1048575  
Introduced 16.0.R1  
Platforms All

### **sr-labels**

Synopsis Enter the **sr-labels** context  
Context **configure** **router** *string* **mpls-labels sr-labels**  
Tree **sr-labels**

Description	<p>Commands in this context configure the range of the Segment Routing Global Block (SRGB), which assigns labels to segment routing prefix SIDs originated by this router. The range is taken from the system dynamic label range and is not instantiated by default.</p> <p>Segment routing labels are reserved labels. After they are instantiated, they cannot be used for dynamic label assignment by other protocols, such as RSVP, LDP, and BGP.</p> <p><b>Note:</b> Changes to the SRGB range do not impact the actual MPLS datapath table sizes.</p>
Introduced	16.0.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the label range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls-labels</b> <b>sr-labels</b> <b>end</b> <i>number</i>
Tree	<b>end</b>
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the label range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls-labels</b> <b>sr-labels</b> <b>start</b> <i>number</i>
Tree	<b>start</b>
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

### **static-label-range number**

Synopsis	Static label range on the ingress router
Context	<b>configure</b> <b>router</b> <i>string</i> <b>mpls-labels</b> <b>static-label-range</b> <i>number</i>
Tree	<b>static-label-range</b>
Range	0 to 1048544
Default	18400
Introduced	16.0.R1

Platforms All

## msdp

Synopsis Enable the **msdp** context  
 Context **configure router string msdp**  
 Tree [msdp](#)  
 Introduced 19.10.R1  
 Platforms All

## active-source-limit *number*

Synopsis Maximum number of active messages accepted by MSDP  
 Context **configure router string msdp active-source-limit number**  
 Tree [active-source-limit](#)  
 Range 0 to 1000000  
 Introduced 19.10.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of MSDP  
 Context **configure router string msdp admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 19.10.R1  
 Platforms All

## data-encapsulation *boolean*

Synopsis Enable encapsulation of multicast data used by MSDP  
 Context **configure router string msdp data-encapsulation boolean**  
 Tree [data-encapsulation](#)  
 Default true

Introduced 19.10.R1  
 Platforms All

### **export-policy** *reference*

Synopsis Policies to export source active state into MSDP  
 Context **configure** *router string msdp export-policy reference*  
 Tree [export-policy](#)  
 Reference **configure** *policy-options policy-statement string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 19.10.R1  
 Platforms All

### **group** [*name*] *string*

Synopsis Enter the **group** list instance  
 Context **configure** *router string msdp group string*  
 Tree [group](#)  
 Introduced 19.10.R1  
 Platforms All

### **[name]** *string*

Synopsis MSDP group name  
 Context **configure** *router string msdp group string*  
 Tree [group](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms All

**active-source-limit** *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>active-source-limit</b> <i>number</i>
Tree	<a href="#">active-source-limit</a>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**import-policy** *reference*

Synopsis	Policy to import source active state from MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **local-address** *string*

Synopsis	Local end of an MSDP session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">local-address</a> <i>string</i>
Tree	<a href="#">local-address</a>
Introduced	19.10.R1
Platforms	All

### **mode** *keyword*

Synopsis	Topology of groups of peers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	standard, mesh-group
Default	standard
Introduced	19.10.R1
Platforms	All

### **peer** [[ip-address](#)] *string*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i>
Tree	<a href="#">peer</a>
Introduced	19.10.R1
Platforms	All



**[ip-address] string**

Synopsis	IP address of the remote MSDP router for peering
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i>
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**active-source-limit number**

Synopsis	Maximum number of active messages accepted by MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>active-source-limit</b> <i>number</i>
Tree	<b>active-source-limit</b>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

**authentication-key string**

Synopsis	MD5 authentication key for the MSDP peering session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

**default-peer** *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>default-peer</b> <i>boolean</i>
Tree	<a href="#">default-peer</a>
Default	false
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**import-policy** *reference*

Synopsis	Policy to import source active state from MSDP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **local-address** *string*

Synopsis	Local end of an MSDP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>local-address</b> <i>string</i>
Tree	<b>local-address</b>
Introduced	19.10.R1
Platforms	All

### **receive-message-rate**

Synopsis	Enter the <b>receive-message-rate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b>
Tree	<b>receive-message-rate</b>
Introduced	19.10.R1
Platforms	All

### **rate** *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>rate</b> <i>number</i>
Tree	<b>rate</b>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

### **threshold** *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

**time** *number*

Synopsis	Limit of MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>peer</b> <i>string</i> <b>receive-message-rate</b> <b>time</b> <i>number</i>
Tree	<b>time</b>
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

**receive-message-rate**

Synopsis	Enter the <b>receive-message-rate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>receive-message-rate</b>
Tree	<b>receive-message-rate</b>
Introduced	19.10.R1
Platforms	All

**rate** *number*

Synopsis	Number of MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>receive-message-rate</b> <b>rate</b> <i>number</i>
Tree	<b>rate</b>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

**threshold** *number*

Synopsis	Limit for MSDP messages read from the TCP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>msdp</b> <b>group</b> <i>string</i> <b>receive-message-rate</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

**time number**

Synopsis	Limit of MSDP messages read from the TCP session
Context	<b>configure router</b> <i>string msdp group string receive-message-rate time number</i>
Tree	<a href="#">time</a>
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

**import-policy reference**

Synopsis	Policy to import source active state from MSDP
Context	<b>configure router</b> <i>string msdp import-policy reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**local-address string**

Synopsis	Local end of an MSDP session
Context	<b>configure router</b> <i>string msdp local-address string</i>
Tree	<a href="#">local-address</a>
Introduced	19.10.R1
Platforms	All

**peer [ip-address] string**

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure router</b> <i>string msdp peer string</i>
Tree	<a href="#">peer</a>

Introduced 19.10.R1  
Platforms All

### **[ip-address]** *string*

Synopsis IP address of the remote MSDP router for peering  
Context **configure** *router string msdp peer string*  
Tree *peer*  
Notes This element is part of a list key.  
Introduced 19.10.R1  
Platforms All

### **active-source-limit** *number*

Synopsis Maximum number of active messages accepted by MSDP  
Context **configure** *router string msdp peer string active-source-limit number*  
Tree *active-source-limit*  
Range 0 to 1000000  
Introduced 19.10.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of MSDP  
Context **configure** *router string msdp peer string admin-state keyword*  
Tree *admin-state*  
Options enable, disable  
Default enable  
Introduced 19.10.R1  
Platforms All

### **authentication-key** *string*

Synopsis MD5 authentication key for the MSDP peering session  
Context **configure** *router string msdp peer string authentication-key string*

Tree	<a href="#">authentication-key</a>
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

**default-peer** *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">default-peer</a> <i>boolean</i>
Tree	<a href="#">default-peer</a>
Default	false
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**import-policy** *reference*

Synopsis	Policy to import source active state from MSDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced 19.10.R1  
Platforms All

### **local-address** *string*

Synopsis Local end of an MSDP session  
Context **configure** [router](#) *string* [msdp](#) [peer](#) *string* [local-address](#) *string*  
Tree [local-address](#)  
Introduced 19.10.R1  
Platforms All

### **receive-message-rate**

Synopsis Enter the **receive-message-rate** context  
Context **configure** [router](#) *string* [msdp](#) [peer](#) *string* [receive-message-rate](#)  
Tree [receive-message-rate](#)  
Introduced 19.10.R1  
Platforms All

### **rate** *number*

Synopsis Number of MSDP messages read from the TCP session  
Context **configure** [router](#) *string* [msdp](#) [peer](#) *string* [receive-message-rate](#) [rate](#) *number*  
Tree [rate](#)  
Range 10 to 10000  
Introduced 19.10.R1  
Platforms All

### **threshold** *number*

Synopsis Limit for MSDP messages read from the TCP session  
Context **configure** [router](#) *string* [msdp](#) [peer](#) *string* [receive-message-rate](#) [threshold](#) *number*  
Tree [threshold](#)  
Range 1 to 1000000  
Introduced 19.10.R1



Platforms All

### **time** *number*

Synopsis Limit of MSDP messages read from the TCP session  
 Context **configure** *router string msdp peer string receive-message-rate time number*  
 Tree [time](#)  
 Range 1 to 600  
 Units seconds  
 Introduced 19.10.R1  
 Platforms All

### **receive-message-rate**

Synopsis Enter the **receive-message-rate** context  
 Context **configure** *router string msdp receive-message-rate*  
 Tree [receive-message-rate](#)  
 Introduced 19.10.R1  
 Platforms All

### **rate** *number*

Synopsis Number of MSDP messages read from the TCP session  
 Context **configure** *router string msdp receive-message-rate rate number*  
 Tree [rate](#)  
 Range 10 to 10000  
 Introduced 19.10.R1  
 Platforms All

### **threshold** *number*

Synopsis Limit for MSDP messages read from the TCP session  
 Context **configure** *router string msdp receive-message-rate threshold number*  
 Tree [threshold](#)  
 Range 1 to 1000000

Introduced 19.10.R1  
Platforms All

### **time** *number*

Synopsis Limit of MSDP messages read from the TCP session  
Context **configure** *router string msdp receive-message-rate time number*  
Tree *time*  
Range 1 to 600  
Units seconds  
Introduced 19.10.R1  
Platforms All

### **rpf-table** *keyword*

Synopsis Route tables for RPF lookup  
Context **configure** *router string msdp rpf-table keyword*  
Tree *rpf-table*  
Options rtable-m, rtable-u, both  
Default rtable-u  
Introduced 19.10.R1  
Platforms All

### **source** [*ip-prefix*] *string*

Synopsis Enter the **source** list instance  
Context **configure** *router string msdp source string*  
Tree *source*  
Introduced 19.10.R1  
Platforms All

### [*ip-prefix*] *string*

Synopsis Source IP address for accepted active source messages  
Context **configure** *router string msdp source string*

Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **active-source-limit** *number*

Synopsis	Number of active source messages accepted by MSDP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">source</a> <i>string</i> <a href="#">active-source-limit</a> <i>number</i>
Tree	<a href="#">active-source-limit</a>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

### **source-active-cache-lifetime** *number*

Synopsis	Lifetime of SA entries in the cache
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">msdp</a> <a href="#">source-active-cache-lifetime</a> <i>number</i>
Tree	<a href="#">source-active-cache-lifetime</a>
Range	90 to 600
Units	seconds
Default	90
Introduced	19.10.R1
Platforms	All

### **mss-adjust**

Synopsis	Enable the <b>mss-adjust</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mss-adjust</a>
Tree	<a href="#">mss-adjust</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group used for TCP-MSS adjustment
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mss-adjust</i> <i>nat-group</i> <i>number</i>
Tree	<a href="#">nat-group</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**segment-size** *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mss-adjust</i> <i>segment-size</i> <i>number</i>
Tree	<a href="#">segment-size</a>
Range	160 to 10240
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mtrace2**

Synopsis	Enter the <b>mtrace2</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mtrace2</i>
Tree	<a href="#">mtrace2</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of multicast path tracing
Context	<b>configure</b> <i>router</i> <i>string</i> <i>mtrace2</i> <i>admin-state</i> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **udp-port** *number*

Synopsis	Destination and listening port for the mtrace2 command
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mtrace2</a> <a href="#">udp-port</a> <i>number</i>
Tree	<a href="#">udp-port</a>
Range	1024 to 49151
Default	5000
Introduced	16.0.R1
Platforms	All

### **multicast-info-policy** *reference*

Synopsis	Multicast policy name for virtual router
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">multicast-info-policy</a> <i>reference</i>
Tree	<a href="#">multicast-info-policy</a>
Reference	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **nat**

Synopsis	Enable the <b>nat</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a>
Tree	<a href="#">nat</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inside**

Synopsis	Enter the <b>inside</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a>
Tree	<a href="#">inside</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**I2-aware**

Synopsis	Enter the <b>I2-aware</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">I2-aware</a>
Tree	<a href="#">I2-aware</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**force-unique-ip-addresses** *boolean*

Synopsis	Enforce unique IPv4 addresses for L2-aware subscribers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">I2-aware</a> <a href="#">force-unique-ip-addresses</a> <i>boolean</i>
Tree	<a href="#">force-unique-ip-addresses</a>
Description	When configured to <b>true</b> , the system enforces the uniqueness of IPv4 addresses of L2-aware subscribers in an inside routing context.  This functionality is required if multicast sourced from the inside routing context is enabled for L2-aware subscribers.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscribers** [[prefix](#)] *string*

Synopsis	Add a list entry for <b>subscribers</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">I2-aware</a> <a href="#">subscribers</a> <i>string</i>
Tree	<a href="#">subscribers</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[prefix] string**

Synopsis	Layer-2 Aware NAT subscriber prefix
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">l2-aware</a> <a href="#">subscribers</a> <a href="#">string</a>
Tree	<a href="#">subscribers</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**large-scale**

Synopsis	Enter the <b>large-scale</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a>
Tree	<a href="#">large-scale</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dnat-only**

Synopsis	Enter the <b>dnat-only</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dnat-only</a>
Tree	<a href="#">dnat-only</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**source-prefix-list reference**

Synopsis	NAT prefix list that contains source IP addresses
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dnat-only</a> <a href="#">source-prefix-list</a> <a href="#">reference</a>
Tree	<a href="#">source-prefix-list</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">prefix-list</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dual-stack-lite

Synopsis	Enter the <b>dual-stack-lite</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a>
Tree	<a href="#">dual-stack-lite</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of Dual Stack Lite
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## deterministic

Synopsis	Enter the <b>deterministic</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a>
Tree	<a href="#">deterministic</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix-map [[source-prefix](#)] *string nat-policy reference*

Synopsis	Enter the <b>prefix-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string nat-policy reference</i>
Tree	<a href="#">prefix-map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[source-prefix] string**

Synopsis	List containing source IP addresses on the private side
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a>
Tree	<a href="#">prefix-map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy reference**

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a>
Tree	<a href="#">prefix-map</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <a href="#">string</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the prefix
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**map [from] string to string**

Synopsis	Enter the <b>map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <a href="#">string</a> <a href="#">to</a> <a href="#">string</a>

Tree	<a href="#">map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[from]** *string*

Synopsis	Beginning of the range for IPv6 addresses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <i>string</i> <a href="#">to</a> <i>string</i>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**to** *string*

Synopsis	End of the range for IPv6 addresses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <i>string</i> <a href="#">to</a> <i>string</i>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**first-outside-address** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <i>string</i> <a href="#">to</a> <i>string</i> <a href="#">first-outside-address</a> <i>string</i>
Tree	<a href="#">first-outside-address</a>
Notes	This element is mandatory.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **endpoint** [[address](#)] *string*

Synopsis Enter the **endpoint** list instance

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [endpoint](#) *string*

Tree [endpoint](#)

Max. Instances 128

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[address]** *string*

Synopsis Dual Stack Lite IPv6 address

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [endpoint](#) *string*

Tree [endpoint](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-fragmentation** *keyword*

Synopsis Fragmentation control of the AFTR originated downstream IPv6 traffic

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [endpoint](#) *string* [ip-fragmentation](#) *keyword*

Tree [ip-fragmentation](#)

Options fragment-ipv6, fragment-ipv6-unless-ipv4-df-set

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **min-first-fragment-size-rx** *number*

Synopsis Minimum MTU size for upstream packets

Context **configure** [router](#) *string* [nat](#) [inside](#) [large-scale](#) [dual-stack-lite](#) [endpoint](#) *string* [min-first-fragment-size-rx](#) *number*

Tree	<a href="#">min-first-fragment-size-rx</a>
Description	This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.
Range	512 to 1280
Default	1280
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reassemble** *boolean*

Synopsis	Reassembly of IPv6 payload datagrams
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">endpoint</a> <i>string</i> <a href="#">reassemble</a> <i>boolean</i>
Tree	<a href="#">reassemble</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-mtu** *number*

Synopsis	DS-Lite tunnel MTU for this address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">endpoint</a> <i>string</i> <a href="#">tunnel-mtu</a> <i>number</i>
Tree	<a href="#">tunnel-mtu</a>
Description	This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.
Range	464 to 9212
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-subscriber-limit** *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">max-subscriber-limit</a> <i>number</i>
Tree	<a href="#">max-subscriber-limit</a>
Range	1   2   4   8   16   32   64   128   256   512   1024   2048   4096   8192   16384   32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber-prefix-length** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length of the Dual Stack Lite subscribers
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">subscriber-prefix-length</a> <i>number</i>
Tree	<a href="#">subscriber-prefix-length</a>
Range	32 to 64   128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy for LSN
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat-policy</a> <i>reference</i>
Tree	<a href="#">nat-policy</a>

Reference	<b>configure service nat nat-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat44

Synopsis	Enter the <b>nat44</b> context
Context	<b>configure router</b> <i>string</i> <b>nat inside large-scale nat44</b>
Tree	<a href="#">nat44</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## destination-prefix [[ip-prefix-length](#)] *string*

Synopsis	Enter the <b>destination-prefix</b> list instance
Context	<b>configure router</b> <i>string</i> <b>nat inside large-scale nat44 destination-prefix</b> <i>string</i>
Tree	<a href="#">destination-prefix</a>
Max. Instances	6144
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [\[ip-prefix-length\]](#) *string*

Synopsis	IP prefix for the destination address
Context	<b>configure router</b> <i>string</i> <b>nat inside large-scale nat44 destination-prefix</b> <i>string</i>
Tree	<a href="#">destination-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat-policy *reference*



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">destination-prefix</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## deterministic

Synopsis	Enter the <b>deterministic</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a>
Tree	<a href="#">deterministic</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix-map [[source-prefix](#)] *string* [nat-policy](#) [reference](#)

Synopsis	Enter the <b>prefix-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a>
Tree	<a href="#">prefix-map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [\[source-prefix\]](#) *string*

Synopsis	Traffic sent from sources within this prefix will be NATed
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <a href="#">reference</a>
Tree	<a href="#">prefix-map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** *reference*

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i>
Tree	<a href="#">prefix-map</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**map** [[from](#)] *string to string*

Synopsis	Enter the <b>map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i> <a href="#">map</a> <i>string to string</i>
Tree	<a href="#">map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[from]** *string*

Synopsis	Beginning of the range for IPv4 addresses
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i> <a href="#">map</a> <i>string to string</i>
Tree	<a href="#">map</a>



Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**to string**

Synopsis	End of the range for IPv4 addresses
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>inside</b> <b>large-scale</b> <b>nat44</b> <b>deterministic</b> <b>prefix-map</b> <i>string</i> <b>nat-policy</b> <b>reference</b> <b>map</b> <i>string</i> <b>to</b> <i>string</i>
Tree	<b>map</b>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**first-outside-address** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>inside</b> <b>large-scale</b> <b>nat44</b> <b>deterministic</b> <b>prefix-map</b> <i>string</i> <b>nat-policy</b> <b>reference</b> <b>map</b> <i>string</i> <b>to</b> <i>string</i> <b>first-outside-address</b> <i>string</i>
Tree	<b>first-outside-address</b>
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-subscriber-limit** *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>inside</b> <b>large-scale</b> <b>nat44</b> <b>max-subscriber-limit</b> <i>number</i>
Tree	<b>max-subscriber-limit</b>
Range	1   2   4   8   16   32   64   128   256   512   1024   2048   4096   8192   16384   32768

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-import** *reference*

Synopsis	Import BGP-VPN routes in NAT inside routing context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">nat-import</a> <i>reference</i>
Tree	<a href="#">nat-import</a>
Description	<p>This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p> <p>All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.</p>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-prefix** [[ip-prefix-length](#)] *string*

Synopsis	Enter the <b>source-prefix</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">source-prefix</a> <i>string</i>
Tree	<a href="#">source-prefix</a>
Description	<p>Commands in this context configure the source prefix used to identify traffic for NAT processing. After the traffic is diverted to the ESA-VM or vISA, its source IP address is checked to determine if it belongs to the configured prefix. If it does, the traffic is processed by NAT, otherwise, it is dropped.</p>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[ip-prefix-length]** *string*

Synopsis	IPv4 prefix length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">source-prefix</a> <i>string</i>
Tree	<a href="#">source-prefix</a>
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AT policy associated with the source prefix
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">source-prefix</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat64**

Synopsis	Enable the <b>nat64</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a>
Tree	<a href="#">nat64</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of NAT64
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**drop-zero-ipv4-checksum** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop UDP datagrams with zero IPv4 checksum
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <b>drop-zero-ipv4-checksum</b> <i>boolean</i>
Tree	<a href="#">drop-zero-ipv4-checksum</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**insert-ipv6-fragment-header** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include IPv6 fragment header to indicate that the sender allows fragmentation
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <b>insert-ipv6-fragment-header</b> <i>boolean</i>
Tree	<a href="#">insert-ipv6-fragment-header</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-fragmentation *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Control fragmentation of originated downstream IPv6 traffic
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">ip-fragmentation</a> <i>keyword</i>
Tree	<a href="#">ip-fragmentation</a>
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6-mtu *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the IPv6 downstream packet in NAT64
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">ipv6-mtu</a> <i>number</i>
Tree	<a href="#">ipv6-mtu</a>
Range	1280 to 9212
Default	1520
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix to derive the IPv6 address from the IPv4 address
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>

Default	64:ff9b::/96
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-prefix-length** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length for the NAT64 subscribers
Context	<b>configure</b> <i>router string nat inside large-scale nat64 subscriber-prefix-length number</i>
Tree	<a href="#">subscriber-prefix-length</a>
Range	32 to 64   128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tos**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>tos</b> context
Context	<b>configure</b> <i>router string nat inside large-scale nat64 tos</i>
Tree	<a href="#">tos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## downstream



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>downstream</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a> <a href="#">downstream</a>
Tree	<a href="#">downstream</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## use-ipv4 *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a> <a href="#">downstream</a> <a href="#">use-ipv4</a> <i>boolean</i>
Tree	<a href="#">use-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## upstream



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>upstream</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a> <a href="#">upstream</a>
Tree	<a href="#">upstream</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**set-tos** (*keyword* | *number*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TOS/DSCP bits in IPv4 frame in the upstream direction
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat64</a> <a href="#">tos</a> <a href="#">upstream</a> <b>set-tos</b> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">set-tos</a>
Range	0 to 255
Options	use-ipv6
Default	use-ipv6
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**redundancy**

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <b>redundancy</b>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer** *string*

Synopsis	IP address of the NAT redundancy peer for this virtual router instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">redundancy</a> <b>peer</b> <i>string</i>
Tree	<a href="#">peer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer6** *string*

Synopsis	IPv6 address of the NAT redundancy peer for this virtual router instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">redundancy</a> <b>peer6</b> <i>string</i>
Tree	<a href="#">peer6</a>



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **steering-route** *string*

Synopsis	IP address and prefix length of the steering route
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">steering-route</a> <i>string</i>
Tree	<a href="#">steering-route</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **static-port-forwards**

Synopsis	Enter the <b>static-port-forwards</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">static-port-forwards</a>
Tree	<a href="#">static-port-forwards</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spf-nat-policy** [[nat-policy](#)] *reference*

Synopsis	Add a list entry for <b>spf-nat-policy</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">static-port-forwards</a> <a href="#">spf-nat-policy</a> <i>reference</i>
Tree	<a href="#">spf-nat-policy</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[nat-policy]** *reference*

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">static-port-forwards</a> <a href="#">spf-nat-policy</a> <i>reference</i>
Tree	<a href="#">spf-nat-policy</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">nat-policy</a> <i>string</i>
Notes	This element is part of a list key.

Introduced 23.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### subscriber-identification

Synopsis Enter the **subscriber-identification** context  
Context **configure** [router](#) [string](#) [nat](#) [inside](#) [large-scale](#) [subscriber-identification](#)  
Tree [subscriber-identification](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### admin-state *keyword*

Synopsis Administrative state of subscriber identification  
Context **configure** [router](#) [string](#) [nat](#) [inside](#) [large-scale](#) [subscriber-identification](#) [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### attribute

Synopsis Enter the **attribute** context  
Context **configure** [router](#) [string](#) [nat](#) [inside](#) [large-scale](#) [subscriber-identification](#) [attribute](#)  
Tree [attribute](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### type *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	RADIUS attribute used as subscriber identifier
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">attribute</a> <a href="#">type</a> <a href="#">keyword</a>
Tree	<a href="#">type</a>
Options	alc-sub-string, user-name, class, station-id, imsi, imei
Default	alc-sub-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### vendor keyword



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The RADIUS Vendor
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">attribute</a> <a href="#">vendor</a> <a href="#">keyword</a>
Tree	<a href="#">vendor</a>
Options	standard, nokia, 3gpp
Default	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### description string

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**drop-unidentified-traffic** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop traffic from unidentified flows
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">drop-unidentified-traffic</a> <i>boolean</i>
Tree	<a href="#">drop-unidentified-traffic</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**radius-proxy-server**

Synopsis	Enable the <b>radius-proxy-server</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">radius-proxy-server</a>
Tree	<a href="#">radius-proxy-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">radius-proxy-server</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Server name
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">subscriber-identification</a> <a href="#">radius-proxy-server</a> <a href="#">server</a> <i>string</i>
Tree	<a href="#">server</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## traffic-identification

Synopsis	Enter the <b>traffic-identification</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">traffic-identification</a>
Tree	<a href="#">traffic-identification</a>
Description	Commands in this context configure traffic identification for NAT processing
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## source-prefix-only *boolean*

Synopsis	Allow traffic associated with source prefixes only
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">traffic-identification</a> <a href="#">source-prefix-only</a> <i>boolean</i>
Tree	<a href="#">source-prefix-only</a>
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## map

Synopsis	Enter the <b>map</b> context
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a>
Tree	<a href="#">map</a>
Introduced	16.0.R1
Platforms	VSR

### **map-domain** [[domain-name](#)] *reference*

Synopsis	Add a list entry for <b>map-domain</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a> <a href="#">map-domain</a> <i>reference</i>
Tree	<a href="#">map-domain</a>
Introduced	16.0.R1
Platforms	VSR

### **[domain-name]** *reference*

Synopsis	MAP domain template name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a> <a href="#">map-domain</a> <i>reference</i>
Tree	<a href="#">map-domain</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">map-t</a> <a href="#">domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	VSR

### **outside**

Synopsis	Enter the <b>outside</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a>
Tree	<a href="#">outside</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dnat-only**

Synopsis	Enter the <b>dnat-only</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">dnat-only</a>

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Tree	<a href="#">dnat-only</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **route-limit** *number*

Synopsis	Limit for internal routes for downstream traffic
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">dnat-only</a> <a href="#">route-limit</a> <i>number</i>
Tree	<a href="#">route-limit</a>
Range	1 to 131072
Default	32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filters**

Synopsis	Enter the <b>filters</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">filters</a>
Tree	<a href="#">filters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **downstream**

Synopsis	Enter the <b>downstream</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">filters</a> <a href="#">downstream</a>
Tree	<a href="#">downstream</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4** *reference*

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">filters</a> <a href="#">downstream</a> <a href="#">ipv4</a> <i>reference</i>
Tree	<a href="#">ipv4</a>

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Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure router string nat outside filters downstream ipv6 reference</b>
Tree	<a href="#">ipv6</a>
Reference	<b>configure filter ipv6-filter string</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### upstream

Synopsis	Enter the <b>upstream</b> context
Context	<b>configure router string nat outside filters upstream</b>
Tree	<a href="#">upstream</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv4 reference

Synopsis	IPv4 filter policy name
Context	<b>configure router string nat outside filters upstream ipv4 reference</b>
Tree	<a href="#">ipv4</a>
Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure router string nat outside filters upstream ipv6 reference</b>
Tree	<a href="#">ipv6</a>



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Reference	<b>configure filter ipv6-filter string</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu number**

Synopsis	MTU for downstream traffic
Context	<b>configure router string nat outside mtu number</b>
Tree	<b>mtu</b>
Range	512 to 9000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pool [name] string**

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure router string nat outside pool string</b>
Tree	<b>pool</b>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name] string**

Synopsis	NAT pool name
Context	<b>configure router string nat outside pool string</b>
Tree	<b>pool</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address-pooling** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Outside IP address allocation mode for a NAT subscriber
Context	<b>configure</b> <i>router</i> <i>string</i> <b>nat</b> <i>outside</i> <b>pool</b> <i>string</i> <b>address-pooling</b> <i>keyword</i>
Tree	<a href="#">address-pooling</a>
Description	<p>This command configures address pooling which defines a relationship between the NAT subscriber and its outside IP address(es).</p> <p>The behavior in NAT, as defined in RFC 7857, strongly recommends that the NAT subscribers be mapped to a single outside IP address. If this outside IP address runs out of ports, no new ports for the subscriber are allocated. This behavior is called paired address pooling.</p> <p>The alternative behavior is arbitrary address pooling, where a NAT subscriber is mapped to multiple IP addresses when the current outside IP address runs out of ports. This way, the subscriber becomes associated with multiple outside IP addresses. While this results in better resource utilization in NAT, it may negatively affect the behavior of some applications.</p>
Options	paired, arbitrary
Default	paired
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address-range** [*start*] *string* *end* *string*

Synopsis	Enter the <b>address-range</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <b>nat</b> <i>outside</i> <b>pool</b> <i>string</i> <b>address-range</b> <i>string</i> <i>end</i> <i>string</i>
Tree	<a href="#">address-range</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[start]** *string*

Synopsis	Lower bound of the NAT address range
Context	<b>configure</b> <i>router</i> <i>string</i> <b>nat</b> <i>outside</i> <b>pool</b> <i>string</i> <b>address-range</b> <i>string</i> <i>end</i> <i>string</i>

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Tree	<a href="#">address-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end string**

Synopsis	Upper bound of the NAT address range
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">address-range</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a>
Tree	<a href="#">address-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">address-range</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **drain boolean**

Synopsis	Start or stop draining this NAT address range
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">address-range</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a> <a href="#">drain</a> <a href="#">boolean</a>
Tree	<a href="#">drain</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the outside routing NAT pool
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**applications**

Synopsis	Enter the <b>applications</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">applications</a>
Tree	<a href="#">applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**agnostic** *boolean***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">applications</a> <a href="#">agnostic</a> <i>boolean</i>
Tree	<a href="#">agnostic</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flexible-port-allocation** *boolean***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocates individual ports per subscriber in a pool
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">applications</a> <a href="#">flexible-port-allocation</a> <a href="#">boolean</a>
Tree	<a href="#">flexible-port-allocation</a>
Description	When configured to <b>true</b> , the router enables LSN44 pool behavior, where a subscriber allocates ports individually and not through port blocks. The port block is removed and port logging is disabled for this application. Static port forwards can be interleaved with dynamically allocated ports when this application is enabled. A subscriber limit that is the maximum number of subscribers per outside IP address is not supported for this application.
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**icmp-echo-reply** *boolean*

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">icmp-echo-reply</a> <a href="#">boolean</a>
Tree	<a href="#">icmp-echo-reply</a>
Description	This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use.

In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it.

In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.

In LSN, the reply from an outside IP address is generated regardless if a binding is present.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## I2-aware

Synopsis	Enter the <b>I2-aware</b> context
Context	<b>configure</b> <i>router string nat outside pool string I2-aware</i>
Tree	<i>I2-aware</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-host

Synopsis	Enable the <b>default-host</b> context
Context	<b>configure</b> <i>router string nat outside pool string I2-aware default-host</i>
Tree	<i>default-host</i>
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inside-router-instance *string*

Synopsis	Router instance of the DMZ
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Context	<b>configure</b> <i>router string nat outside pool string l2-aware default-host inside-router-instance string</i>
Tree	<a href="#">inside-router-instance</a>
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis	IP address of the default DMZ host
Context	<b>configure</b> <i>router string nat outside pool string l2-aware default-host ip-address string</i>
Tree	<a href="#">ip-address</a>
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	<b>configure</b> <i>router string nat outside pool string l2-aware default-host rate-limit number</i>
Tree	<a href="#">rate-limit</a>
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host.  Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**external-assignment** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	External IP address for Layer-2-aware
Context	<b>configure</b> <i>router</i> <i>string</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>string</i> <i>l2-aware</i> <i>external-assignment</i> <i>boolean</i>
Tree	<i>external-assignment</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-block-extension****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>port-block-extension</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>string</i> <i>l2-aware</i> <i>port-block-extension</i>
Tree	<i>port-block-extension</i>
Description	Commands in this context configure the attributes of the port block reserved for a dynamic NAT traffic flow for each subscriber with a port forwarding entry.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ports** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per dynamic port-block
Context	<b>configure</b> <i>router</i> <i>string</i> <i>nat</i> <i>outside</i> <i>pool</i> <i>string</i> <i>l2-aware</i> <i>port-block-extension</i> <i>ports</i> <i>number</i>



Tree	<a href="#">ports</a>
Description	<p>For Carrier Grade NAT (CGN), this command represents the size of all port blocks for NAT subscribes in the NAT pool.</p> <p>For L2-Aware NAT, this command represents only the size of the initial port block of a subscriber in the L2-aware NAT pool. Additional port-blocks (extended port blocks) for the L2-Aware subscriber must be explicitly enabled under the <b>I2-aware port-block-extension</b> hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port-blocks.</p>
Range	10 to 5000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscriber

Synopsis	Enter the <b>subscriber</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">I2-aware</a> <a href="#">port-block-extension</a> <a href="#">subscriber</a>
Tree	<a href="#">subscriber</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">I2-aware</a> <a href="#">port-block-extension</a> <a href="#">subscriber</a> <a href="#">watermarks</a>
Tree	<a href="#">watermarks</a>
Description	This command configures watermarks for NAT resources.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark percentage
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">I2-aware</a> <a href="#">port-block-extension</a> <a href="#">subscriber</a> <a href="#">watermarks</a> <a href="#">high</a> <a href="#">number</a>
Tree	<a href="#">high</a>

Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis	Low watermark percentage
Context	<b>configure</b> <i>router string nat outside pool string l2-aware port-block-extension subscriber watermarks low number</i>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-limit number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of L2-Aware NAT subscribers per outside address
Context	<b>configure</b> <i>router string nat outside pool string l2-aware port-block-extension subscriber-limit number</i>
Tree	<a href="#">subscriber-limit</a>
Description	When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following: <ul style="list-style-type: none"> <li>• well-known port (this is a fixed and permanently allocated block of ports for all NAT types)</li> <li>• static port-forwarding range (if enabled by configuration)</li> </ul>

- port range allocated for initial port blocks of each L2-Aware subscriber
- port range allocated for extended port blocks for the remainder after the three previous port ranges

The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber.

The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.

Range	2 to 2000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>l2-aware port-block-extension</b> <b>watermarks</b>
Tree	<b>watermarks</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark percentage
Context	<b>configure</b> <i>router</i> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>l2-aware port-block-extension</b> <b>watermarks</b> <b>high</b> <i>number</i>
Tree	<b>high</b>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**low number**

Synopsis	Low watermark percentage
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware port-block-extension watermarks</a> <a href="#">low number</a>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**large-scale**

Synopsis	Enter the <b>large-scale</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">large-scale</a>
Tree	<a href="#">large-scale</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-host**

Synopsis	Enable the <b>default-host</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">default-host</a>
Tree	<a href="#">default-host</a>
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inside-router-instance** *string*

Synopsis	Router instance of the DMZ
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">default-host</a> <a href="#">inside-router-instance</a> <i>string</i>
Tree	<a href="#">inside-router-instance</a>
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-address** *string*

Synopsis	IP address of the default DMZ host
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">default-host</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate-limit** *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">default-host</a> <a href="#">rate-limit</a> <i>number</i>
Tree	<a href="#">rate-limit</a>
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host.  Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.
Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## deterministic

Synopsis Enter the **deterministic** context

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [deterministic](#)

Tree [deterministic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-reservation *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Number of ports per deterministic port-block

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [deterministic](#) [port-reservation](#) *number*

Tree [port-reservation](#)

Range 1 to 65536

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis Enable the **watermarks** context

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [deterministic](#) [watermarks](#)

Tree [watermarks](#)

Description Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN.

High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool.

For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.

Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high number**

Synopsis	High watermark percentage
Context	<b>configure</b> <i>router string nat outside pool string large-scale deterministic watermarks high number</i>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis	Low watermark percentage
Context	<b>configure</b> <i>router string nat outside pool string large-scale deterministic watermarks low number</i>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flexible-port-allocation**

Synopsis	Enter the <b>flexible-port-allocation</b> context
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Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">large-scale</a> <a href="#">flexible-port-allocation</a>
Tree	<a href="#">flexible-port-allocation</a>
Description	Commands in this context enable LSN44 pool behavior where a subscriber allocates ports individually instead of through port blocks. The port block concept is removed for this application. Static port forwards can be interleaved with dynamically-allocated ports. Port logging is disabled when this application is enabled. A subscriber limit that is the maximum number of subscribers per outside IP address is not supported for this application.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## free-port-limit

Synopsis	Enter the <b>free-port-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">large-scale</a> <a href="#">flexible-port-allocation</a> <a href="#">free-port-limit</a>
Tree	<a href="#">free-port-limit</a>
Description	Commands in this context configure the minimal number of ports per protocol and per outside IP address in an LSN44 pool with flexible port allocations that must be free to map new subscribers to the outside IP address. This limit avoids rapid port depletion for new subscribers in paired pooling mode, or unnecessary toggling between external IP addresses for existing subscribers in arbitrary pooling mode.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of free ports for ICMP per outside IP address
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">large-scale</a> <a href="#">flexible-port-allocation</a> <a href="#">free-port-limit</a> <a href="#">icmp</a> <i>number</i>
Tree	<a href="#">icmp</a>
Description	This command configures the minimum number of ports for the ICMP protocol per outside IP address in an LSN44 pool with flexible port allocations that are free so that a new subscriber is mapped to the outside IP address. This limit is set to avoid rapid port depletion for new subscribers in paired pooling mode, or unnecessary toggling between external IP addresses for existing subscribers in arbitrary pooling mode.



Range	1 to 10000
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### tcp number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of free ports for TCP per outside IP address
Context	<b>configure</b> <i>router string nat outside pool string large-scale flexible-port-allocation free-port-limit tcp number</i>
Tree	<a href="#">tcp</a>
Description	This command configures the minimum number of ports for TCP protocol per outside IP address in an LSN44 pool with flexible port allocations that are free so that a new subscriber is mapped to the outside IP address. This limit is set to avoid rapid port depletion for new subscribers in paired pooling mode, or unnecessary toggling between external IP addresses for existing subscribers in arbitrary pooling mode.
Range	1 to 10000
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### udp number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of free ports for UDP per outside IP address
Context	<b>configure</b> <i>router string nat outside pool string large-scale flexible-port-allocation free-port-limit udp number</i>
Tree	<a href="#">udp</a>
Description	This command configures the minimum number of ports for UDP protocol per outside IP address in an LSN44 pool with flexible port allocations that are free so that a new subscriber is mapped to the outside IP address. This limit is set to avoid rapid port depletion for new subscribers in paired pooling mode, or unnecessary toggling between external IP addresses for existing subscribers in arbitrary pooling mode.
Range	1 to 10000
Introduced	23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## redundancy

Synopsis Enter the **redundancy** context

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [redundancy](#)

Tree [redundancy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of NAT pool redundancy

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [redundancy](#) [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Notes The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## export-route *string*

Synopsis Route to export to the peer

Context **configure** [router](#) *string* [nat](#) [outside](#) [pool](#) *string* [large-scale](#) [redundancy](#) [export-route](#) *string*

Tree [export-route](#)

Notes The following elements are part of a choice: (**admin-state**, **export-route**, and **monitor-route**) or **follow**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## follow

Synopsis	Enter the <b>follow</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">follow</a>
Tree	<a href="#">follow</a>
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## name *string*

Synopsis	Name of the pool where activity is shared
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">follow</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router-instance *string*

Synopsis	Router instance where the lead pool resides
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">follow</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## monitor-route *string*

Synopsis	Monitor the peer route
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">monitor-route</a> <i>string</i>
Tree	<a href="#">monitor-route</a>
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-limit** *number*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>large-scale</b> <b>subscriber-limit</b> <i>number</i>
Tree	<b>subscriber-limit</b>
Range	1 to 65535   4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	<b>configure</b> <b>router</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	auto, napt, one-to-one
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-group** *reference*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a NAT group
Context	<b>configure</b> <i>router string nat outside pool string nat-group reference</i>
Tree	<i>nat-group</i>
Reference	<b>configure</b> <i>isa nat-group number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-forwarding**

Synopsis	Enter the <b>port-forwarding</b> context
Context	<b>configure</b> <i>router string nat outside pool string port-forwarding</i>
Tree	<i>port-forwarding</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dynamic-block-reservation** *boolean***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Reserve dynamic block for subscriber
Context	<b>configure</b> <i>router string nat outside pool string port-forwarding dynamic-block-reservation boolean</i>
Tree	<i>dynamic-block-reservation</i>
Description	<p>When configured to <b>true</b>, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.</p> <p>The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.</p> <p>Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.</p>

When configured to **false**, dynamic port blocks are not reserved when the first port forward for the subscriber is created.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### range-end *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
Context	<b>configure</b> <i>router string nat outside pool string port-forwarding range-end number</i>
Tree	<a href="#">range-end</a>
Description	<p>This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the <b>range-start</b> command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.</p> <p>If unconfigured, the <b>range-end</b> implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.</p> <p>Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.</p>
Range	0   1023 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### range-start *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start of the wildcard range for port forwards
Context	<b>configure</b> <i>router string nat outside pool string port-forwarding range-start number</i>
Tree	<a href="#">range-start</a>

Description	This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the <b>range-end</b> command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool.  Port 0 is always excluded from the port forwarding range.  Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.
Range	0   1   1025 to 65535
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-reservation

Synopsis	Enter the <b>port-reservation</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <b>port-reservation</b>
Tree	<a href="#">port-reservation</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-blocks *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">port-reservation</a> <a href="#">port-blocks</a> <i>number</i>
Tree	<a href="#">port-blocks</a>
Description	In CGN, this command specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.  For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the <b>I2-aware port-block-extension</b> hierarchy in the NAT pool.
Range	0 to 64512

Notes	The following elements are part of a choice: <b>port-blocks</b> or <b>ports</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ports** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	<b>configure</b> <i>router string nat outside pool string port-reservation ports number</i>
Tree	<i>ports</i>
Description	<p>For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool.</p> <p>For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware subscriber must be explicitly enabled under the <b>I2-aware port-block-extension</b> hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port blocks.</p> <p>For deterministic pools, the port range begins with zero. However, for non-deterministic pools, the port range begins with one.</p>
Range	0 to 64512
Notes	The following elements are part of a choice: <b>port-blocks</b> or <b>ports</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.



Synopsis	NAT pool type
Context	<b>configure</b> <i>router string nat outside pool string type keyword</i>
Tree	<i>type</i>
Options	large-scale, l2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <i>router string nat outside pool string watermarks</i>
Tree	<i>watermarks</i>
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### high number

Synopsis	High watermark percentage
Context	<b>configure</b> <i>router string nat outside pool string watermarks high number</i>
Tree	<i>high</i>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### low number

Synopsis	Low watermark percentage
Context	<b>configure</b> <i>router string nat outside pool string watermarks low number</i>
Tree	<i>low</i>

Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### wlan-gw-group *reference*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a WLAN GW group for NAT
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### network-domains

Synopsis	Enter the <b>network-domains</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">network-domains</a>
Tree	<a href="#">network-domains</a>
Introduced	16.0.R4
Platforms	All

### network-domain [[domain-name](#)] *string*

Synopsis	Enter the <b>network-domain</b> list instance
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Context	<b>configure router</b> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i>
Tree	<a href="#">network-domain</a>
Max. Instances	5
Introduced	16.0.R4
Platforms	All

### **[domain-name]** *string*

Synopsis	Network domain name
Context	<b>configure router</b> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i>
Tree	<a href="#">network-domain</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure router</b> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **origin-validation**

Synopsis	Enter the <b>origin-validation</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">origin-validation</a>
Tree	<a href="#">origin-validation</a>
Introduced	19.5.R1
Platforms	All

**rpki-session** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>rpki-session</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">origin-validation</a> <a href="#">rpki-session</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">rpki-session</a>
Introduced	19.5.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv4 or IPv6 address for the RPKI local cache server
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">origin-validation</a> <a href="#">rpki-session</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">rpki-session</a>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the RPKI session
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">origin-validation</a> <a href="#">rpki-session</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**connect-retry** *number*

Synopsis	RPKI Connect Retry timer value
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">origin-validation</a> <a href="#">rpki-session</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">connect-retry</a> <i>number</i>
Tree	<a href="#">connect-retry</a>
Range	1 to 65535

Units	seconds
Default	120
Introduced	19.5.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	19.5.R1
Platforms	All

### **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local address for the TCP connection setup
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>local-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>local-address</b>
Introduced	19.5.R1
Platforms	All

### **port** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination port number used to contact cache server
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>port</b> <i>number</i>
Tree	<b>port</b>

Range	0 to 65535
Default	323
Introduced	19.5.R1
Platforms	All

## refresh-time

Synopsis	Enter the <b>refresh-time</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>refresh-time</b>
Tree	<b>refresh-time</b>
Introduced	19.5.R1
Platforms	All

## hold-time *number*

Synopsis	Length of time that the session is to be considered UP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>refresh-time</b> <b>hold-time</b> <i>number</i>
Tree	<b>hold-time</b>
Range	60 to 65535
Units	seconds
Default	600
Introduced	19.5.R1
Platforms	All

## value *number*

Synopsis	Periodic Serial Query PDUs sent for liveness detection
Context	<b>configure</b> <b>router</b> <i>string</i> <b>origin-validation</b> <b>rpki-session</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>refresh-time</b> <b>value</b> <i>number</i>
Tree	<b>value</b>
Range	30 to 32767
Units	seconds
Default	300
Introduced	19.5.R1

Platforms All

### **stale-time** *number*

Synopsis Maximum time prefix origin validation remains usable

Context **configure** **router** *string* **origin-validation** **rpki-session** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **stale-time** *number*

Tree **stale-time**

Range 60 to 3600

Units seconds

Default 3600

Introduced 19.5.R1

Platforms All

### **static-entry** [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*) **upto** *number* **origin-as** *number*

Synopsis Enter the **static-entry** list instance

Context **configure** **router** *string* **origin-validation** **static-entry** (*ipv4-prefix* | *ipv6-prefix*) **upto** *number* **origin-as** *number*

Tree **static-entry**

Introduced 19.5.R1

Platforms All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IPv4 or IPv6 address with the minimum prefix and length

Context **configure** **router** *string* **origin-validation** **static-entry** (*ipv4-prefix* | *ipv6-prefix*) **upto** *number* **origin-as** *number*

Tree **static-entry**

Notes This element is part of a list key.

Introduced 19.5.R1

Platforms All

### **upto** *number*

Synopsis Maximum prefix length

Context	<b>configure router</b> <i>string</i> <b>origin-validation static-entry</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>upto number origin-as number</b>
Tree	<b>static-entry</b>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **origin-as** *number*

Synopsis	Origin AS number
Context	<b>configure router</b> <i>string</i> <b>origin-validation static-entry</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>upto number origin-as number</b>
Tree	<b>static-entry</b>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **valid** *boolean*

Synopsis	Designate mix of origin AS and prefix range as valid
Context	<b>configure router</b> <i>string</i> <b>origin-validation static-entry</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>upto number origin-as number valid boolean</b>
Tree	<b>valid</b>
Default	true
Introduced	19.5.R1
Platforms	All

### **ospf** [**ospf-instance**] *number*

Synopsis	Enter the <b>ospf</b> list instance
Context	<b>configure router</b> <i>string</i> <b>ospf number</b>
Tree	<b>ospf</b>
Max. Instances	32



Introduced	16.0.R1
Platforms	All

**[ospf-instance] number**

Synopsis	Value for the integrated OSPF instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i>
Tree	<a href="#">ospf</a>
Range	0 to 31
MD-CLI	0
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the OSPF instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**advertise-router-capability keyword**

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">advertise-router-capability</a> <i>keyword</i>
Tree	<a href="#">advertise-router-capability</a>
Options	false, link, area, as
Default	false
Introduced	16.0.R1
Platforms	All

**advertise-tunnel-link** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <i>router string ospf number advertise-tunnel-link boolean</i>
Tree	<a href="#">advertise-tunnel-link</a>
Default	false
Introduced	16.0.R1
Platforms	All

**area** [[area-id](#)] *string*

Synopsis	Enter the <b>area</b> list instance
Context	<b>configure</b> <i>router string ospf number area string</i>
Tree	<a href="#">area</a>
Introduced	16.0.R1
Platforms	All

**[area-id]** *string*

Synopsis	Area-ID attribute
Context	<b>configure</b> <i>router string ospf number area string</i>
Tree	<a href="#">area</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <i>router string ospf number area string advertise-router-capability boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

**area-range** [**ip-prefix-mask**] *string*

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure</b> <i>router string ospf number area string area-range string</i>
Tree	<a href="#">area-range</a>
Introduced	16.0.R1
Platforms	All

**[ip-prefix-mask]** *string*

Synopsis	IP prefix and subnet mask for the range used by the ABR
Context	<b>configure</b> <i>router string ospf number area string area-range string</i>
Tree	<a href="#">area-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise** *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure</b> <i>router string ospf number area string area-range string advertise boolean</i>
Tree	<a href="#">advertise</a>
Default	true
Introduced	16.0.R1
Platforms	All

**bier**

Synopsis	Enter the <b>bier</b> context
Context	<b>configure</b> <i>router string ospf number area string bier</i>
Tree	<a href="#">bier</a>
Description	Commands in this context configure the administrative state of BIER and the BIER template assigned to the OSPF area.
Introduced	20.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of BIER
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>bier</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

**template** *reference*

Synopsis	BIER template name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>bier</b> <b>template</b> <i>reference</i>
Tree	<a href="#">template</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>bier</b> <b>template</b> <i>string</i>
Introduced	20.5.R1
Platforms	All

**blackhole-aggregate** *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>blackhole-aggregate</b> <i>boolean</i>
Tree	<a href="#">blackhole-aggregate</a>
Default	true
Introduced	16.0.R1
Platforms	All

**database-export-exclude** *boolean*

Synopsis	Exclude IGP link-state OSPF area info into TE-DB
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>database-export-exclude</b> <i>boolean</i>
Tree	<a href="#">database-export-exclude</a>
Default	false
Introduced	16.0.R1

Platforms All

### **export-policy** *reference*

Synopsis Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route

Context **configure** **router** *string* **ospf** *number* **area** *string* **export-policy** *reference*

Tree [export-policy](#)

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

### **import-policy** *reference*

Synopsis Route imported as Summary Type 3/Inter-Area-Prefix-LSA

Context **configure** **router** *string* **ospf** *number* **area** *string* **import-policy** *reference*

Tree [import-policy](#)

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

### **interface** [[interface-name](#)] *string*

Synopsis Enter the **interface** list instance

Context **configure** **router** *string* **ospf** *number* **area** *string* **interface** *string*

Tree [interface](#)

Description Commands in this context configure the attributes of the OSPF area interface.  
Unless they are explicitly configured, interfaces are not activated by default in any interior gateway protocol such as OSPF.

Introduced 16.0.R1

Platforms All

### **[interface-name]** *string*

Synopsis Router interface name

Context **configure** *router string ospf number area string interface string*

Tree [interface](#)

Description This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for **configure router interface** and **configure service ies interface** commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.

If the IP interface name does not exist or does not have an IP address configured, an error message is returned.

If the IP interface exists in a different area it is moved to this area.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **adjacency-set** [*id*] *reference*

Synopsis Add a list entry for **adjacency-set**

Context **configure** *router string ospf number area string interface string adjacency-set reference*

Tree [adjacency-set](#)

Max. Instances 1024

Introduced 16.0.R1

Platforms All

### **[id]** *reference*

Synopsis Adjacency set identity

Context **configure** *router string ospf number area string interface string adjacency-set reference*

Tree [adjacency-set](#)

Reference **configure** *router string ospf number segment-routing adjacency-set number*

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## adjacency-sid

Synopsis	Enable the <b>adjacency-sid</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>adjacency-sid</b>
Tree	<b>adjacency-sid</b>
Introduced	16.0.R1
Platforms	All

## label *number*

Synopsis	Adjacency SID label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>adjacency-sid</b> <b>label</b> <i>number</i>
Tree	<b>label</b>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the OSPF interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## advertise-router-capability *boolean*

Synopsis	Allow router advertisement capabilities
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> <i>advertise-router-capability</i> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **advertise-subnet** *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> <i>advertise-subnet</i> <i>boolean</i>
Tree	<a href="#">advertise-subnet</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	Authentication key
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> <i>authentication-key</i> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> <i>authentication-keychain</i> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <i>system</i> <i>security</i> <i>keychains</i> <i>keychain</i> <i>string</i>
Introduced	16.0.R3
Platforms	All



**authentication-type** *keyword*

Synopsis	Authentication type used on OSPF interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>authentication-type</b> <i>keyword</i>
Tree	<b>authentication-type</b>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Introduced	16.0.R1
Platforms	All

**remain-down-on-failure** *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness</b> <b>remain-down-on-failure</b> <i>boolean</i>
Tree	<b>remain-down-on-failure</b>
Default	false
Introduced	16.0.R1
Platforms	All

**strict** *boolean*

Synopsis	Enable BFD strict mode
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness</b> <b>strict</b> <i>boolean</i>
Tree	<b>strict</b>
Description	When configured to <b>true</b> , the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to <b>true</b> , the router uses Link-Local Signaling (LLS)

with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.

During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.

Default	false
Introduced	23.3.R1
Platforms	All

### **strict-mode-holddown** *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness</b> <b>strict-mode-holddown</b> <i>number</i>
Tree	<b>strict-mode-holddown</b>
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1
Platforms	All

### **dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>dead-interval</b> <i>number</i>
Tree	<b>dead-interval</b>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **flex-algo** [**flex-algo-id**] *number*

Synopsis	Enter the <b>flex-algo</b> list instance
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i>
Tree	<a href="#">flex-algo</a>
Description	Commands in this context configure the attributes of OSPFv2 flexible algorithms interface.
Max. Instances	7
Introduced	21.7.R1
Platforms	All

### **[flex-algo-id]** *number*

Synopsis	Flexible algorithm ID
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i>
Tree	<a href="#">flex-algo</a>
Range	128 to 255
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

### **node-sid**

Synopsis	Enable the <b>node-sid</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i> <i>node-sid</i>
Tree	<a href="#">node-sid</a>
Introduced	21.7.R1
Platforms	All

### **index** *number*

Synopsis	Node SID index for this interface
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>interface</i> <i>string</i> <i>flex-algo</i> <i>number</i> <i>node-sid</i> <i>index</i> <i>number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .

Introduced	21.7.R1
Platforms	All

**label** *number*

Synopsis	Label value for the node SID
Context	<b>configure</b> <b>router</b> <i>string ospf number area string interface string flex-algo number node-sid label number</i>
Tree	<b>label</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	21.7.R1
Platforms	All

**hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure</b> <b>router</b> <i>string ospf number area string interface string hello-interval number</i>
Tree	<b>hello-interval</b>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**interface-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	<b>configure</b> <b>router</b> <i>string ospf number area string interface string interface-type keyword</i>
Tree	<b>interface-type</b>
Description	This command specifies the interface type. <b>broadcast</b> - Broadcast network

To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.

**non-broadcast** - Non-broadcast network

**point-to-point** - Point-to-point link

Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.

**p2mp-nbma** - Point-to-multipoint on a link without broadcast or multicast support

No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.

**secondary** - Multiple secondary adjacencies allowed

A **secondary** interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.

Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	16.0.R1
Platforms	All

### load-balancing-weight *number*

Synopsis	Load balancing weight for an OSPF interface
Context	<b>configure</b> <i>router string ospf number area string interface string load-balancing-weight number</i>
Tree	<a href="#">load-balancing-weight</a>
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

### loopfree-alternate

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure</b> <i>router string ospf number area string interface string loopfree-alternate</i>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R3
Platforms	All

**exclude** *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b> <b>exclude</b> <i>boolean</i>
Tree	<b>exclude</b>
Default	false
Introduced	16.0.R3
Platforms	All

**policy-map**

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b> <b>policy-map</b>
Tree	<b>policy-map</b>
Introduced	16.0.R3
Platforms	All

**route-nh-template** *reference*

Synopsis	Route next hop policy template name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b> <b>policy-map</b> <b>route-nh-template</b> <i>reference</i>
Tree	<b>route-nh-template</b>
Reference	<b>configure</b> <b>routing-options</b> <b>route-next-hop-policy</b> <b>template</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

**lsa-filter-out** *keyword*

Synopsis	LSA flooding reduction
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>lsa-filter-out</b> <i>keyword</i>
Tree	<b>lsa-filter-out</b>
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults

Default	none
Introduced	16.0.R1
Platforms	All

### **message-digest-key** [[key-id](#)] *number*

Synopsis	Enter the <b>message-digest-key</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">message-digest-key</a> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Introduced	16.0.R1
Platforms	All

### **[key-id]** *number*

Synopsis	Message digest index
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">message-digest-key</a> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **md5** *string*

Synopsis	MD5 hash key
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">message-digest-key</a> <i>number</i> <b>md5</b> <i>string</i>
Tree	<a href="#">md5</a>
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**metric number**

Synopsis	Route cost metric for the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**mtu number**

Synopsis	MTU for the OSPF to use on the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>mtu</b> <i>number</i>
Tree	<b>mtu</b>
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

**neighbor [address] string**

Synopsis	Add a list entry for <b>neighbor</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>neighbor</b> <i>string</i>
Tree	<b>neighbor</b>
Introduced	16.0.R1
Platforms	All

**[address] string**

Synopsis	IPv4 address of the OSPFv2 neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>neighbor</b> <i>string</i>
Tree	<b>neighbor</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



## node-sid

Synopsis	Enable the <b>node-sid</b> context
Context	<b>configure</b> <i>router string ospf number area string interface string node-sid</i>
Tree	<i>node-sid</i>
Description	<p>Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.</p> <p>In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.</p> <p>This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.</p> <p>The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.</p> <p>The <b>clear-n-flag</b> option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p> <p>The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.</p>
Introduced	16.0.R1
Platforms	All

## clear-n-flag *boolean*

Synopsis	Clear the N-flag in an OSPF prefix
Context	<b>configure</b> <i>router string ospf number area string interface string node-sid clear-n-flag boolean</i>
Tree	<i>clear-n-flag</i>
Description	When configured to <b>true</b> , this command allows the user to clear the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system.

When configured to **false**, the N-flag in an OSPF prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.

When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

Default	false
Introduced	16.0.R1
Platforms	All

### **index number**

Synopsis	Node SID index for this interface
Context	<b>configure router string ospf number area string interface string node-sid index number</b>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

### **label number**

Synopsis	Label value for the node SID
Context	<b>configure router string ospf number area string interface string node-sid label number</b>
Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

### **passive boolean**

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	<b>configure router string ospf number area string interface string passive boolean</b>
Tree	<a href="#">passive</a>
Introduced	16.0.R1

Platforms All

### **poll-interval** *number*

Synopsis Interval for Hellos to non-adjacent OSPF NBMA neighbor

Context **configure** *router string ospf number area string interface string poll-interval number*

Tree [poll-interval](#)

Max. Range 0 to 4294967295

Units seconds

Default 120

Introduced 16.0.R1

Platforms All

### **priority** *number*

Synopsis Interface priority in the DR election on the subnet

Context **configure** *router string ospf number area string interface string priority number*

Tree [priority](#)

Range 0 to 255

Default 1

Introduced 16.0.R1

Platforms All

### **retransmit-interval** *number*

Synopsis Time before OSPF retransmits an unacknowledged LSA

Context **configure** *router string ospf number area string interface string retransmit-interval number*

Tree [retransmit-interval](#)

Range 1 to 1800

Units seconds

Default 5

Introduced 16.0.R1

Platforms All

**rib-priority** *keyword*

Synopsis	RIB priority for OSPF
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>rib-priority</b> <i>keyword</i>
Tree	<b>rib-priority</b>
Options	high
Introduced	16.0.R1
Platforms	All

**sid-protection** *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>sid-protection</b> <i>boolean</i>
Tree	<b>sid-protection</b>
Default	true
Introduced	16.0.R1
Platforms	All

**transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>transit-delay</b> <i>number</i>
Tree	<b>transit-delay</b>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>loopfree-alternate-exclude</b> <i>boolean</i>
Tree	<b>loopfree-alternate-exclude</b>
Default	false
Introduced	16.0.R1

Platforms All

## nssa

Synopsis Enable the **nssa** context  
 Context **configure** *router string ospf number area string nssa*  
 Tree [nssa](#)  
 Introduced 16.0.R1  
 Platforms All

## area-range [*ip-prefix-mask*] *string*

Synopsis Enter the **area-range** list instance  
 Context **configure** *router string ospf number area string nssa area-range string*  
 Tree [area-range](#)  
 Introduced 16.0.R1  
 Platforms All

## [*ip-prefix-mask*] *string*

Synopsis IP prefix and subnet mask for the range used by the ABR  
 Context **configure** *router string ospf number area string nssa area-range string*  
 Tree [area-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

## advertise *boolean*

Synopsis Advertise summarized range of addresses to other areas  
 Context **configure** *router string ospf number area string nssa area-range string advertise boolean*  
 Tree [advertise](#)  
 Default true  
 Introduced 16.0.R1

Platforms All

### **originate-default-route**

Synopsis Enable the **originate-default-route** context

Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* [nssa](#) [originate-default-route](#)

Tree [originate-default-route](#)

Introduced 16.0.R1

Platforms All

### **adjacency-check** *boolean*

Synopsis Default route to remove if there is no adjacency

Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* [nssa](#) [originate-default-route](#) [adjacency-check](#) *boolean*

Tree [adjacency-check](#)

Default true

Introduced 16.0.R1

Platforms All

### **type-nssa** *boolean*

Synopsis Generate a default route using NSSA-LSA type

Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* [nssa](#) [originate-default-route](#) [type-nssa](#) *boolean*

Tree [type-nssa](#)

Default false

Introduced 16.0.R1

Platforms All

### **redistribute-external** *boolean*

Synopsis Redistribute external routes into the NSSA

Context **configure** [router](#) *string* [ospf](#) *number* [area](#) *string* [nssa](#) [redistribute-external](#) *boolean*

Tree [redistribute-external](#)

Default true

Introduced 16.0.R1  
 Platforms All

### **summaries** *boolean*

Synopsis Send summary (Type 3) LSAs into the NSSA on an ABR  
 Context **configure** *router string ospf number area string nssa summaries boolean*  
 Tree [summaries](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **stub**

Synopsis Enable the **stub** context  
 Context **configure** *router string ospf number area string stub*  
 Tree [stub](#)  
 Introduced 16.0.R1  
 Platforms All

### **default-metric** *number*

Synopsis Metric used by ABR for default route into the stub area  
 Context **configure** *router string ospf number area string stub default-metric number*  
 Tree [default-metric](#)  
 Range 1 to 16777214  
 Default 1  
 Introduced 16.0.R1  
 Platforms All

### **summaries** *boolean*

Synopsis Send summary (Type 3) LSAs into the stub area on an ABR  
 Context **configure** *router string ospf number area string stub summaries boolean*  
 Tree [summaries](#)

Default	true
Introduced	16.0.R1
Platforms	All

### **virtual-link** [**router-id**] *string transit-area reference*

Synopsis	Enter the <b>virtual-link</b> list instance
Context	<b>configure router string ospf number area string virtual-link string transit-area reference</b>
Tree	<a href="#">virtual-link</a>
Introduced	16.0.R1
Platforms	All

### **[router-id]** *string*

Synopsis	Router identity of the virtual link neighbor
Context	<b>configure router string ospf number area string virtual-link string transit-area reference</b>
Tree	<a href="#">virtual-link</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **transit-area** *reference*

Synopsis	Transit area linking the backbone to not-connected area
Context	<b>configure router string ospf number area string virtual-link string transit-area reference</b>
Tree	<a href="#">virtual-link</a>
Reference	<b>configure router string ospf number area string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the OSPF interface
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	Authentication key
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type used on OSPF interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">authentication-type</a> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1

Platforms All

### **dead-interval** *number*

Synopsis OSPF wait time for Hellos before neighbor declared down

Context **configure** **router** *string ospf number area string virtual-link string transit-area reference*  
*dead-interval number*

Tree [dead-interval](#)

Range 2 to 65535

Units seconds

Introduced 16.0.R1

Platforms All

### **hello-interval** *number*

Synopsis Time between OSPF Hellos of this interface

Context **configure** **router** *string ospf number area string virtual-link string transit-area reference*  
*hello-interval number*

Tree [hello-interval](#)

Range 1 to 65535

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **message-digest-key** [*key-id*] *number*

Synopsis Enter the **message-digest-key** list instance

Context **configure** **router** *string ospf number area string virtual-link string transit-area reference*  
*message-digest-key number*

Tree [message-digest-key](#)

Introduced 16.0.R1

Platforms All

**[key-id] number**

Synopsis	Message digest index
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>message-digest-key</b> <i>number</i>
Tree	<b>message-digest-key</b>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**md5 string**

Synopsis	MD5 hash key
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>message-digest-key</b> <i>number</i> <b>md5</b> <i>string</i>
Tree	<b>md5</b>
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**retransmit-interval number**

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>retransmit-interval</b> <i>number</i>
Tree	<b>retransmit-interval</b>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

**transit-delay number**

Synopsis	Required LSA transmit time
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <i>area</i> <i>string</i> <i>virtual-link</i> <i>string</i> <i>transit-area</i> <i>reference</i> <i>transit-delay</i> <i>number</i>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

## asbr

Synopsis	Enable the <b>asbr</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <b>asbr</b>
Tree	<a href="#">asbr</a>
Introduced	16.0.R1
Platforms	All

## trace-path (*number* | *keyword*)

Synopsis	Domain identity
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <b>asbr</b> <i>trace-path</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">trace-path</a>
Range	0 to 31
Options	none
Default	none
Introduced	16.0.R1
Platforms	All

## compatible-rfc1583 *boolean*

Synopsis	OSPF summary and external route calculations
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf</i> <i>number</i> <b>compatible-rfc1583</b> <i>boolean</i>
Tree	<a href="#">compatible-rfc1583</a>
Default	true
Introduced	16.0.R1

Platforms All

### database-export

Synopsis Enable the **database-export** context  
 Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#)  
 Tree [database-export](#)  
 Introduced 16.0.R1  
 Platforms All

### bgp-ls-identifier

Synopsis Enable the **bgp-ls-identifier** context  
 Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#) [bgp-ls-identifier](#)  
 Tree [bgp-ls-identifier](#)  
 Introduced 16.0.R1  
 Platforms All

### value *number*

Synopsis BGP-LS identifier sent in the BGP-LS NLRI  
 Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#) [bgp-ls-identifier](#) *value* *number*  
 Tree [value](#)  
 Max. Range 0 to 4294967295  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

### igp-identifier *number*

Synopsis IGP instance in the BGP-LS NLRI  
 Context **configure** [router](#) *string* [ospf](#) *number* [database-export](#) [igp-identifier](#) *number*  
 Tree [igp-identifier](#)  
 Description This command identifies the IGP instance in the BGP-LS NLRI when a router has interfaces participating in multiple IGP instances. The concept of an instance ID specified for OSPF is local subnet significant (RFC 6549). An IGP identifier value can be

configured to be unique within a given IGP domain when the router sends the IGP link state information using BGP-LS.

Max. Range	0 to 18446744073709551615
Introduced	16.0.R1
Platforms	All

## entropy-label

Synopsis	Enter the <b>entropy-label</b> context
Context	<b>configure</b> <i>router string ospf number entropy-label</i>
Tree	<a href="#">entropy-label</a>
Introduced	16.0.R1
Platforms	All

## override-tunnel-elc *boolean*

Synopsis	Enable override of received ELC advertisements
Context	<b>configure</b> <i>router string ospf number entropy-label override-tunnel-elc boolean</i>
Tree	<a href="#">override-tunnel-elc</a>
Default	false
Introduced	16.0.R1
Platforms	All

## export-limit

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <i>router string ospf number export-limit</i>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R1
Platforms	All

## log-percent *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <i>router string ospf number export-limit log-percent number</i>
Tree	<a href="#">log-percent</a>

Range	1 to 100
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <i>router string ospf number export-limit number number</i>
Tree	<i>number</i>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**export-policy** *reference*

Synopsis	Export policies that determine exported routes
Context	<b>configure</b> <i>router string ospf number export-policy reference</i>
Tree	<i>export-policy</i>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the <b>aggregate</b> command is also configured in the <b>configure router</b> context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the <b>configure router policy-options</b> context.</p>
Reference	<b>configure</b> <i>policy-options policy-statement string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## external-db-overflow

Synopsis	Enable the <b>external-db-overflow</b> context
Context	<b>configure</b> <i>router string ospf number external-db-overflow</i>
Tree	<a href="#">external-db-overflow</a>
Introduced	16.0.R1
Platforms	All

## interval *number*

Synopsis	Time during which the router operates in overload
Context	<b>configure</b> <i>router string ospf number external-db-overflow interval number</i>
Tree	<a href="#">interval</a>
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

## limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	<b>configure</b> <i>router string ospf number external-db-overflow limit number</i>
Tree	<a href="#">limit</a>
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

## external-preference *number*

Synopsis	Preference for OSPF external routes
Context	<b>configure</b> <i>router string ospf number external-preference number</i>
Tree	<a href="#">external-preference</a>
Range	1 to 255
Default	150



Introduced	16.0.R1
Platforms	All

## flexible-algorithms

Synopsis	Enter the <b>flexible-algorithms</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">flexible-algorithms</a>
Tree	<a href="#">flexible-algorithms</a>
Description	Commands in this context configure the OSPFv2 parameters for flexible algorithm participation.
Introduced	21.7.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of flexible algorithm support
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command specifies the administrative state of the support of flexible algorithm IGP LSDB extensions.
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	All

## advertise-admin-group *keyword*

Synopsis	Administrative group TLV to advertise
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">flexible-algorithms</a> <a href="#">advertise-admin-group</a> <i>keyword</i>
Tree	<a href="#">advertise-admin-group</a>
Description	This command configures the type of Administrative Group TLV the router advertises as an IGP link attribute. This command is configured for this IGP instance.
Options	prefer-ag, eag-only, ag-eag
Default	prefer-ag
Introduced	23.3.R1

Platforms All

### **flex-algo** [**flex-algo-id**] *number*

Synopsis Enter the **flex-algo** list instance

Context **configure** *router string ospf number flexible-algorithms flex-algo number*

Tree [flex-algo](#)

Description Commands in this context configure the attributes of the OSPFv2 flexible algorithm.

The maximum unique flexible algorithms can be configured on a router across all configured OSPFv2 instances. In each OSPF flexible algorithm configuration context, the OSPFv2 instance participation can be either enabled or disabled, and it configures the advertising of a locally-configured flexible algorithm definition.

When flexible algorithm is enabled in an OSPF instance, it is enabled for all areas within the OSPF instance.

Max. Instances 7

Introduced 21.7.R1

Platforms All

### **[flex-algo-id]** *number*

Synopsis Flexible algorithm ID

Context **configure** *router string ospf number flexible-algorithms flex-algo number*

Tree [flex-algo](#)

Range 128 to 255

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms All

### **advertise** *reference*

Synopsis Flexible Algorithm Definition advertisement

Context **configure** *router string ospf number flexible-algorithms flex-algo number advertise reference*

Tree [advertise](#)

Description This command enables the advertisement of a locally configured Flexible Algorithm Definition (FAD).

The winning FAD that a router uses must be consistent with the winning FAD on all other routers, which avoids routing loops and traffic blackholing. The winning FAD is selected using a tiebreaker algorithm that first selects the highest advertised FAD priority followed by the highest system ID.

Reference	<b>configure routing-options flexible-algorithm-definitions flex-algo</b> <i>string</i>
Introduced	21.7.R1
Platforms	All

## loopfree-alternate

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure router</b> <i>string ospf number flexible-algorithms flex-algo number loopfree-alternate</i>
Tree	<a href="#">loopfree-alternate</a>
Introduced	21.7.R1
Platforms	All

## participate *boolean*

Synopsis	Allow participation in the Flexible Algorithm
Context	<b>configure router</b> <i>string ospf number flexible-algorithms flex-algo number participate boolean</i>
Tree	<a href="#">participate</a>
Description	When configured to <b>true</b> , the router advertises the capability to participate in a flexible algorithm within the IS-IS Router Capability TLV. A router only advertises participation when the winning FAD can be supported, which includes segment routing support.  When configured to <b>false</b> , flexible algorithm participation is not enabled.
Default	false
Introduced	21.7.R1
Platforms	All

## graceful-restart

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure router</b> <i>string ospf number graceful-restart</i>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1

Platforms All

### **helper-mode** *boolean*

Synopsis Enable graceful restart helper for OSPF  
Context **configure** [router](#) *string* [ospf](#) *number* [graceful-restart](#) [helper-mode](#) *boolean*  
Tree [helper-mode](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **strict-lsa-checking** *boolean*

Synopsis Perform strict LSA checking during graceful restart  
Context **configure** [router](#) *string* [ospf](#) *number* [graceful-restart](#) [strict-lsa-checking](#) *boolean*  
Tree [strict-lsa-checking](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **igp-shortcut**

Synopsis Enter the **igp-shortcut** context  
Context **configure** [router](#) *string* [ospf](#) *number* [igp-shortcut](#)  
Tree [igp-shortcut](#)  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the IGP shortcuts  
Context **configure** [router](#) *string* [ospf](#) *number* [igp-shortcut](#) [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable

Introduced	16.0.R1
Platforms	All

### **allow-sr-over-srte** *boolean*

Synopsis	Enable SR over SR-TE LSPs
Context	<b>configure</b> <i>router string ospf number igp-shortcut allow-sr-over-srte boolean</i>
Tree	<a href="#">allow-sr-over-srte</a>
Description	<p>When configured to <b>true</b>, the router only allows SR-MPLS SRv4 and SRv6 IGP shortcuts to use SR-TE LSPs with <b>allow-sr-over-srte</b> explicitly enabled with an adjacency SID as top SID in the SR-TE LSP. IPv4 and IPv6 addresses can use all available SR-TE LSPs as IGP shortcuts regardless of the explicit <b>allow-sr-over-srte</b> configuration.</p> <p>Under ECMP, when this command is configured to <b>true</b>, preference is given to the SR-TE LSPs with <b>allow-sr-over-srte</b> explicitly configured over the LSPs that do not have <b>allow-sr-over-srte</b> configured.</p>
Default	false
Introduced	23.3.R1
Platforms	All

### **tunnel-next-hop**

Synopsis	Enter the <b>tunnel-next-hop</b> context
Context	<b>configure</b> <i>router string ospf number igp-shortcut tunnel-next-hop</i>
Tree	<a href="#">tunnel-next-hop</a>
Introduced	16.0.R1
Platforms	All

### **family** [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <i>router string ospf number igp-shortcut tunnel-next-hop family keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

**[family-type] keyword**

Synopsis	Address family type for tunnel next-hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>igp-shortcut</b> <b>tunnel-next-hop</b> <b>family</b> <i>keyword</i>
Tree	<b>family</b>
Options	ipv4, srv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**resolution keyword**

Synopsis	Resolution state for IGP shortcut tunnels
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>igp-shortcut</b> <b>tunnel-next-hop</b> <b>family</b> <i>keyword</i> <b>resolution</b> <i>keyword</i>
Tree	<b>resolution</b>
Options	none, filter, any, match-family-ip
Default	none
Introduced	16.0.R1
Platforms	All

**resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>igp-shortcut</b> <b>tunnel-next-hop</b> <b>family</b> <i>keyword</i> <b>resolution-filter</b>
Tree	<b>resolution-filter</b>
Introduced	16.0.R1
Platforms	All

**rsvp boolean**

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>igp-shortcut</b> <b>tunnel-next-hop</b> <b>family</b> <i>keyword</i> <b>resolution-filter</b> <b>rsvp</b> <i>boolean</i>
Tree	<b>rsvp</b>
Default	false

Introduced	16.0.R1
Platforms	All

**sr-te boolean**

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">igp-shortcut</a> <a href="#">tunnel-next-hop</a> <i>family</i> <i>keyword</i> <a href="#">resolution-filter</a> <a href="#">sr-te</a> <i>boolean</i>
Tree	<a href="#">sr-te</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy reference**

Synopsis	Import policy names for routes from IGP to route table
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**ldp-over-rsvp boolean**

Synopsis	Allow LSP over RSVP in this OSPF instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">ldp-over-rsvp</a> <i>boolean</i>
Tree	<a href="#">ldp-over-rsvp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ldp-sync** *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	<b>configure</b> <i>router string ospf number ldp-sync boolean</i>
Tree	<a href="#">ldp-sync</a>
Default	true
Introduced	16.0.R1
Platforms	All

**loopfree-alternate**

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <i>router string ospf number loopfree-alternate</i>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R1
Platforms	All

**augment-route-table** *boolean*

Synopsis	Attach remote LFA information to RTM entries
Context	<b>configure</b> <i>router string ospf number loopfree-alternate augment-route-table boolean</i>
Tree	<a href="#">augment-route-table</a>
Description	When configured to <b>true</b> , this command enables IS-IS to attach remote LFA-specific information to RTM entries for use by protocols such as LDP. When configured to <b>false</b> , rLFA-specific information is not added to RTM entries.
Default	false
Introduced	21.10.R1
Platforms	All

**exclude**

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <i>router string ospf number loopfree-alternate exclude</i>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3
Platforms	All



**prefix-policy** *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>loopfree-alternate</b> <b>exclude</b> <b>prefix-policy</b> <i>reference</i>
Tree	<b>prefix-policy</b>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

**multi-homed-prefix**

Synopsis	Enable the <b>multi-homed-prefix</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>loopfree-alternate</b> <b>multi-homed-prefix</b>
Tree	<b>multi-homed-prefix</b>
Description	<p>Commands in this context configure a multihomed prefix LFA for both RTM routes (IP FRR) and SR-OSPF tunnels. SR-OSPF tunnels enable multihomed prefix extension in both algorithm 0 and flexible-algorithm numbers.</p> <p>This feature makes use of the multihomed prefix model described in RFC 8518 to compute a backup IP next hop using an alternate ABR or ASBR for external prefixes and to an alternate router owner for local anycast prefixes.</p> <p>This feature further enhances the multihomed prefix backup path calculation beyond RFC 8518 with the addition of repair tunnels that make use of a PQ node or a P-Q set to reach the alternate exit ABR or ASBR of external prefixes or the alternate owner router of local anycast prefixes.</p> <p>The computed IP next-hop based backup path is added to OSPF routes of external /32 prefixes (OSPFv2 routes types 3, 4, 5, and 7) and local /32 anycast prefixes in the RTM if the prefix is not protected by base LFA or if the user set leaf preference value to all. The user must enable the ip-fast-reroute leaf to have these backup paths programmed into the FIB in datapath.</p> <p>The computed IP next hop or repair tunnel based backup path is also programmed for SR-OSPF node SID tunnels of external /32 prefixes and to /32 prefixes in same area as the computing node S and which are advertised by multiple routers (anycast prefix) in both algorithm 0 and flexible-algorithm numbers.</p>

Introduced	22.2.R1
Platforms	All

### **preference** *keyword*

Synopsis	Multi-homed prefix LFA backup path preference
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">multi-homed-prefix</a> <a href="#">preference</a> <i>keyword</i>
Tree	<a href="#">preference</a>
Options	none, all
Default	none
Introduced	22.2.R1
Platforms	All

### **remote-lfa**

Synopsis	Enable the <b>remote-lfa</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a>
Tree	<a href="#">remote-lfa</a>
Introduced	16.0.R1
Platforms	All

### **max-pq-cost** *number*

Synopsis	Maximum cost during reverse SPF calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <a href="#">max-pq-cost</a> <i>number</i>
Tree	<a href="#">max-pq-cost</a>
Max. Range	0 to 4294967295
Default	65535
Introduced	16.0.R1
Platforms	All

### **node-protect**

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <a href="#">node-protect</a>

Tree	<a href="#">node-protect</a>
Introduced	16.0.R4
Platforms	All

### **max-pq-nodes** *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPF's
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">remote-lfa</a> <a href="#">node-protect</a> <b>max-pq-nodes</b> <i>number</i>
Tree	<a href="#">max-pq-nodes</a>
Range	1 to 32
Default	16
Introduced	16.0.R4
Platforms	All

### **ti-lfa**

Synopsis	Enable the <b>ti-lfa</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <b>ti-lfa</b>
Tree	<a href="#">ti-lfa</a>
Description	Commands in this context configure the Topology Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this OSPF instance.
Introduced	16.0.R1
Platforms	All

### **max-sr-frr-labels** *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">ti-lfa</a> <b>max-sr-frr-labels</b> <i>number</i>
Tree	<a href="#">max-sr-frr-labels</a>
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2

Introduced	16.0.R1
Platforms	All

## **node-protect**

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">ti-lfa</a> <a href="#">node-protect</a>
Tree	<a href="#">node-protect</a>
Introduced	16.0.R5
Platforms	All

## **multi-instance** *boolean*

Synopsis	Enable OSPF Multi Instance Extensions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">multi-instance</a> <i>boolean</i>
Tree	<a href="#">multi-instance</a>
Description	When configured to <b>true</b> , the Base router supports RFC 6549, OSPFv2 Multi-Instance Extensions.  This support is enabled per instance and allows flexibility when migrating a particular instance from classic OSPFv2 to a multi-instance OSPFv2.
Default	false
Introduced	19.10.R1
Platforms	All

## **multicast-import** *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">multicast-import</a> <i>boolean</i>
Tree	<a href="#">multicast-import</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **overload** *boolean*

Synopsis	Change local router state to appear overloaded
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Context	<b>configure</b> <i>router string ospf number overload boolean</i>
Tree	<a href="#">overload</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-include-ext-1** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure</b> <i>router string ospf number overload-include-ext-1 boolean</i>
Tree	<a href="#">overload-include-ext-1</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **overload-include-ext-2** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure</b> <i>router string ospf number overload-include-ext-2 boolean</i>
Tree	<a href="#">overload-include-ext-2</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-include-stub** *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	<b>configure</b> <i>router string ospf number overload-include-stub boolean</i>
Tree	<a href="#">overload-include-stub</a>
Default	false
Introduced	16.0.R1
Platforms	All

## overload-on-boot

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure router</b> <i>string ospf number</i> <b>overload-on-boot</b>
Tree	<b>overload-on-boot</b>
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Time during which the router operates in overload state
Context	<b>configure router</b> <i>string ospf number</i> <b>overload-on-boot</b> <i>timeout number</i>
Tree	<b>timeout</b>
Range	1 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

## preference *number*

Synopsis	Preference for OSPF internal routes
Context	<b>configure router</b> <i>string ospf number</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

## reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	<b>configure router</b> <i>string ospf number</i> <b>reference-bandwidth</b> <i>number</i>
Tree	<b>reference-bandwidth</b>
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000

Introduced 16.0.R1  
 Platforms All

## rib-priority

Synopsis Enter the **rib-priority** context  
 Context **configure** [router string ospf number rib-priority](#)  
 Tree [rib-priority](#)  
 Introduced 16.0.R1  
 Platforms All

## high

Synopsis Enter the **high** context  
 Context **configure** [router string ospf number rib-priority high](#)  
 Tree [high](#)  
 Introduced 16.0.R1  
 Platforms All

## prefix-list reference

Synopsis Higher priority list used during OSPF route calculation  
 Context **configure** [router string ospf number rib-priority high prefix-list reference](#)  
 Tree [prefix-list](#)  
 Reference **configure** [policy-options prefix-list string](#)  
 Introduced 16.0.R1  
 Platforms All

## router-id string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Unique router ID for the OSPF instance  
 Context **configure** [router string ospf number router-id string](#)

Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

### **rtr-adv-lsa-limit**

Synopsis	Enable the <b>rtr-adv-lsa-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>rtr-adv-lsa-limit</b>
Tree	<a href="#">rtr-adv-lsa-limit</a>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Log the event without triggering overload
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>rtr-adv-lsa-limit</b> <b>log-only</b> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-lsa-count** *number*

Synopsis	Maximum number of LSAs one router can advertise
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>rtr-adv-lsa-limit</b> <b>max-lsa-count</b> <i>number</i>
Tree	<a href="#">max-lsa-count</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **overload-timeout** (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
----------	---



Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>rtr-adv-lsa-limit</b> <b>overload-timeout</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">overload-timeout</a>
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

### **warning-threshold** *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>rtr-adv-lsa-limit</b> <b>warning-threshold</b> <i>number</i>
Tree	<a href="#">warning-threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **segment-routing**

Synopsis	Enter the <b>segment-routing</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>segment-routing</b>
Tree	<a href="#">segment-routing</a>
Introduced	16.0.R1
Platforms	All

### **adj-sid-hold** (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>segment-routing</b> <b>adj-sid-hold</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">adj-sid-hold</a>
Description	This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range	1 to 1800
Units	seconds
Options	none
Default	15
Introduced	16.0.R1
Platforms	All

### **adjacency-set** [*id*] *number*

Synopsis	Enter the <b>adjacency-set</b> list instance
Context	<b>configure</b> <i>router string ospf number segment-routing adjacency-set number</i>
Tree	<a href="#">adjacency-set</a>
Introduced	16.0.R1
Platforms	All

**[id] number**

Synopsis	Non-zero identifier for a given adjacency set
Context	<b>configure router string ospf number segment-routing adjacency-set number</b>
Tree	<a href="#">adjacency-set</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise boolean**

Synopsis	Advertise adjacency for links terminating on same node
Context	<b>configure router string ospf number segment-routing adjacency-set number advertise boolean</b>
Tree	<a href="#">advertise</a>
Default	true
Introduced	16.0.R1
Platforms	All

**parallel boolean**

Synopsis	Require adjacency members to terminate on same neighbor
Context	<b>configure router string ospf number segment-routing adjacency-set number parallel boolean</b>
Tree	<a href="#">parallel</a>
Default	true
Introduced	16.0.R1
Platforms	All

**sid**

Synopsis	Enable the <b>sid</b> context
Context	<b>configure router string ospf number segment-routing adjacency-set number sid</b>
Tree	<a href="#">sid</a>
Introduced	16.0.R1

Platforms All

### **label number**

Synopsis Adjacency SID label

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [adjacency-set](#) *number* [sid](#) [label](#) *number*

Tree [label](#)

Range 1 to 1048575

Introduced 16.0.R1

Platforms All

### **adjacency-sid**

Synopsis Enter the **adjacency-sid** context

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [adjacency-sid](#)

Tree [adjacency-sid](#)

Introduced 22.7.R1

Platforms All

### **allocate-dual-sids boolean**

Synopsis Allocate dual adjacency SIDs per interface

Context **configure** [router](#) *string* [ospf](#) *number* [segment-routing](#) [adjacency-sid](#) [allocate-dual-sids](#) *boolean*

Tree [allocate-dual-sids](#)

Description When configured to **true**, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.

When configured to **false**, the router disables the support of two SR-MPLS adjacency SIDs per interface.

Default false

Introduced 22.7.R1

Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of segment routing
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**backup-node-sid**

Synopsis	Enable the <b>backup-node-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">backup-node-sid</a>
Tree	<a href="#">backup-node-sid</a>
Introduced	16.0.R1
Platforms	All

**index** *number*

Synopsis	Node SID index for this interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">backup-node-sid</a> <a href="#">index</a> <i>number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

**ip-prefix** *string*

Synopsis	IP prefix and prefix length for the backup node SID
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">backup-node-sid</a> <a href="#">ip-prefix</a> <i>string</i>
Tree	<a href="#">ip-prefix</a>
Introduced	16.0.R1
Platforms	All

**label number**

Synopsis	Label value for the node SID
Context	<b>configure router string ospf number segment-routing backup-node-sid label number</b>
Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R1
Platforms	All

**class-forwarding boolean**

Synopsis	Allow CBF with ECMP over RSVP-TE LSPs as IGP shortcuts
Context	<b>configure router string ospf number segment-routing class-forwarding boolean</b>
Tree	<a href="#">class-forwarding</a>
Description	<p>When configured to <b>true</b>, this command enables Class-Based Forwarding (CBF) with ECMP for SR-OSPF resolved to RSVP-TE LSPs as IGP shortcuts.</p> <p>For CBF with ECMP to be effective, a class forwarding policy must be defined, as well as FC to set associations and RSVP-TE LSPs to set associations.</p> <p>When configured to <b>false</b>, CBF over IGP shortcuts is disabled.</p>
Default	false
Introduced	20.5.R1
Platforms	All

**egress-statistics**

Synopsis	Enter the <b>egress-statistics</b> context
Context	<b>configure router string ospf number segment-routing egress-statistics</b>
Tree	<a href="#">egress-statistics</a>
Introduced	19.10.R1
Platforms	All

**adj-set boolean**

Synopsis	Enable the allocation of statistics on adjacency sets
Context	<b>configure router string ospf number segment-routing egress-statistics adj-set boolean</b>

Tree	<a href="#">adj-set</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

### **adj-sid** *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <a href="#">adj-sid</a> <i>boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

### **node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **entropy-label** *boolean*

Synopsis	Enable processing of received ELC signaled in the IGP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">entropy-label</a> <i>boolean</i>

Tree	<a href="#">entropy-label</a>
Introduced	16.0.R1
Platforms	All

### **export-tunnel-table** *keyword*

Synopsis	Export tunnel table
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">export-tunnel-table</a> <i>keyword</i>
Tree	<a href="#">export-tunnel-table</a>
Options	ldp
Introduced	16.0.R1
Platforms	All

### **ingress-statistics**

Synopsis	Enter the <b>ingress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a>
Tree	<a href="#">ingress-statistics</a>
Introduced	19.10.R1
Platforms	All

### **adj-set** *boolean*

Synopsis	Enable the allocation of statistics on adjacency sets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a> <a href="#">adj-set</a> <i>boolean</i>
Tree	<a href="#">adj-set</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indices to each adjacency set. All adjacencies of a set share the same statistics index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All



**adj-sid** *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a> <a href="#">adj-sid</a> <i>boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

**node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

**mapping-server**

Synopsis	Enter the <b>mapping-server</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a>
Tree	<a href="#">mapping-server</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OSPF mapping server
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **node-sid-map** [[sid-index](#)] *number*

Synopsis	Enter the <b>node-sid-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <i>number</i>
Tree	<a href="#">node-sid-map</a>
Introduced	16.0.R1
Platforms	All

### **[sid-index]** *number*

Synopsis	Start SID index for the node SID mapping
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <i>number</i>
Tree	<a href="#">node-sid-map</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **ip-prefix** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Starting prefix of the mapping
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">mapping-server</a> <a href="#">node-sid-map</a> <i>number</i> <a href="#">ip-prefix</a> <i>string</i>
Tree	<a href="#">ip-prefix</a>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

## range number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Number of prefixes mapped by Extended Range Prefix TLV

Context **configure** *router string ospf number segment-routing mapping-server node-sid-map number range number*

Tree [range](#)

Range 1 to 65535

Default 1

Introduced 16.0.R1

Platforms All

## scope

Synopsis Enter the **scope** context

Context **configure** *router string ospf number segment-routing mapping-server node-sid-map number scope*

Tree [scope](#)

Introduced 16.0.R1

Platforms All

## area reference

Synopsis Area ID in which the advertise Extended Range TLV is advertised

Context **configure** *router string ospf number segment-routing mapping-server node-sid-map number scope area reference*

Tree [area](#)

Reference **configure** *router string ospf number area string*

Notes The following elements are part of a choice: **area** or **as**.

Introduced 16.0.R1

Platforms All

**as**

Synopsis	Advertise Extended Range TLV in whole autonomous system
Context	<b>configure</b> <i>router string ospf number segment-routing mapping-server node-sid-map number scope as</i>
Tree	<a href="#">as</a>
Notes	The following elements are part of a choice: <b>area</b> or <b>as</b> .
Introduced	16.0.R1
Platforms	All

**maximum-sid-depth**

Synopsis	Enter the <b>maximum-sid-depth</b> context
Context	<b>configure</b> <i>router string ospf number segment-routing maximum-sid-depth</i>
Tree	<a href="#">maximum-sid-depth</a>
Introduced	20.2.R1
Platforms	All

**override-bmi** *number*

Synopsis	Value to override the announced node MSD-BMI value
Context	<b>configure</b> <i>router string ospf number segment-routing maximum-sid-depth override-bmi number</i>
Tree	<a href="#">override-bmi</a>
Description	<p>This command overrides the announced MSD node Base MPLS Imposition (BMI) value. The MSD-BMI value announced by a router can be used by recipients to understand the number of MPLS labels that can be imposed inclusive of all service, transport, or special labels.</p> <p>When unconfigured, the router announces the maximum supported BMI of the node assuming the most simple services and Layer 2 encapsulation.</p>
Range	0 to 12
Introduced	20.2.R1
Platforms	All

**override-erld** *number*

Synopsis	Value to override the announced node MSD-ERLD value
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Context	<b>configure router string ospf number segment-routing maximum-sid-depth override-erld number</b>
Tree	<a href="#">override-erld</a>
Description	This command configures the override Entropy Readable Label Depth (ERLD) Maximum Sid Depth (MSD) value. Information about the capability of each intermediate LSR of reading the maximum label stack depth is used by ingress LSRs to perform EL-based load balancing.  When unconfigured, the router announces the node maximum supported ERLD assuming the most simple Layer 2 encapsulation.
Range	0 to 15
Introduced	20.2.R1
Platforms	All

### prefix-sid-range

Synopsis	Enable the <b>prefix-sid-range</b> context
Context	<b>configure router string ospf number segment-routing prefix-sid-range</b>
Tree	<a href="#">prefix-sid-range</a>
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	16.0.R1
Platforms	All

### global

Synopsis	Allocate labels from the SRBG space
Context	<b>configure router string ospf number segment-routing prefix-sid-range global</b>
Tree	<a href="#">global</a>
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the <b>configure router mpls-labels sr-labels</b> context.
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## max-index *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">max-index</a> <i>number</i>
Tree	<a href="#">max-index</a>
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## start-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">start-label</a> <i>number</i>
Tree	<a href="#">start-label</a>
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R1
Platforms	All

## srlb *reference*

Synopsis	Segment routing local block
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">srlb</a> <i>reference</i>
Tree	<a href="#">srlb</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>

Introduced	16.0.R1
Platforms	All

### **tunnel-mtu** *number*

Synopsis	Tunnel MTU size
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>segment-routing</b> <b>tunnel-mtu</b> <i>number</i>
Tree	<b>tunnel-mtu</b>
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

### **tunnel-table-pref** *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>segment-routing</b> <b>tunnel-table-pref</b> <i>number</i>
Tree	<b>tunnel-table-pref</b>

**Description** This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the **any** value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

**Note:** The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE\_PREF\_RSVP 7
- ROUTE\_PREF\_SR\_TE 8

- `ROUTE_PREF_LDP 9`
- `ROUTE_PREF_OSPF_TTM 10`
- `ROUTE_PREF_ISIS_TTM 11`
- `ROUTE_PREF_BGP_TTM 12`
- `ROUTE_PREF_GRE 255`

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-ISIS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

## timers

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

## incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">incremental-spf-wait</a> <i>number</i>
Tree	<a href="#">incremental-spf-wait</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All



### **lsa-accumulate** *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-accumulate</b> <i>number</i>
Tree	<b>lsa-accumulate</b>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **lsa-arrival** *number*

Synopsis	Minimum delay between receipt of same LSAs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-arrival</b> <i>number</i>
Tree	<b>lsa-arrival</b>
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **lsa-generate**

Synopsis	Enter the <b>lsa-generate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-generate</b>
Tree	<b>lsa-generate</b>
Introduced	16.0.R1
Platforms	All

### **lsa-initial-wait** *number*

Synopsis	First wait period between OSPF LSA generation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-generate</b> <b>lsa-initial-wait</b> <i>number</i>
Tree	<b>lsa-initial-wait</b>

---

Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **lsa-second-wait** *number*

Synopsis	Hold time between the first and second LSA generation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-generate</b> <b>lsa-second-wait</b> <i>number</i>
Tree	<a href="#">lsa-second-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **max-lsa-wait** *number*

Synopsis	Max time between two LSAs being generated
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>lsa-generate</b> <b>max-lsa-wait</b> <i>number</i>
Tree	<a href="#">max-lsa-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **redistribute-delay** *number*

Synopsis	Hold down timer for external routes into OSPF
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>redistribute-delay</b> <i>number</i>
Tree	<a href="#">redistribute-delay</a>
Range	0 to 1000
Units	milliseconds

Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a>
Tree	<a href="#">spf-wait</a>
Introduced	16.0.R1
Platforms	All

### **spf-initial-wait** *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <a href="#">spf-initial-wait</a> <i>number</i>
Tree	<a href="#">spf-initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-max-wait** *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <a href="#">spf-max-wait</a> <i>number</i>
Tree	<a href="#">spf-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

**spf-second-wait** *number*

Synopsis	Hold time between the first and second SPF calculation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>timers</b> <b>spf-wait</b> <b>spf-second-wait</b> <i>number</i>
Tree	<a href="#">spf-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**traffic-engineering** *boolean*

Synopsis	Calculate traffic engineering route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>traffic-engineering</b> <i>boolean</i>
Tree	<a href="#">traffic-engineering</a>
Default	false
Introduced	16.0.R1
Platforms	All

**traffic-engineering-options**

Synopsis	Enter the <b>traffic-engineering-options</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>traffic-engineering-options</b>
Tree	<a href="#">traffic-engineering-options</a>
Introduced	20.7.R1
Platforms	All

**advertise-delay** *boolean*

Synopsis	Enable the advertisement of link delay for TE
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf</b> <i>number</i> <b>traffic-engineering-options</b> <b>advertise-delay</b> <i>boolean</i>
Tree	<a href="#">advertise-delay</a>
Description	When configured to <b>true</b> , the router advertises link delay in the IGP LSDB within the OSPF-TE TLV attribute or when the Application-Specific Link Attribute (ASLA) is enabled within SR-TE ASLA.

When the router is configured under the **configure router ospf traffic-engineering-options sr-te application-specific-link-attributes** command to generate SR-TE ASLA attributes, link delay is advertised as a legacy RFC 3630 TLV when RSVP-TE is enabled and as an ASLA RFC 8920 TLV for SR-TE when MPLS is enabled for an interface.

SR OS accepts and handles both legacy RSVP-TE TLVs and ASLAs for the RSVP application. However, SR OS only advertises RFC 3630 legacy RSVP-TE TLVs (as recommended by RFC 8920) to avoid compatibility issues.

When configured to **false**, the router disables link delay advertisement.

Default	false
Introduced	22.10.R1
Platforms	All

### **sr-te** keyword

Synopsis	Advertisement of link attributes for SR-TE
Context	<b>configure router</b> <i>string</i> <b>ospf number</b> <b>traffic-engineering-options sr-te</b> <i>keyword</i>
Tree	<b>sr-te</b>
Description	This command specifies the advertisement of TE attributes of each link on a per-application basis for RSVP-TE and SR-TE applications.
Options	false, legacy, application-specific-link-attributes
Default	false
Introduced	20.7.R1
Platforms	All

### **unicast-import** *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	<b>configure router</b> <i>string</i> <b>ospf number</b> <b>unicast-import</b> <i>boolean</i>
Tree	<b>unicast-import</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **ospf3** [*ospf-instance*] *number*

Synopsis	Enter the <b>ospf3</b> list instance
Context	<b>configure router</b> <i>string</i> <b>ospf3</b> <i>number</i>

Tree	<a href="#">ospf3</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **[ospf-instance] number**

Synopsis	Value for the integrated OSPF instance
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3 number</i>
Tree	<a href="#">ospf3</a>
Range	0 to 31   64 to 95
MD-CLI Default	0
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the OSPF instance
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3 number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **advertise-router-capability keyword**

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3 number advertise-router-capability keyword</i>
Tree	<a href="#">advertise-router-capability</a>
Options	false, link, area, as
Default	false

Introduced	16.0.R1
Platforms	All

**area** [[area-id](#)] *string*

Synopsis	Enter the <b>area</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i>
Tree	<a href="#">area</a>
Introduced	16.0.R1
Platforms	All

**[area-id]** *string*

Synopsis	Area-ID attribute
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i>
Tree	<a href="#">area</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">advertise-router-capability</a> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

**area-range** [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">area-range</a>
Introduced	16.0.R1

Platforms All

### **[ip-prefix-mask]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Address ranges to create on an ABR for route summarization or suppression

Context **configure** **router** *string ospf3 number area string area-range* (*ipv4-prefix* | *ipv6-prefix*)

Tree [area-range](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **advertise** *boolean*

Synopsis Advertise summarized range of addresses to other areas

Context **configure** **router** *string ospf3 number area string area-range* (*ipv4-prefix* | *ipv6-prefix*)  
[advertise](#) *boolean*

Tree [advertise](#)

Default true

Introduced 16.0.R1

Platforms All

### **blackhole-aggregate** *boolean*

Synopsis Install a low priority blackhole route to avoid loops

Context **configure** **router** *string ospf3 number area string blackhole-aggregate* *boolean*

Tree [blackhole-aggregate](#)

Default true

Introduced 16.0.R1

Platforms All

### **database-export-exclude** *boolean*

Synopsis Exclude IGP link-state OSPF area info into TE-DB

Context **configure** **router** *string ospf3 number area string database-export-exclude* *boolean*

Tree [database-export-exclude](#)



Default	false
Introduced	16.0.R4
Platforms	All

### **export-policy** *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **extended-lsa** *keyword*

Synopsis	Extended LSA format in an OSPFv3 area
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">extended-lsa</a> <i>keyword</i>
Tree	<a href="#">extended-lsa</a>
Options	only
Introduced	16.0.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1

Platforms All

### **interface** [*interface-name*] *string*

Synopsis Enter the **interface** list instance

Context **configure** *router string ospf3 number area string interface string*

Tree *interface*

Introduced 16.0.R1

Platforms All

### **[interface-name]** *string*

Synopsis Router interface name

Context **configure** *router string ospf3 number area string interface string*

Tree *interface*

Description This command specifies the IP interface name. Interface names must be unique within the group of defined IP interfaces for **configure router interface** and **configure service ies interface** commands. An interface name cannot be in the form of an IP address. Interface names can be a string composed of printable, 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.

If the IP interface name does not exist or does not have an IP address configured, an error message is returned.

If the IP interface exists in a different area it is moved to this area.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the OSPF interface

Context **configure** *router string ospf3 number area string interface string admin-state keyword*

Tree *admin-state*

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **advertise-router-capability** *boolean*

Synopsis Allow router advertisement capabilities

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **advertise-router-capability** *boolean*

Tree [advertise-router-capability](#)

Default true

Introduced 16.0.R1

Platforms All

### **authentication**

Synopsis Enable the **authentication** context

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **authentication**

Tree [authentication](#)

Introduced 16.0.R6

Platforms All

### **inbound** *reference*

Synopsis sa-name

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **authentication** **inbound** *reference*

Tree [inbound](#)

Reference **configure** [ipsec](#) **static-sa** *string*

Notes This element is mandatory.

Introduced 16.0.R6

Platforms All

### **outbound** *reference*

Synopsis sa-name

Context **configure** [router](#) *string* [ospf3](#) *number* [area](#) *string* [interface](#) *string* **authentication** **outbound** *reference*

Tree	<a href="#">outbound</a>
Reference	<b>configure ipsec static-sa</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

## **bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure router</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness</b>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

## **remain-down-on-failure** *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	<b>configure router</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness remain-down-on-failure</b> <i>boolean</i>
Tree	<a href="#">remain-down-on-failure</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **strict** *boolean*

Synopsis	Enable BFD strict mode
Context	<b>configure router</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness strict</b> <i>boolean</i>
Tree	<a href="#">strict</a>
Description	When configured to <b>true</b> , the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to <b>true</b> , the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.

During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.

Default	false
Introduced	23.3.R1
Platforms	All

### **strict-mode-holddown** *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness</b> <b>strict-mode-holddown</b> <i>number</i>
Tree	<b>strict-mode-holddown</b>
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1
Platforms	All

### **dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>dead-interval</b> <i>number</i>
Tree	<b>dead-interval</b>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>hello-interval</b> <i>number</i>
Tree	<b>hello-interval</b>

Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

## interface-type *keyword*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string interface string interface-type keyword</i>
Tree	<a href="#">interface-type</a>
Description	<p>This command specifies the interface type.</p> <p><b>broadcast</b> - Broadcast network</p> <p>To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.</p> <p><b>non-broadcast</b> - Non-broadcast network</p> <p><b>point-to-point</b> - Point-to-point link</p> <p>Set the interface type of an Ethernet link to <b>point-to-point</b> to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.</p> <p><b>p2mp-nbma</b> - Point-to-multipoint on a link without broadcast or multicast support</p> <p>No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.</p> <p><b>secondary</b> - Multiple secondary adjacencies allowed</p> <p>A <b>secondary</b> interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	16.0.R1
Platforms	All

### **load-balancing-weight** *number*

Synopsis	Load balancing weight for an OSPF3 interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>load-balancing-weight</b> <i>number</i>
Tree	<b>load-balancing-weight</b>
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

### **loopfree-alternate**

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b>
Tree	<b>loopfree-alternate</b>
Introduced	16.0.R3
Platforms	All

### **exclude** *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b> <b>exclude</b> <i>boolean</i>
Tree	<b>exclude</b>
Default	false
Introduced	16.0.R3
Platforms	All

### **policy-map**

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b> <b>policy-map</b>
Tree	<b>policy-map</b>
Introduced	16.0.R3
Platforms	All

**route-nh-template** *reference*

Synopsis	Route next hop policy template name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>loopfree-alternate</b> <b>policy-map</b> <b>route-nh-template</b> <i>reference</i>
Tree	<b>route-nh-template</b>
Reference	<b>configure</b> <b>routing-options</b> <b>route-next-hop-policy</b> <b>template</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

**lsa-filter-out** *keyword*

Synopsis	LSA flooding reduction
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>lsa-filter-out</b> <i>keyword</i>
Tree	<b>lsa-filter-out</b>
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

**metric** *number*

Synopsis	Route cost metric for the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**mtu** *number*

Synopsis	MTU for the OSPF to use on the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>mtu</b> <i>number</i>
Tree	<b>mtu</b>



Range	512 to 9786
Introduced	16.0.R1
Platforms	All

### **neighbor** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>neighbor</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>neighbor</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Neighbor link local address
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>neighbor</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **node-sid**

Synopsis	Enable the <b>node-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>node-sid</b>
Tree	<a href="#">node-sid</a>
Description	<p>Commands in this context configure a node SID index or label value for the prefix representing the primary address of a network interface of type system or loopback. A separate SID value can be configured for each IPv4 and IPv6 primary address of the interface. The secondary address of an IPv4 interface cannot be assigned a node SID index and does not inherit the SID of the primary IPv4 address.</p> <p>In OSPFv2 and OSPFv3, the node SID is configured in the primary area but is inherited in any other area in which the interface is added as secondary.</p> <p>This command fails if the network interface is not a loopback type or if the interface is defined in an IES or VPRN context. Assigning the same SID index or label value to the same interface in two different IGP instances is not allowed within the same node.</p>

The value of the label or index SID is taken from the range configured for this IGP instance. When using the global mode of operation, the segment routing module checks that the same index or label value is not assigned to more than one loopback interface address. When using the per-instance mode of operation, this check is not required because the index and, therefore, the label ranges of IGP instances are not allowed to overlap.

The **clear-n-flag** option allows the user to clear the N-flag (node-sid flag) in an OSPF or OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system. By default, the prefix SID sub-TLV for the prefix of a loopback interface is tagged as a node SID; that is, it belongs to this node only. However, to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.

The SR OS implementation is relaxed on the receive end and accepts duplicate prefix SIDs with the N-flag set or clear. SR OS resolves to the closest owner, or owners if ECMP, of the prefix SID cost-wise.

Introduced	16.0.R4
Platforms	All

### **clear-n-flag** *boolean*

Synopsis	Clear the N-flag in an OSPF3 prefix
Context	<b>configure</b> <i>router string ospf3 number area string interface string node-sid clear-n-flag boolean</i>
Tree	<a href="#">clear-n-flag</a>
Description	<p>When configured to <b>true</b>, this command allows the user to clear the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system.</p> <p>When configured to <b>false</b>, the N-flag in an OSPF3 prefix SID sub-TLV originated for the prefix of a loopback interface on the system is not cleared.</p> <p>When the user wants to configure and advertise an anycast SID using the same loopback interface prefix on multiple nodes, the user must clear the N-flag to assure interoperability with third-party implementations. This may perform a strict check on the receive end and drop duplicate prefix SID sub-TLVs when the N-flag is set.</p>
Default	false
Introduced	16.0.R5
Platforms	All

### **index** *number*

Synopsis	Node SID index for this interface
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Context	<b>configure router</b> <i>string ospf3 number area string interface string node-sid index number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R4
Platforms	All

### **label** *number*

Synopsis	Label value for the node SID
Context	<b>configure router</b> <i>string ospf3 number area string interface string node-sid label number</i>
Tree	<a href="#">label</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	16.0.R4
Platforms	All

### **passive** *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	<b>configure router</b> <i>string ospf3 number area string interface string passive boolean</i>
Tree	<a href="#">passive</a>
Introduced	16.0.R1
Platforms	All

### **poll-interval** *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	<b>configure router</b> <i>string ospf3 number area string interface string poll-interval number</i>
Tree	<a href="#">poll-interval</a>
Max. Range	0 to 4294967295
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

**priority** *number*

Synopsis	Interface priority in the DR election on the subnet
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>retransmit-interval</b> <i>number</i>
Tree	<b>retransmit-interval</b>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

**rib-priority** *keyword*

Synopsis	RIB priority for OSPF
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>rib-priority</b> <i>keyword</i>
Tree	<b>rib-priority</b>
Options	high
Introduced	16.0.R1
Platforms	All

**sid-protection** *boolean*

Synopsis	Allow adjacency SID protection by LFA and remote LFA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>interface</b> <i>string</i> <b>sid-protection</b> <i>boolean</i>

Tree	<a href="#">sid-protection</a>
Default	true
Introduced	16.0.R4
Platforms	All

### **transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">transit-delay</a> <i>number</i>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **key-rollover-interval** *number*

Synopsis	Key rollover interval
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">key-rollover-interval</a> <i>number</i>
Tree	<a href="#">key-rollover-interval</a>
Range	10 to 300
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">loopfree-alternate-exclude</a> <i>boolean</i>
Tree	<a href="#">loopfree-alternate-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

**nssa**

Synopsis	Enable the <b>nssa</b> context
Context	<b>configure router string ospf3 number area string nssa</b>
Tree	<b>nssa</b>
Introduced	16.0.R1
Platforms	All

**area-range** [**ip-prefix-mask**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure router string ospf3 number area string nssa area-range</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>area-range</b>
Introduced	16.0.R1
Platforms	All

**[ip-prefix-mask]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Addresses on ABR for route summarization or suppression
Context	<b>configure router string ospf3 number area string nssa area-range</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>area-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise boolean**

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure router string ospf3 number area string nssa area-range</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>advertise boolean</b>
Tree	<b>advertise</b>
Default	true
Introduced	16.0.R1
Platforms	All

## originate-default-route

Synopsis	Enable the <b>originate-default-route</b> context
Context	<b>configure router string ospf3 number area string nssa originate-default-route</b>
Tree	<a href="#">originate-default-route</a>
Introduced	16.0.R1
Platforms	All

## adjacency-check *boolean*

Synopsis	Default route to remove if there is no adjacency
Context	<b>configure router string ospf3 number area string nssa originate-default-route adjacency-check boolean</b>
Tree	<a href="#">adjacency-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

## type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	<b>configure router string ospf3 number area string nssa originate-default-route type-nssa boolean</b>
Tree	<a href="#">type-nssa</a>
Default	false
Introduced	16.0.R1
Platforms	All

## redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	<b>configure router string ospf3 number area string nssa redistribute-external boolean</b>
Tree	<a href="#">redistribute-external</a>
Default	true
Introduced	16.0.R1
Platforms	All

**summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string nssa summaries boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All

**stub**

Synopsis	Enable the <b>stub</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string stub</i>
Tree	<a href="#">stub</a>
Introduced	16.0.R1
Platforms	All

**default-metric** *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string stub default-metric number</i>
Tree	<a href="#">default-metric</a>
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

**summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string stub summaries boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All



**virtual-link** [*router-id*] *string* *transit-area* *reference*

Synopsis	Enter the <b>virtual-link</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i> <b>virtual-link</b> <i>string</i> <i>transit-area</i> <i>reference</i>
Tree	<b>virtual-link</b>
Introduced	16.0.R1
Platforms	All

**[router-id]** *string*

Synopsis	Router ID of the virtual link neighbor
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i> <b>virtual-link</b> <i>string</i> <i>transit-area</i> <i>reference</i>
Tree	<b>virtual-link</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**transit-area** *reference*

Synopsis	Transit area linking backbone and non-connected area
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i> <b>virtual-link</b> <i>string</i> <i>transit-area</i> <i>reference</i>
Tree	<b>virtual-link</b>
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OSPF interface
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>area</i> <i>string</i> <b>virtual-link</b> <i>string</i> <i>transit-area</i> <i>reference</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable

Introduced 16.0.R1  
 Platforms All

## authentication

Synopsis Enable the **authentication** context  
 Context **configure** [router](#) *string ospf3 number area string virtual-link string transit-area reference authentication*  
 Tree [authentication](#)  
 Introduced 16.0.R6  
 Platforms All

## inbound reference

Synopsis sa-name  
 Context **configure** [router](#) *string ospf3 number area string virtual-link string transit-area reference authentication inbound reference*  
 Tree [inbound](#)  
 Reference **configure** [ipsec static-sa](#) *string*  
 Notes This element is mandatory.  
 Introduced 16.0.R6  
 Platforms All

## outbound reference

Synopsis sa-name  
 Context **configure** [router](#) *string ospf3 number area string virtual-link string transit-area reference authentication outbound reference*  
 Tree [outbound](#)  
 Reference **configure** [ipsec static-sa](#) *string*  
 Notes This element is mandatory.  
 Introduced 16.0.R6  
 Platforms All

**dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>dead-interval</b> <i>number</i>
Tree	<b>dead-interval</b>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>hello-interval</b> <i>number</i>
Tree	<b>hello-interval</b>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>area</b> <i>string</i> <b>virtual-link</b> <i>string</i> <b>transit-area</b> <i>reference</i> <b>retransmit-interval</b> <i>number</i>
Tree	<b>retransmit-interval</b>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

### **transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <b>router</b> <i>string ospf3 number area string virtual-link string transit-area reference transit-delay number</i>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **asbr**

Synopsis	Enable the <b>asbr</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number asbr</i>
Tree	<a href="#">asbr</a>
Introduced	16.0.R1
Platforms	All

### **database-export**

Synopsis	Enable the <b>database-export</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number database-export</i>
Tree	<a href="#">database-export</a>
Introduced	16.0.R4
Platforms	All

### **bgp-ls-identifier**

Synopsis	Enable the <b>bgp-ls-identifier</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number database-export bgp-ls-identifier</i>
Tree	<a href="#">bgp-ls-identifier</a>
Introduced	16.0.R4
Platforms	All

**value number**

Synopsis	BGP-LS identifier sent in the BGP-LS NLRI
Context	<b>configure</b> <b>router</b> <i>string ospf3 number database-export bgp-ls-identifier value number</i>
Tree	<b>value</b>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	All

**igp-identifier number**

Synopsis	IGP instance in the BGP-LS NLRI
Context	<b>configure</b> <b>router</b> <i>string ospf3 number database-export igp-identifier number</i>
Tree	<b>igp-identifier</b>
Description	This command identifies the IGP instance in the BGP-LS NLRI when a router has interfaces participating in multiple IGP instances. The concept of an instance ID specified for OSPF is local subnet significant (RFC 6549). An IGP identifier value can be configured to be unique within a given IGP domain when the router sends the IGP link state information using BGP-LS.
Max. Range	0 to 18446744073709551615
Introduced	16.0.R4
Platforms	All

**export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number export-limit</i>
Tree	<b>export-limit</b>
Introduced	16.0.R1
Platforms	All

**log-percent number**

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <b>router</b> <i>string ospf3 number export-limit log-percent number</i>
Tree	<b>log-percent</b>

Range	1 to 100
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>export-limit</i> <i>number</i> <i>number</i>
Tree	<i>number</i>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**export-policy** *reference*

Synopsis	Export policies that determine exported routes
Context	<b>configure</b> <i>router</i> <i>string</i> <i>ospf3</i> <i>number</i> <i>export-policy</i> <i>reference</i>
Tree	<i>export-policy</i>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the <b>aggregate</b> command is also configured in the <b>configure router</b> context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the <b>configure router policy-options</b> context.</p>
Reference	<b>configure</b> <i>policy-options</i> <i>policy-statement</i> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**extended-lsa** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended LSA format in an OSPFv3 area
Context	<b>configure</b> <i>router string ospf3 number extended-lsa keyword</i>
Tree	<a href="#">extended-lsa</a>
Options	sparse, only
Default	sparse
Introduced	16.0.R1
Platforms	All

**external-db-overflow**

Synopsis	Enable the <b>external-db-overflow</b> context
Context	<b>configure</b> <i>router string ospf3 number external-db-overflow</i>
Tree	<a href="#">external-db-overflow</a>
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Time during which the router operates in overload
Context	<b>configure</b> <i>router string ospf3 number external-db-overflow interval number</i>
Tree	<a href="#">interval</a>
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

**limit** *number*

Synopsis	Number of external LSA at which overload is triggered
Context	<b>configure</b> <i>router string ospf3 number external-db-overflow limit number</i>

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Tree	<a href="#">limit</a>
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

### **external-preference** *number*

Synopsis	Preference for OSPF external routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">external-preference</a> <i>number</i>
Tree	<a href="#">external-preference</a>
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

### **graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

### **helper-mode** *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">helper-mode</a> <i>boolean</i>
Tree	<a href="#">helper-mode</a>
Default	true
Introduced	16.0.R1
Platforms	All



### **strict-lsa-checking** *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">graceful-restart</a> <b>strict-lsa-checking</b> <i>boolean</i>
Tree	<a href="#">strict-lsa-checking</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **igp-shortcut**

Synopsis	Enter the <b>igp-shortcut</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">igp-shortcut</a>
Tree	<a href="#">igp-shortcut</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the IGP shortcuts
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">igp-shortcut</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **tunnel-next-hop**

Synopsis	Enter the <b>tunnel-next-hop</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">igp-shortcut</a> <b>tunnel-next-hop</b>
Tree	<a href="#">tunnel-next-hop</a>
Introduced	16.0.R4
Platforms	All

**family** [*family-type*] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <b>router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword</i>
Tree	<b>family</b>
Introduced	16.0.R4
Platforms	All

**[family-type]** *keyword*

Synopsis	Address family type for the tunnel next hop
Context	<b>configure</b> <b>router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword</i>
Tree	<b>family</b>
Options	ipv4, ipv6, srv4, srv6
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**resolution** *keyword*

Synopsis	Resolution state for IGP shortcut tunnels
Context	<b>configure</b> <b>router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution keyword</i>
Tree	<b>resolution</b>
Options	none, filter, any, match-family-ip
Default	none
Introduced	16.0.R4
Platforms	All

**resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <b>router</b> <i>string ospf3 number igp-shortcut tunnel-next-hop family keyword resolution-filter</i>
Tree	<b>resolution-filter</b>
Introduced	16.0.R4

Platforms All

### **rsvp** *boolean*

Synopsis Use RSVP tunneling for next-hop resolution

Context **configure** [router](#) *string* [ospf3](#) *number* [igp-shortcut](#) [tunnel-next-hop](#) *family* *keyword* [resolution-filter](#) [rsvp](#) *boolean*

Tree [rsvp](#)

Default false

Introduced 16.0.R4

Platforms All

### **sr-te** *boolean*

Synopsis Use SR-TE tunneling for next-hop resolution

Context **configure** [router](#) *string* [ospf3](#) *number* [igp-shortcut](#) [tunnel-next-hop](#) *family* *keyword* [resolution-filter](#) [sr-te](#) *boolean*

Tree [sr-te](#)

Default false

Introduced 16.0.R4

Platforms All

### **import-policy** *reference*

Synopsis Import policy names for routes from IGP to route table

Context **configure** [router](#) *string* [ospf3](#) *number* [import-policy](#) *reference*

Tree [import-policy](#)

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

**ldp-sync** *boolean*

Synopsis	Configure IGP-LDP synchronization for interfaces
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">ldp-sync</a> <i>boolean</i>
Tree	<a href="#">ldp-sync</a>
Default	true
Introduced	16.0.R1
Platforms	All

**loopfree-alternate**

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R1
Platforms	All

**exclude**

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">exclude</a>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3
Platforms	All

**prefix-policy** *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">exclude</a> <a href="#">prefix-policy</a> <i>reference</i>
Tree	<a href="#">prefix-policy</a>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

## remote-lfa

Synopsis	Enable the <b>remote-lfa</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>loopfree-alternate</b> <b>remote-lfa</b>
Tree	<b>remote-lfa</b>
Introduced	16.0.R4
Platforms	All

## max-pq-cost *number*

Synopsis	Maximum cost during reverse SPF calculation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>loopfree-alternate</b> <b>remote-lfa</b> <b>max-pq-cost</b> <i>number</i>
Tree	<b>max-pq-cost</b>
Max. Range	0 to 4294967295
Default	65535
Introduced	16.0.R4
Platforms	All

## node-protect

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>loopfree-alternate</b> <b>remote-lfa</b> <b>node-protect</b>
Tree	<b>node-protect</b>
Introduced	16.0.R6
Platforms	All

## max-pq-nodes *number*

Synopsis	Maximum number of PQ nodes found in the LFA SPFs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>loopfree-alternate</b> <b>remote-lfa</b> <b>node-protect</b> <b>max-pq-nodes</b> <i>number</i>

Tree	<a href="#">max-pq-nodes</a>
Range	1 to 32
Default	16
Introduced	16.0.R6
Platforms	All

## ti-lfa

Synopsis	Enable the <b>ti-lfa</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">ti-lfa</a>
Tree	<a href="#">ti-lfa</a>
Description	Commands in this context configure the Topology Independent Loop-Free Alternate (TI-LFA) algorithm used in the LFA Shortest Path First (SPF) calculation for this OSPFv3 instance.
Introduced	16.0.R5
Platforms	All

## max-sr-frr-labels *number*

Synopsis	Maximum number of labels the TI-LFA backup path can use
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">ti-lfa</a> <a href="#">max-sr-frr-labels</a> <i>number</i>
Tree	<a href="#">max-sr-frr-labels</a>
Description	This command configures the maximum number of labels allowed in the segment list of the TI-LFA repair tunnel. A higher value results in better coverage by TI-LFA at the expense of increased packet encapsulation overhead. The TI-LFA algorithm uses this value to limit the search for the Q-node from the P-node on the post-convergence path.
Range	0 to 3
Default	2
Introduced	16.0.R5
Platforms	All

## node-protect

Synopsis	Enable the <b>node-protect</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">loopfree-alternate</a> <a href="#">ti-lfa</a> <a href="#">node-protect</a>
Tree	<a href="#">node-protect</a>

Introduced 16.0.R6  
Platforms All

### **multicast-import** *boolean*

Synopsis Submit routes into the multicast Route Table Manager  
Context **configure** *router string ospf3 number multicast-import boolean*  
Tree [multicast-import](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **overload** *boolean*

Synopsis Change local router state to appear overloaded  
Context **configure** *router string ospf3 number overload boolean*  
Tree [overload](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **overload-include-ext-1** *boolean*

Synopsis Advertise routes with maximum metric value for overload  
Context **configure** *router string ospf3 number overload-include-ext-1 boolean*  
Tree [overload-include-ext-1](#)  
Default false  
Introduced 19.7.R1  
Platforms All

### **overload-include-ext-2** *boolean*

Synopsis Advertise routes with maximum metric value for overload  
Context **configure** *router string ospf3 number overload-include-ext-2 boolean*  
Tree [overload-include-ext-2](#)

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Default	false
Introduced	16.0.R1
Platforms	All

### **overload-include-stub** *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>overload-include-stub</b> <i>boolean</i>
Tree	<a href="#">overload-include-stub</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-on-boot**

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>overload-on-boot</b>
Tree	<a href="#">overload-on-boot</a>
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Router interval in overload before normal operations
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>overload-on-boot</b> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Preference for OSPF internal routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>preference</b> <i>number</i>



Tree	<a href="#">preference</a>
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

### **reference-bandwidth** *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3</i> <i>number reference-bandwidth</i> <i>number</i>
Tree	<a href="#">reference-bandwidth</a>
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	16.0.R1
Platforms	All

### **rib-priority**

Synopsis	Enter the <b>rib-priority</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3</i> <i>number rib-priority</i>
Tree	<a href="#">rib-priority</a>
Introduced	16.0.R1
Platforms	All

### **high**

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string ospf3</i> <i>number rib-priority high</i>
Tree	<a href="#">high</a>
Introduced	16.0.R1
Platforms	All

**prefix-list** *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rib-priority</a> <a href="#">high</a> <a href="#">prefix-list</a> <i>reference</i>
Tree	<a href="#">prefix-list</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**router-id** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">router-id</a> <i>string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

**rtr-adv-lsa-limit**

Synopsis	Enable the <b>rtr-adv-lsa-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a>
Tree	<a href="#">rtr-adv-lsa-limit</a>
Introduced	16.0.R1
Platforms	All

**log-only** *boolean*

Synopsis	Log the event without triggering overload
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a> <a href="#">log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1

Platforms All

### **max-lsa-count** *number*

Synopsis Maximum number of LSAs one router can advertise

Context **configure** **router** *string ospf3 number rtr-adv-lsa-limit max-lsa-count number*

Tree [max-lsa-count](#)

Range 1 to 4294967295

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **overload-timeout** (*number* | *keyword*)

Synopsis Maximum time in overload after LSA limit is reached

Context **configure** **router** *string ospf3 number rtr-adv-lsa-limit overload-timeout (number | keyword)*

Tree [overload-timeout](#)

Range 1 to 1800

Units seconds

Options forever

Default forever

Introduced 16.0.R1

Platforms All

### **warning-threshold** *number*

Synopsis Percentage of the max LSA count that causes a warning

Context **configure** **router** *string ospf3 number rtr-adv-lsa-limit warning-threshold number*

Tree [warning-threshold](#)

Range 0 to 100

Units percent

Default 0

Introduced 16.0.R1

Platforms All

## segment-routing

Synopsis	Enter the <b>segment-routing</b> context
Context	<b>configure router string ospf3 number segment-routing</b>
Tree	<a href="#">segment-routing</a>
Introduced	16.0.R4
Platforms	All

## adj-sid-hold (*number* | *keyword*)

Synopsis	Adjacency SID hold time
Context	<b>configure router string ospf3 number segment-routing adj-sid-hold (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">adj-sid-hold</a>
Description	This command configures a timer to hold the ILM or LTN of an adjacency SID following a failure of the adjacency.

When an adjacency to a neighbor fails, the following procedure is followed for both an LFA protected and the LFA unprotected SID of this adjacency in SR-MPLS. An adjacency can have both types of SIDs assigned by configuration. An LFA protected adjacency SID is eligible for LFA protection, however, the following procedure applies even if an LFA backup is not programmed at the time of the failure. An LFA unprotected adjacency SID is not eligible for LFA protection.

- IGP withdraws the advertisement of the link TLV as well as its adjacency SID sub-TLV.
- The adjacency SID hold timer starts.
- The LTN and ILM records of the adjacency are kept in the datapath for as long as the adjacency SID hold time is running. This allows packets to flow over the LFA backup path, when the adjacency is protected, and allows the ingress LER or PCE time to compute a new path of the SR-TE LSP after IGP converges.
- If the adjacency is restored while the adjacency SID hold timer is running, the timer is aborted, and the adjacency SID remains programmed in the datapath with the retained SID values. However, the backup NHLFE may change if a new LFA SPF runs while the adjacency SID hold timer running. An update to the backup NHLFE is performed immediately following the LFA SPF. In all cases, the adjacency keeps its assigned SID label value.
- If the adjacency SID hold timer expires before the adjacency is restored, the SID is deprogrammed from the datapath and the label returned into the common pool where it was drawn from. Users of the adjacency (for example, SR policy and SR-TE LSP) are also informed. When the adjacency is subsequently restored, it gets assigned its allocated static-label value or a new dynamic-label value.
- A new PG-ID is assigned each time an adjacency comes back up. This PG-ID is used by the ILM and LTN of the adjacency SID and of all downstream node SIDs that resolve to a next hop over this adjacency.

Range	1 to 1800
Units	seconds
Options	none
Default	15
Introduced	16.0.R4
Platforms	All

## adjacency-sid

Synopsis	Enter the <b>adjacency-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf3</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">adjacency-sid</a>
Tree	<a href="#">adjacency-sid</a>
Introduced	22.7.R1
Platforms	All

## allocate-dual-sids *boolean*

Synopsis	Allocate dual adjacency SIDs per interface
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf3</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">adjacency-sid</a> <a href="#">allocate-dual-sids</a> <i>boolean</i>
Tree	<a href="#">allocate-dual-sids</a>
Description	<p>When configured to <b>true</b>, the router supports two SR-MPLS adjacency SIDs per interface. A protected and unprotected adjacency SID is instantiated and advertised. If an SR-MPLS adjacency SID already exists, an additional complementary (protected or unprotected) adjacency SID is created on the interface.</p> <p>When configured to <b>false</b>, the router disables the support of two SR-MPLS adjacency SIDs per interface.</p>
Default	false
Introduced	22.7.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of segment routing
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">ospf3</a> <a href="#">number</a> <a href="#">segment-routing</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R4
Platforms	All

## **egress-statistics**

Synopsis	Enter the <b>egress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a>
Tree	<a href="#">egress-statistics</a>
Introduced	19.10.R1
Platforms	All

## **adj-sid** *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <a href="#">adj-sid</a> <i>boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

## **node-sid** *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">egress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

## ingress-statistics

Synopsis	Enter the <b>ingress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a>
Tree	<a href="#">ingress-statistics</a>
Introduced	19.10.R1
Platforms	All

## adj-sid *boolean*

Synopsis	Enable the allocation of statistics on adjacency SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a> <a href="#">adj-sid</a> <i>boolean</i>
Tree	<a href="#">adj-sid</a>
Description	When configured to <b>true</b> , this command enables the allocation of statistic indexes to each programmed NHLFE corresponding to Adjacency SIDs (local and received by means of IGP advertisement). All NHLFEs associated to a given SID share the same index. If a statistics index is not available at allocation time, the allocation fails and the system retries the allocation. The system generates a log on the first fail and a log on the final successful allocation.
Default	false
Introduced	19.10.R1
Platforms	All

## node-sid *boolean*

Synopsis	Enable the allocation of statistics on node SIDs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">ingress-statistics</a> <a href="#">node-sid</a> <i>boolean</i>
Tree	<a href="#">node-sid</a>
Default	false
Introduced	19.10.R1
Platforms	All

## prefix-sid-range

Synopsis	Enable the <b>prefix-sid-range</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a>

Tree	<a href="#">prefix-sid-range</a>
Description	Commands in this context configure the label block BGP segment routing can use.
Introduced	16.0.R4
Platforms	All

## global

Synopsis	Allocate labels from the SRBG space
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">global</a>
Tree	<a href="#">global</a>
Description	When configured, the system allows BGP to allocate labels from the SRGB space, as defined under the <b>configure router mpls-labels sr-labels</b> context.
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R4
Platforms	All

## max-index *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound value for the local SID index
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">max-index</a> <i>number</i>
Tree	<a href="#">max-index</a>
Range	0 to 524287
Default	1
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R4
Platforms	All



**start-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound value for the local label offset
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">prefix-sid-range</a> <a href="#">start-label</a> <i>number</i>
Tree	<a href="#">start-label</a>
Range	0 to 524287
Default	0
Notes	The following elements are part of a choice: <b>global</b> or ( <b>max-index</b> and <b>start-label</b> ).
Introduced	16.0.R4
Platforms	All

**tunnel-mtu** *number*

Synopsis	Tunnel MTU size
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">tunnel-mtu</a> <i>number</i>
Tree	<a href="#">tunnel-mtu</a>
Range	512 to 9786
Introduced	16.0.R4
Platforms	All

**tunnel-table-pref** *number*

Synopsis	Preference of SR tunnels created by the IGP instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">segment-routing</a> <a href="#">tunnel-table-pref</a> <i>number</i>
Tree	<a href="#">tunnel-table-pref</a>
Description	This command configures the TTM preference of shortest path SR tunnels created by the IGP instance. This is used for BGP shortcuts, VPRN auto-bind, or BGP transport tunnel when the tunnel binding commands are configured to the <b>any</b> value, which parses the TTM for tunnels in the protocol preference order. The user can choose to either accept the global TTM preference or explicitly list the tunnel types they want to use. If the user lists the tunnel type explicitly, the TTM preference is still used to select one type over the other. In both cases, a fallback to the next preferred tunnel type is performed if the selected type fails. A reversion to a more preferred tunnel type is performed as soon as one is available.

The segment routing module adds to the TTM an SR tunnel entry for each resolved remote node SID prefix and programs the data path having the corresponding LTN with the push operation pointing to the primary and LFA backup NHLFEs.

The default preference for shortest path SR tunnels in the TTM is set lower than LDP tunnels but higher than BGP tunnels to allow controlled migration of customers without disrupting their current deployment when they enable segment routing. The following is the value of the default preference for the various tunnel types. This includes the preference of SR tunnels based on shortest path (referred to as SR-ISIS and SR-OSPF).

**Note:** The preference of an SR-TE LSP is not configurable and is the second most preferred tunnel type after RSVP-TE. The preference is the same whether if the SR-TE LSP was resolved in IS-IS or OSPF.

The global default TTM preference for the tunnel types is as follows:

- ROUTE\_PREF\_RSVP 7
- ROUTE\_PREF\_SR\_TE 8
- ROUTE\_PREF\_LDP 9
- ROUTE\_PREF\_OSPF\_TTM 10
- ROUTE\_PREF\_ISIS\_TTM 11
- ROUTE\_PREF\_BGP\_TTM 12
- ROUTE\_PREF\_GRE 255

The default value for SR-ISIS or SR-OSPF is the same regardless if one or more IS-IS or OSPF instances programmed a tunnel for the same prefix. The selection of a SR tunnel in this case will be based on the lowest IGP instance ID. Similarly, IPv6 SR-ISIS and SR-OSPF3 tunnels are programmed into TTMv6 with the same default preference value as IPv4 SR-ISIS and IPv4 SR-OSPF respectively.

Nokia recommends not to set two or more tunnel types to the same preference value. In such a situation, the tunnel table prefers the tunnel type which was first introduced in SR OS implementation historically.

Range	1 to 255
Default	10
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <i>router string ospf3 number timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

**incremental-spf-wait** *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>timers</b> <b>incremental-spf-wait</b> <i>number</i>
Tree	<b>incremental-spf-wait</b>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**lsa-accumulate** *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>timers</b> <b>lsa-accumulate</b> <i>number</i>
Tree	<b>lsa-accumulate</b>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**lsa-arrival** *number*

Synopsis	Minimum delay between receipt of same LSAs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>timers</b> <b>lsa-arrival</b> <i>number</i>
Tree	<b>lsa-arrival</b>
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

## lsa-generate

Synopsis	Enter the <b>lsa-generate</b> context
Context	<b>configure router</b> <i>string ospf3 number timers</i> <b>lsa-generate</b>
Tree	<a href="#">lsa-generate</a>
Introduced	16.0.R1
Platforms	All

## lsa-initial-wait *number*

Synopsis	First wait period between OSPF LSA generation
Context	<b>configure router</b> <i>string ospf3 number timers</i> <b>lsa-generate lsa-initial-wait</b> <i>number</i>
Tree	<a href="#">lsa-initial-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

## lsa-second-wait *number*

Synopsis	Hold time between the first and second LSA generation
Context	<b>configure router</b> <i>string ospf3 number timers</i> <b>lsa-generate lsa-second-wait</b> <i>number</i>
Tree	<a href="#">lsa-second-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

## max-lsa-wait *number*

Synopsis	Max time between two LSAs being generated
Context	<b>configure router</b> <i>string ospf3 number timers</i> <b>lsa-generate max-lsa-wait</b> <i>number</i>
Tree	<a href="#">max-lsa-wait</a>
Range	10 to 600000

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Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **redistribute-delay** *number*

Synopsis	Hold down timer for external routes into OSPF
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>timers</b> <b>redistribute-delay</b> <i>number</i>
Tree	<b>redistribute-delay</b>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>timers</b> <b>spf-wait</b>
Tree	<b>spf-wait</b>
Introduced	16.0.R1
Platforms	All

### **spf-initial-wait** *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ospf3</b> <i>number</i> <b>timers</b> <b>spf-wait</b> <b>spf-initial-wait</b> <i>number</i>
Tree	<b>spf-initial-wait</b>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**spf-max-wait** *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	<b>configure</b> <i>router string ospf3 number timers spf-wait spf-max-wait number</i>
Tree	<a href="#">spf-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

**spf-second-wait** *number*

Synopsis	Hold time between the first and second SPF calculation
Context	<b>configure</b> <i>router string ospf3 number timers spf-wait spf-second-wait number</i>
Tree	<a href="#">spf-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**unicast-import** *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	<b>configure</b> <i>router string ospf3 number unicast-import boolean</i>
Tree	<a href="#">unicast-import</a>
Default	true
Introduced	16.0.R1
Platforms	All

**p2mp-sr-tree**

Synopsis	Enable the <b>p2mp-sr-tree</b> context
Context	<b>configure</b> <i>router string p2mp-sr-tree</i>

Tree	<a href="#">p2mp-sr-tree</a>
Introduced	21.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

**bfd-liveness** *keyword*

Synopsis	BFD-liveness for P2MP SR tree status entry
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <b>bfd-liveness</b> <i>keyword</i>
Tree	<a href="#">bfd-liveness</a>
Options	ipv4, ipv6
Max. Instances	2
Introduced	21.5.R1
Platforms	All

**p2mp-policy** [[p2mp-policy-name](#)] *string*

Synopsis	Enter the <b>p2mp-policy</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <b>p2mp-policy</b> <i>string</i>
Tree	<a href="#">p2mp-policy</a>
Introduced	21.5.R1
Platforms	All

**[p2mp-policy-name]** *string*

Synopsis	P2MP policy name
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Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i>
Tree	<a href="#">p2mp-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the P2MP policy
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

### **candidate-path** [[candidate-path-name](#)] *string*

Synopsis	Enter the <b>candidate-path</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i> <a href="#">candidate-path</a> <i>string</i>
Tree	<a href="#">candidate-path</a>
Introduced	21.5.R1
Platforms	All

### **[candidate-path-name]** *string*

Synopsis	Candidate path name
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i> <a href="#">candidate-path</a> <i>string</i>
Tree	<a href="#">candidate-path</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All



**active-instance** *reference*

Synopsis	Candidate path active instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>active-instance</b> <i>reference</i>
Tree	<b>active-instance</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>path-instances</b> <i>number</i>
Introduced	21.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the P2MP SR tree
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

**path-instances** [*index*] *number*

Synopsis	Enter the <b>path-instances</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>path-instances</b> <i>number</i>
Tree	<b>path-instances</b>
Introduced	21.5.R1
Platforms	All

**[index]** *number*

Synopsis	Instance index
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>path-instances</b> <i>number</i>
Tree	<b>path-instances</b>

Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

### **instance-id** *number*

Synopsis	Instance value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>path-instances</b> <i>number</i> <b>instance-id</b> <i>number</i>
Tree	<b>instance-id</b>
Max. Range	0 to 4294967295
Introduced	21.5.R1
Platforms	All

### **preference** *number*

Synopsis	Candidate-path preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>candidate-path</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	0 to 1024
Default	100
Introduced	21.5.R1
Platforms	All

### **root-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Root address for the P2MP policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>root-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>root-address</b>
Default	0.0.0.0
Introduced	21.5.R1
Platforms	All

**tree-id** *number*

Synopsis	Tree ID for the P2MP policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>p2mp-policy</b> <i>string</i> <b>tree-id</b> <i>number</i>
Tree	<b>tree-id</b>
Range	0   8193 to 16286
Default	0
Introduced	21.5.R1
Platforms	All

**replication-segment** [**policy-name**] *string*

Synopsis	Enter the <b>replication-segment</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i>
Tree	<b>replication-segment</b>
Introduced	21.5.R1
Platforms	All

**[policy-name]** *string*

Synopsis	P2MP policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i>
Tree	<b>replication-segment</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the replication segment
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable

Introduced	21.5.R1
Platforms	All

### **downstream-nodes** [[downstream-index](#)] *number*

Synopsis	Enter the <b>downstream-nodes</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">replication-segment</a> <i>string</i> <a href="#">downstream-nodes</a> <i>number</i>
Tree	<a href="#">downstream-nodes</a>
Introduced	21.5.R1
Platforms	All

### **[downstream-index]** *number*

Synopsis	Downstream index
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">replication-segment</a> <i>string</i> <a href="#">downstream-nodes</a> <i>number</i>
Tree	<a href="#">downstream-nodes</a>
Range	1 to 4096
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of next-hop entries
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">replication-segment</a> <i>string</i> <a href="#">downstream-nodes</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

**label**

Synopsis	Enter the <b>label</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i> <b>label</b>
Tree	<b>label</b>
Introduced	21.5.R1
Platforms	All

**sid-list** [*index*] *number*

Synopsis	Enter the <b>sid-list</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i> <b>label</b> <b>sid-list</b> <i>number</i>
Tree	<b>sid-list</b>
Introduced	21.5.R1
Platforms	All

**[index]** *number*

Synopsis	SID list index
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i> <b>label</b> <b>sid-list</b> <i>number</i>
Tree	<b>sid-list</b>
Range	1 to 11
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

**replication-sid** *number*

Synopsis	Segment ID for the SID list entry
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>downstream-nodes</b> <i>number</i> <b>label</b> <b>sid-list</b> <i>number</i> <b>replication-sid</b> <i>number</i>
Tree	<b>replication-sid</b>
Range	3   16 to 1048575   4294967295
Notes	This element is mandatory.

Introduced 21.5.R1  
 Platforms All

### **next-hop-address** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Next-hop address for replication segment next hops  
 Context **configure** *router string p2mp-sr-tree replication-segment string downstream-nodes number next-hop-address (ipv4-address-with-zone | ipv6-address-with-zone)*  
 Tree [next-hop-address](#)  
 Default 0.0.0.0  
 Introduced 21.5.R1  
 Platforms All

### **next-hop-interface-name** *string*

Synopsis Interface name for replication segment next-hops  
 Context **configure** *router string p2mp-sr-tree replication-segment string downstream-nodes number next-hop-interface-name string*  
 Tree [next-hop-interface-name](#)  
 String Length 1 to 32  
 Introduced 21.5.R1  
 Platforms All

### **protect-nexthop-id** *reference*

Synopsis ID of the protection next hop used for FRR  
 Context **configure** *router string p2mp-sr-tree replication-segment string downstream-nodes number protect-nexthop-id reference*  
 Tree [protect-nexthop-id](#)  
 Reference **configure** *router string p2mp-sr-tree replication-segment string downstream-nodes number*  
 Introduced 21.5.R1  
 Platforms All

**instance-id** *number*

Synopsis	Instance ID for replication segment entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>instance-id</b> <i>number</i>
Tree	<b>instance-id</b>
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

**replication-sid** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment ID of the replication segment
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>replication-sid</b> <i>number</i>
Tree	<b>replication-sid</b>
Max. Range	0 to 4294967295
Default	0
Introduced	21.5.R1
Platforms	All

**root-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Root address for replication segment entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>root-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>root-address</b>
Introduced	21.5.R1
Platforms	All

**sid-action** *keyword*

Synopsis	SID action for replication segment entries
Context	<b>configure</b> <b>router</b> <i>string</i> <b>p2mp-sr-tree</b> <b>replication-segment</b> <i>string</i> <b>sid-action</b> <i>keyword</i>

Tree	<a href="#">sid-action</a>
Options	none, push, pop, swap
Default	none
Introduced	21.5.R1
Platforms	All

### **tree-id** *number*

Synopsis	Tree ID for the replication segment of the P2MP SR tree
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">replication-segment</a> <i>string</i> <a href="#">tree-id</a> <i>number</i>
Tree	<a href="#">tree-id</a>
Range	0   8193 to 16286
Default	0
Introduced	21.5.R1
Platforms	All

### **reserved-label-block** *reference*

Synopsis	Reserved label block name for the P2MP SR tree
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">reserved-label-block</a> <i>reference</i>
Tree	<a href="#">reserved-label-block</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Introduced	21.5.R1
Platforms	All

### **pcep**

Synopsis	Enter the <b>pcep</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a>
Tree	<a href="#">pcep</a>
Introduced	16.0.R4
Platforms	All



**pcc**

Synopsis	Enable the <b>pcc</b> context
Context	<b>configure</b> <i>router string</i> <b>pcep pcc</b>
Tree	<b>pcc</b>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the PCEP session element
Context	<b>configure</b> <i>router string</i> <b>pcep pcc admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**dead-timer** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure dead timer
Context	<b>configure</b> <i>router string</i> <b>pcep pcc dead-timer</b> <i>number</i>
Tree	<b>dead-timer</b>
Range	1 to 255
Units	seconds
Default	120
Introduced	16.0.R4
Platforms	All

## keepalive *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure keepalive
Context	<b>configure</b> <i>router string pcep pcc keepalive number</i>
Tree	<a href="#">keepalive</a>
Range	1 to 255
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	All

## local-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address of the PCEP speaker
Context	<b>configure</b> <i>router string pcep pcc local-address string</i>
Tree	<a href="#">local-address</a>
Description	This command configures the local IPv4 address of the PCEP speaker.  See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv4 address to establish a PCEP session.
Introduced	16.0.R4
Platforms	All

## local-address-ipv6 *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv6 address of the PCEP speaker
Context	<b>configure</b> <i>router string pcep pcc local-address-ipv6 string</i>

Tree	<a href="#">local-address-ipv6</a>
Description	This command configures the local IPv6 address of the PCEP speaker. See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv6 address to establish a PCEP session.
Introduced	20.2.R1
Platforms	All

### **max-srte-pce-init-lsps** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure max sr te pce init LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep pcc max-srte-pce-init-lsps</a> <i>number</i>
Tree	<a href="#">max-srte-pce-init-lsps</a>
Range	0 to 8191
Default	8191
Introduced	16.0.R5
Platforms	All

### **pce-associations**

Synopsis	Enter the <b>pce-associations</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep pcc pce-associations</a>
Tree	<a href="#">pce-associations</a>
Description	Commands in this context configure PCE association groups.
Introduced	22.5.R1
Platforms	All

### **diversity** [[assoc-name](#)] *string*

Synopsis	Enter the <b>diversity</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep pcc pce-associations diversity</a> <i>string</i>
Tree	<a href="#">diversity</a>

Description	Commands in this context create a named diversity association from which the parameters for the specified diversity association are configured.
Introduced	22.5.R1
Platforms	All

**[assoc-name]** *string*

Synopsis	Name of the association group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>pce-associations</b> <b>diversity</b> <i>string</i>
Tree	<b>diversity</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	All

**association-id** *number*

Synopsis	Association ID for the diversity association group
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>pce-associations</b> <b>diversity</b> <i>string</i> <b>association-id</b> <i>number</i>
Tree	<b>association-id</b>
Description	This command configures the diversity association ID. The user must specify an association ID.
Range	0 to 65535
Default	0
Introduced	22.5.R1
Platforms	All

**association-source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address of the diversity association
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>pce-associations</b> <b>diversity</b> <i>string</i> <b>association-source</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>association-source</b>
Introduced	22.5.R1
Platforms	All

**disjointness-reference** *boolean*

Synopsis	Configure P-flag in the disjointness configuration TLV
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pcep pcc pce-associations diversity string disjointness-reference boolean</i>
Tree	<a href="#">disjointness-reference</a>
Description	<p>When configured to <b>true</b>, the router sets the P-flag in the disjointness configuration TLV. When the P-flag is set, it indicates that this LSP path is the reference path for the disjoint set of paths. The PCE must first compute the path of this LSP and then apply the requested disjointness type to compute the path of all other paths in the same diversity association ID.</p> <p>When configured to <b>false</b>, the router does not set the P-flag in the disjointness configuration TLV.</p>
Default	false
Introduced	22.5.R1
Platforms	All

**disjointness-type** *keyword*

Synopsis	Disjointness type for the association group
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pcep pcc pce-associations diversity string disjointness-type keyword</i>
Tree	<a href="#">disjointness-type</a>
Options	strict, loose
Default	loose
Introduced	22.5.R1
Platforms	All

**diversity-type** *keyword*

Synopsis	Diversity type for the association group
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pcep pcc pce-associations diversity string diversity-type keyword</i>
Tree	<a href="#">diversity-type</a>
Description	This command configures the diversity type for the association group.
Options	none, link, node, srlg-link, srlg-node
Default	none
Introduced	22.5.R1

Platforms All

### **policy** [*assoc-name*] *string*

Synopsis Enter the **policy** list instance

Context **configure** *router string pcep pcc pce-associations policy string*

Tree *policy*

Description Commands in this context create a named policy association from which the parameters for the specified policy association are configured.

Introduced 22.5.R1

Platforms All

### **[assoc-name]** *string*

Synopsis Name of the association group

Context **configure** *router string pcep pcc pce-associations policy string*

Tree *policy*

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.5.R1

Platforms All

### **association-id** *number*

Synopsis Association ID for the policy association group

Context **configure** *router string pcep pcc pce-associations policy string association-id number*

Tree *association-id*

Description This command configures the policy association ID. The user must specify an association ID.

Range 0 to 65535

Default 0

Introduced 22.5.R1

Platforms All

**association-source** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address for the association
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>pce-associations</b> <b>policy</b> <i>string</i> <b>association-source</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>association-source</b>
Description	This command configures the source IP address of the policy association.
Introduced	22.5.R1
Platforms	All

**peer** [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Max. Instances	2
Introduced	16.0.R4
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Destination IP address of a PCE peer in a PCEP session
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>peer</b>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the PCC peer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable

Introduced 16.0.R4  
 Platforms All

### authentication-keychain *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Keychain for TCP-AO authentication between PCC and PCE  
 Context **configure** *router* *string* *pcep pcc peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
*authentication-keychain reference*  
 Tree *authentication-keychain*  
 Reference **configure** *system security keychains keychain string*  
 Introduced 23.7.R1  
 Platforms All

### preference *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Preference value of the peer  
 Context **configure** *router* *string* *pcep pcc peer* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
*preference number*  
 Tree *preference*  
 Range 0 to 100  
 Default 0  
 Introduced 16.0.R4  
 Platforms All

### route-preference *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Route preference to reach the PCE server
Context	<b>configure router</b> <i>string pcep pcc peer (ipv4-address-no-zone   ipv6-address-no-zone) route-preference keyword</i>
Tree	<a href="#">route-preference</a>
Description	This command specifies the routing preference to reach the PCE server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the management routing instance are used to reach the PCE server before the in-band routes in the Base routing instance.
Options	inband, outband, both
Default	both
Introduced	21.10.R1
Platforms	All

### **tls-client-profile** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TLS client profile name assigned to this PCC peer
Context	<b>configure router</b> <i>string pcep pcc peer (ipv4-address-no-zone   ipv6-address-no-zone) tls-client-profile reference</i>
Tree	<a href="#">tls-client-profile</a>
Reference	<b>configure system security tls client-tls-profile</b> <i>string</i>
Introduced	21.10.R1
Platforms	All

### **tls-wait-timer** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time the PCC waits until declaring handshake failure
Context	<b>configure router</b> <i>string pcep pcc peer (ipv4-address-no-zone   ipv6-address-no-zone) tls-wait-timer number</i>
Tree	<a href="#">tls-wait-timer</a>
Range	60 to 255

Units	seconds
Default	60
Introduced	21.10.R1
Platforms	All

### **redelegation-timer** *number*

Synopsis	Configure redelegation-timer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep pcc redelegation-timer</b> <i>number</i>
Tree	<a href="#">redelegation-timer</a>
Range	1 to 3600
Units	seconds
Default	90
Introduced	16.0.R4
Platforms	All

### **report-path-constraints** *boolean*

Synopsis	Include LSP path constraints in PCE report messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep pcc report-path-constraints</b> <i>boolean</i>
Tree	<a href="#">report-path-constraints</a>
Default	true
Introduced	16.0.R4
Platforms	All

### **state-timer**

Synopsis	Enter the <b>state-timer</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep pcc state-timer</b>
Tree	<a href="#">state-timer</a>
Introduced	16.0.R4
Platforms	All

**timer number**

Synopsis	Configure state-timer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>state-timer</b> <b>timer</b> <i>number</i>
Tree	<b>timer</b>
Range	1 to 3600
Units	seconds
Default	180
Introduced	16.0.R4
Platforms	All

**timer-action keyword**

Synopsis	State timer action remove/none
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>state-timer</b> <b>timer-action</b> <i>keyword</i>
Tree	<b>timer-action</b>
Options	none, remove
Default	remove
Introduced	16.0.R4
Platforms	All

**unknown-message-rate number**

Synopsis	Configure unknown message rate
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pcc</b> <b>unknown-message-rate</b> <i>number</i>
Tree	<b>unknown-message-rate</b>
Range	1 to 255
Default	10
Introduced	16.0.R4
Platforms	All

**pce**

Synopsis	Enable the <b>pce</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcep</b> <b>pce</b>
Tree	<b>pce</b>

Introduced	16.0.R4
Platforms	VSR-NRC

### **admin-state** *keyword*

Synopsis	Administrative state of the PCEP session element
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pce</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	VSR-NRC

### **authentication-keychain** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Keychain for TCP-AO authentication between PCC and PCE
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pce</a> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	23.10.R1
Platforms	VSR-NRC

### **dead-timer** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure dead timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep</a> <a href="#">pce</a> <a href="#">dead-timer</a> <i>number</i>
Tree	<a href="#">dead-timer</a>
Range	1 to 255
Units	seconds

Default	120
Introduced	16.0.R4
Platforms	VSR-NRC

### **keepalive** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure keepalive
Context	<b>configure</b> <i>router string pcep pce keepalive number</i>
Tree	<a href="#">keepalive</a>
Range	1 to 255
Units	seconds
Default	30
Introduced	16.0.R4
Platforms	VSR-NRC

### **local-address** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv4 address of the PCEP speaker
Context	<b>configure</b> <i>router string pcep pce local-address string</i>
Tree	<a href="#">local-address</a>
Description	This command configures the local IPv4 address of the PCEP speaker.  See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv4 address to establish a PCEP session.
Introduced	16.0.R4
Platforms	VSR-NRC

## local-address-ipv6 *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPv6 address of the PCEP speaker
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep pce</a> <a href="#">local-address-ipv6</a> <i>string</i>
Tree	<a href="#">local-address-ipv6</a>
Description	This command configures the local IPv6 address of the PCEP speaker.  See "PCEP session establishment and maintenance" in the <i>7750 SR and 7950 XRS Segment Routing and PCE User Guide</i> for more information about configuring a PCEP local IPv6 address to establish a PCEP session.
Introduced	20.2.R1
Platforms	VSR-NRC

## tls-server-profile *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TLS server profile name assigned to this PCE
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep pce</a> <a href="#">tls-server-profile</a> <i>reference</i>
Tree	<a href="#">tls-server-profile</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	VSR-NRC

## tls-wait-timer *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure tls-wait-timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pcep pce</a> <a href="#">tls-wait-timer</a> <i>number</i>
Tree	<a href="#">tls-wait-timer</a>
Range	60 to 255

Units	seconds
Default	60
Introduced	21.10.R1
Platforms	VSR-NRC

### **unknown-message-rate** *number*

Synopsis	Configure unknown message rate
Context	<b>configure</b> <i>router string</i> <b>pcp pce</b> <i>unknown-message-rate number</i>
Tree	<a href="#">unknown-message-rate</a>
Range	1 to 255
Default	10
Introduced	16.0.R4
Platforms	VSR-NRC

### **pcp**

Synopsis	Enter the <b>pcp</b> context
Context	<b>configure</b> <i>router string</i> <b>pcp</b>
Tree	<a href="#">pcp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **server** [*name*] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <i>router string</i> <b>pcp server</b> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	PCP server name
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Context	<b>configure router string pcp server string</b>
Tree	<b>server</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state keyword**

Synopsis	Administrative state of the PCP server
Context	<b>configure router string pcp server string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure router string pcp server string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dual-stack-lite-address string**

Synopsis	Inside Dual Stack Lite AFTR address
Context	<b>configure router string pcp server string dual-stack-lite-address string</b>
Tree	<b>dual-stack-lite-address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**fwd-inside-router** *string*

Synopsis	PCP forwarding inside virtual router instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcp server</b> <i>string</i> <b>fwd-inside-router</b> <i>string</i>
Tree	<b>fwd-inside-router</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface** [**name**] *reference*

Synopsis	Add a list entry for <b>interface</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcp server</b> <i>string</i> <b>interface</b> <i>reference</i>
Tree	<b>interface</b>
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *reference*

Synopsis	Interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcp server</b> <i>string</i> <b>interface</b> <i>reference</i>
Tree	<b>interface</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>interface</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy** *reference*

Synopsis	PCP server policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pcp server</b> <i>string</i> <b>policy</b> <i>reference</i>
Tree	<b>policy</b>
Reference	<b>configure</b> <b>service nat</b> <b>pcp-server-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pim

Synopsis	Enable the <b>pim</b> context
Context	<b>configure router string pim</b>
Tree	<b>pim</b>
Introduced	16.0.R1
Platforms	All

## admin-state keyword

Synopsis	Administrative state of PIM
Context	<b>configure router string pim admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## apply-to keyword

Synopsis	IES and non-IES interfaces to create in PIM
Context	<b>configure router string pim apply-to keyword</b>
Tree	<b>apply-to</b>
Options	ies, non-ies, all, none
Default	none
Introduced	16.0.R1
Platforms	All

## import

Synopsis	Enter the <b>import</b> context
Context	<b>configure router string pim import</b>
Tree	<b>import</b>
Introduced	16.0.R1
Platforms	All

**join-policy** *reference*

Synopsis	Character limit for policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>import</b> <b>join-policy</b> <i>reference</i>
Tree	<a href="#">join-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**register-policy** *reference*

Synopsis	Character limit for policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>import</b> <b>register-policy</b> <i>reference</i>
Tree	<a href="#">register-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Router interface name
----------	-----------------------

Context	<b>configure router</b> <i>string</i> <b>pim interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the PIM interface
Context	<b>configure router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **assert-period** *number*

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	<b>configure router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>assert-period</b> <i>number</i>
Tree	<b>assert-period</b>
Range	1 to 300
Default	60
Introduced	16.0.R1
Platforms	All

### **bfd-liveness**

Synopsis	Enter the <b>bfd-liveness</b> context
Context	<b>configure router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Introduced	16.0.R1
Platforms	All

**ipv4 boolean**

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>bfd-liveness</b> <b>ipv4</b> <b>boolean</b>
Tree	<b>ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6 boolean**

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>bfd-liveness</b> <b>ipv6</b> <b>boolean</b>
Tree	<b>ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	All

**bier-signaling-type**

Synopsis	Enter the <b>bier-signaling-type</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>bier-signaling-type</b>
Tree	<b>bier-signaling-type</b>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ipv4 boolean**

Synopsis	Enable PIM IPv4 signaling through a BIER domain
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>bier-signaling-type</b> <b>ipv4</b> <b>boolean</b>
Tree	<b>ipv4</b>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ipv6 boolean**

Synopsis	Enable PIM IPv6 signaling through a BIER domain
Context	<b>configure</b> <i>router string pim interface string bier-signaling-type ipv6 boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bsm-check-rtr-alert boolean**

Synopsis	Check router alert option in bootstrap messages received
Context	<b>configure</b> <i>router string pim interface string bsm-check-rtr-alert boolean</i>
Tree	<a href="#">bsm-check-rtr-alert</a>
Default	false
Introduced	16.0.R1
Platforms	All

**hello-interval number**

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	<b>configure</b> <i>router string pim interface string hello-interval number</i>
Tree	<a href="#">hello-interval</a>
Range	0 to 255
Default	30
Introduced	16.0.R1
Platforms	All

**hello-multiplier number**

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	<b>configure</b> <i>router string pim interface string hello-multiplier number</i>
Tree	<a href="#">hello-multiplier</a>
Range	20 to 100
Default	35

Introduced 16.0.R1  
 Platforms All

### **improved-assert** *boolean*

Synopsis Allow improved assert processing on interface  
 Context **configure** *router string pim interface string improved-assert boolean*  
 Tree [improved-assert](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **instant-prune-echo** *boolean*

Synopsis Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface  
 Context **configure** *router string pim interface string instant-prune-echo boolean*  
 Tree [instant-prune-echo](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ipv4**

Synopsis Enter the **ipv4** context  
 Context **configure** *router string pim interface string ipv4*  
 Tree [ipv4](#)  
 Introduced 16.0.R1  
 Platforms All

### **monitor-oper-group**

Synopsis Enter the **monitor-oper-group** context  
 Context **configure** *router string pim interface string ipv4 monitor-oper-group*  
 Tree [monitor-oper-group](#)  
 Introduced 16.0.R1

Platforms All

### **name** *reference*

Synopsis Operational group identifier

Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [ipv4](#) [monitor-oper-group](#) *name* *reference*

Tree [name](#)

Reference **configure** [service](#) [oper-group](#) *string*

Introduced 16.0.R1

Platforms All

### **operation** *keyword*

Synopsis Operation performed when operational group is active

Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [ipv4](#) [monitor-oper-group](#) [operation](#) *keyword*

Tree [operation](#)

Options add, subtract, set

Introduced 16.0.R1

Platforms All

### **priority-delta** *number*

Synopsis Delta priority with operation when operational group is active

Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [ipv4](#) [monitor-oper-group](#) [priority-delta](#) *number*

Tree [priority-delta](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **multicast** *boolean*

Synopsis Enable PIM interface operation

Context **configure** [router](#) *string* [pim](#) [interface](#) *string* [ipv4](#) [multicast](#) *boolean*

Tree [multicast](#)



Default	true
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

## monitor-oper-group

Synopsis	Enter the <b>monitor-oper-group</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">monitor-oper-group</a>
Tree	<a href="#">monitor-oper-group</a>
Introduced	16.0.R1
Platforms	All

## name *reference*

Synopsis	Operational group identifier
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">monitor-oper-group</a> <a href="#">name</a> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## operation *keyword*

Synopsis	Operation performed when operational group is active
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">monitor-oper-group</a> <a href="#">operation</a> <i>keyword</i>
Tree	<a href="#">operation</a>
Options	add, subtract, set

Introduced	16.0.R1
Platforms	All

### **priority-delta** *number*

Synopsis	Delta priority with operation when operational group is active
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">monitor-oper-group</a> <a href="#">priority-delta</a> <i>number</i>
Tree	<a href="#">priority-delta</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **multicast** *boolean*

Synopsis	Enable PIM interface operation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">multicast</a> <i>boolean</i>
Tree	<a href="#">multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **max-groups** *number*

Synopsis	Maximum number of groups for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">max-groups</a> <i>number</i>
Tree	<a href="#">max-groups</a>
Range	0   1 to 16000
Default	0
Introduced	16.0.R1
Platforms	All

### **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a>

Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

## bandwidth

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	All

## mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <a href="#">mandatory</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

## total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <a href="#">total</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>interface-policy</b> <i>reference</i>
Tree	<b>interface-policy</b>
Reference	<b>configure</b> <b>mcac</b> <b>interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b>
Tree	<b>mc-constraints</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the multicast CAC constraints
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**level** [*level-id*] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>level</b> <i>number</i>
Tree	<b>level</b>
Introduced	16.0.R1
Platforms	All

**[level-id] number**

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>level</b> <i>number</i>
Tree	<b>level</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bandwidth number**

Synopsis	Bandwidth available for this level
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>level</b> <i>number</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**number-down [number-lag-port-down] number**

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i>
Tree	<b>number-down</b>
Introduced	16.0.R1
Platforms	All

**[number-lag-port-down] number**

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i>
Tree	<b>number-down</b>
Range	1 to 64

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level number**

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac mc-constraints</b> <b>number-down</b> <i>number</i> <b>level</b> <i>number</i>
Tree	<b>level</b>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **use-lag-port-weight boolean**

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac mc-constraints</b> <b>use-lag-port-weight</b> <i>boolean</i>
Tree	<b>use-lag-port-weight</b>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim interface</b> <i>string</i> <b>mcac</b> <i>policy reference</i>
Tree	<b>policy</b>

Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy string</a>
Introduced	16.0.R1
Platforms	All

### **multicast-senders** *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	<b>configure</b> <a href="#">router string pim interface string multicast-senders keyword</a>
Tree	<a href="#">multicast-senders</a>
Options	auto, always, never
Default	auto
Introduced	16.0.R1
Platforms	All

### **p2mp-ldp-tree-join**

Synopsis	Enter the <b>p2mp-ldp-tree-join</b> context
Context	<b>configure</b> <a href="#">router string pim interface string p2mp-ldp-tree-join</a>
Tree	<a href="#">p2mp-ldp-tree-join</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ipv4 boolean**

Synopsis	Allow dynamic mLDP in-band signaling for IPv4 PIM joins
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>p2mp-ldp-tree-join</b> <b>ipv4</b> <i>boolean</i>
Tree	<b>ipv4</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ipv6 boolean**

Synopsis	Allow dynamic mLDP in-band signaling for IPv6 PIM joins
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>p2mp-ldp-tree-join</b> <b>ipv6</b> <i>boolean</i>
Tree	<b>ipv6</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority number**

Synopsis	DR election priority for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	1 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

### **sticky-dr**

Synopsis	Enable the <b>sticky-dr</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>sticky-dr</b>
Tree	<b>sticky-dr</b>
Introduced	16.0.R1
Platforms	All



### **priority** *number*

Synopsis	DR election priority for this interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>sticky-dr</b> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	1 to 4294967295
Default	1024
Introduced	16.0.R1
Platforms	All

### **three-way-hello** *boolean*

Synopsis	Allow three-way hello compatibility mode
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>three-way-hello</b> <i>boolean</i>
Tree	<b>three-way-hello</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **tracking-support** *boolean*

Synopsis	Allow upstream routers to explicitly track join membership
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>interface</b> <i>string</i> <b>tracking-support</b> <i>boolean</i>
Tree	<b>tracking-support</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b>
Tree	<b>ipv4</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of PIM operation for IPv4
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**gtm**

Synopsis	Enter the <b>gtm</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b> <b>gtm</b>
Tree	<b>gtm</b>
Introduced	16.0.R1
Platforms	All

**auto-discovery** *keyword*

Synopsis	Method for multicast VPN membership auto-discovery
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b> <b>gtm</b> <b>auto-discovery</b> <i>keyword</i>
Tree	<b>auto-discovery</b>
Options	bgp
Introduced	16.0.R1
Platforms	All

**multicast-fast-failover** *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim</b> <b>ipv4</b> <b>multicast-fast-failover</b> <i>boolean</i>
Tree	<b>multicast-fast-failover</b>
Default	false
Introduced	16.0.R1
Platforms	All

**rpf-table** *keyword*

Synopsis	Route tables for RPF lookup
Context	<b>configure router</b> <i>string</i> <b>pim ipv4 rpf-table</b> <i>keyword</i>
Tree	<b>rpf-table</b>
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

**source-address**

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure router</b> <i>string</i> <b>pim ipv4 source-address</b>
Tree	<b>source-address</b>
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

**register-message** *string*

Synopsis	Source IPv4 address for PIM register messages
Context	<b>configure router</b> <i>string</i> <b>pim ipv4 source-address register-message</b> <i>string</i>
Tree	<b>register-message</b>
Description	<p>This command configures the source IPv4 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p>
Introduced	23.3.R1
Platforms	All

**ssm-assert-compatible-mode** *boolean*

Synopsis	Enable SSM assert compatible mode
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim ipv4 ssm-assert-compatible-mode</a> <i>boolean</i>
Tree	<a href="#">ssm-assert-compatible-mode</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ssm-default-range** *boolean*

Synopsis	SSM default range
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim ipv4 ssm-default-range</a> <i>boolean</i>
Tree	<a href="#">ssm-default-range</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim ipv6 admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **multicast-fast-failover** *boolean*

Synopsis	Use Multicast-Only Fast Reroute (MoFRR) functionality
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim ipv6 multicast-fast-failover</b> <i>boolean</i>
Tree	<b>multicast-fast-failover</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **rpf-table** *keyword*

Synopsis	Route tables for RPF lookup
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim ipv6 rpf-table</b> <i>keyword</i>
Tree	<b>rpf-table</b>
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

### **source-address**

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim ipv6 source-address</b>
Tree	<b>source-address</b>
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

### **register-message** *string*

Synopsis	Source IPv6 address for PIM register messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim ipv6 source-address register-message</b> <i>string</i>
Tree	<b>register-message</b>
Description	This command configures the source IPv6 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.

When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.

Introduced	23.3.R1
Platforms	All

### **ssm-default-range** *boolean*

Synopsis	SSM default range
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim ipv6 ssm-default-range</b> <i>boolean</i>
Tree	<a href="#">ssm-default-range</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **lag-usage-optimization** *boolean*

Synopsis	Optimize LAG usage
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim lag-usage-optimization</b> <i>boolean</i>
Tree	<a href="#">lag-usage-optimization</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-balance** *boolean*

Synopsis	Enable multicast balancing of traffic over ECMP links
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim mc-ecmp-balance</b> <i>boolean</i>
Tree	<a href="#">mc-ecmp-balance</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-balance-hold** *number*

Synopsis	Hold time for multicast balancing over ECMP links
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim mc-ecmp-balance-hold</b> <i>number</i>

Tree	<a href="#">mc-ecmp-balance-hold</a>
Range	2 to 600
Units	minutes
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-hashing**

Synopsis	Enable the <b>mc-ecmp-hashing</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim mc-ecmp-hashing</a>
Tree	<a href="#">mc-ecmp-hashing</a>
Introduced	16.0.R1
Platforms	All

### **rebalance** *boolean*

Synopsis	Rebalance flows to newly added links immediately instead of waiting until they are pruned
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim mc-ecmp-hashing rebalance</a> <i>boolean</i>
Tree	<a href="#">rebalance</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mdt-spt** *boolean*

Synopsis	Use SPT switchover for default MDT
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim mdt-spt</a> <i>boolean</i>
Tree	<a href="#">mdt-spt</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **non-dr-attract-traffic** *boolean*

Synopsis	Attract traffic when the router is not the designated one
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Context	<b>configure router</b> <i>string</i> <b>pim non-dr-attract-traffic</b> <i>boolean</i>
Tree	<b>non-dr-attract-traffic</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **pim-ssm-scaling** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable PIM-SSM scaling
Context	<b>configure router</b> <i>string</i> <b>pim pim-ssm-scaling</b> <i>boolean</i>
Tree	<b>pim-ssm-scaling</b>
Description	<p>When configured to <b>true</b>, this command enables an increase of PIM SSM (S,G) scaling to a maximum of 256000 per system. The total maximum multicast capacity is, however, constrained by the lowest-performance FP.</p> <p>When the maximum link capacity from the fabric to the lowest-performance FP is reached, the link to that FP is overloaded, resulting in packet loss for all FPs. This capacity constraint is independent of whether the lowest-performance FP has a receiver on it or not. If the multicast management chassis per-plane total capacity is configured to an explicit value larger than that supported by the lowest-performance FP, then IMPM believes that there is more plane capacity available than there actually is and the result is (S,G) packet loss instead of blackholing. By setting the multicast management chassis per-plane total capacity to <b>dynamic</b>, the system automatically sets the switch fabric multicast plane capacity to the minimum value supported by the fabric and all line cards in the system.</p> <p>When PIM SSM scaling is enabled, the following multicast features are disabled:• DM• MoFRR• JP policy• SSM groups• InBand features (BIER and MLDP)• Extranet• ASM</p> <p>When configured to <b>false</b>, there is no increase of PIM SSM (S,G) scaling.</p>
Default	false
Introduced	19.7.R1
Platforms	All

### **rp**

Synopsis	Enter the <b>rp</b> context
Context	<b>configure router</b> <i>string</i> <b>pim rp</b>
Tree	<b>rp</b>



Introduced 16.0.R1  
 Platforms All

## **bootstrap**

Synopsis Enter the **bootstrap** context  
 Context **configure** [router](#) *string* [pim rp bootstrap](#)  
 Tree [bootstrap](#)  
 Introduced 16.0.R1  
 Platforms All

## **export reference**

Synopsis Character limit for policy name  
 Context **configure** [router](#) *string* [pim rp bootstrap export reference](#)  
 Tree [export](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

## **import reference**

Synopsis Character limit for policy name  
 Context **configure** [router](#) *string* [pim rp bootstrap import reference](#)  
 Tree [import](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <i>router string pim rp ipv4</i>
Tree	<i>ipv4</i>
Introduced	16.0.R1
Platforms	All

**anycast** [*ipv4-address*] *string rp-set-peer string*

Synopsis	Add a list entry for <b>anycast</b>
Context	<b>configure</b> <i>router string pim rp ipv4 anycast string rp-set-peer string</i>
Tree	<i>anycast</i>
Introduced	16.0.R1
Platforms	All

**[ipv4-address]** *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	<b>configure</b> <i>router string pim rp ipv4 anycast string rp-set-peer string</i>
Tree	<i>anycast</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**rp-set-peer** *string*

Synopsis	Configure a peer in the anycast rp-set.
Context	<b>configure</b> <i>router string pim rp ipv4 anycast string rp-set-peer string</i>
Tree	<i>anycast</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**auto-rp-discovery** *boolean*

Synopsis	Enable auto-RP discovery mode and auto-RP listener
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv4 auto-rp-discovery</b> <i>boolean</i>
Tree	<a href="#">auto-rp-discovery</a>
Description	When configured to <b>true</b> , the system enables the auto-RP protocol in discovery mode and the auto-RP listener functionality.  See "Automatic discovery of group-to-RP mappings (auto-RP)" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Multicast Routing Protocols Guide</i> for more information about the auto-RP protocol and configuration guidelines.
Default	false
Introduced	16.0.R1
Platforms	All

**bsr-candidate**

Synopsis	Enter the <b>bsr-candidate</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv4 bsr-candidate</b>
Tree	<a href="#">bsr-candidate</a>
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv4 bsr-candidate address</b> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	<b>configure</b> <b>router</b> <i>string</i> <b>pim rp ipv4 bsr-candidate admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	16.0.R1
Platforms	All

### **hash-mask-len** *number*

Synopsis	Length for bootstrap hash mask
Context	<b>configure</b> <i>router string pim rp ipv4 bsr-candidate hash-mask-len number</i>
Tree	<a href="#">hash-mask-len</a>
Range	0 to 32
Default	30
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Bootstrap priority of the router
Context	<b>configure</b> <i>router string pim rp ipv4 bsr-candidate priority number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

### **candidate** *boolean*

Synopsis	Enable auto-RP to advertise candidate RP information
Context	<b>configure</b> <i>router string pim rp ipv4 candidate boolean</i>
Tree	<a href="#">candidate</a>
Description	<p>When configured to <b>true</b>, the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery.</p> <p>When configured to <b>false</b>, the candidate RP information is not specified.</p>
Default	false
Introduced	20.10.R1
Platforms	All

**mapping-agent** *boolean*

Synopsis	Enable the mapping agent on the node
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv4 mapping-agent</i> <i>boolean</i>
Tree	<a href="#">mapping-agent</a>
Description	When configured to <b>true</b> , the mapping agent is enabled on the node. The auto-RP MA observes the <b>auto-rp-announcement</b> messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.
Default	false
Introduced	20.10.R1
Platforms	All

**rp-candidate**

Synopsis	Enter the <b>rp-candidate</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv4 rp-candidate</i>
Tree	<a href="#">rp-candidate</a>
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	Local RP address
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv4 rp-candidate</i> <i>address</i> <i>string</i>
Tree	<a href="#">address</a>
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the Candidate RP
Context	<b>configure</b> <i>router</i> <i>string</i> <i>pim rp ipv4 rp-candidate</i> <i>admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **group-range** [[ipv4-prefix](#)] *string*

Synopsis	Add a list entry for <b>group-range</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim rp ipv4 rp-candidate</a> <a href="#">group-range</a> <i>string</i>
Tree	<a href="#">group-range</a>
Introduced	16.0.R1
Platforms	All

### **[ipv4-prefix]** *string*

Synopsis	IPv4 address and prefix length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim rp ipv4 rp-candidate</a> <a href="#">group-range</a> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **holdtime** *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim rp ipv4 rp-candidate</a> <a href="#">holdtime</a> <i>number</i>
Tree	<a href="#">holdtime</a>
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All

**priority number**

Synopsis	Candidate RP priority
Context	<b>configure</b> <i>router string pim rp ipv4 rp-candidate priority number</i>
Tree	<i>priority</i>
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <i>router string pim rp ipv4 static</i>
Tree	<i>static</i>
Introduced	16.0.R1
Platforms	All

**address [ipv4-address] string**

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <i>router string pim rp ipv4 static address string</i>
Tree	<i>address</i>
Introduced	16.0.R1
Platforms	All

**[ipv4-address] string**

Synopsis	IPv4 address for the static RP
Context	<b>configure</b> <i>router string pim rp ipv4 static address string</i>
Tree	<i>address</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**group-prefix** [[ipv4-prefix](#)] *string*

Synopsis	Add a list entry for <b>group-prefix</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim rp ipv4 static address</a> <i>string</i> <a href="#">group-prefix</a> <i>string</i>
Tree	<a href="#">group-prefix</a>
Introduced	16.0.R1
Platforms	All

**[ipv4-prefix]** *string*

Synopsis	IPv4 address and prefix length
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim rp ipv4 static address</a> <i>string</i> <a href="#">group-prefix</a> <i>string</i>
Tree	<a href="#">group-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**override** *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim rp ipv4 static address</a> <i>string</i> <b>override</b> <i>boolean</i>
Tree	<a href="#">override</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">pim rp ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All



**anycast** [ipv6-address] string rp-set-peer string

Synopsis	Add a list entry for <b>anycast</b>
Context	<b>configure</b> router string pim rp ipv6 anycast string rp-set-peer string
Tree	anycast
Introduced	16.0.R1
Platforms	All

**[ipv6-address]** string

Synopsis	Loopback IP address shared by routes in RP set
Context	<b>configure</b> router string pim rp ipv6 anycast string rp-set-peer string
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**rp-set-peer** string

Synopsis	Peer in the anycast RP set
Context	<b>configure</b> router string pim rp ipv6 anycast string rp-set-peer string
Tree	anycast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bsr-candidate**

Synopsis	Enter the <b>bsr-candidate</b> context
Context	<b>configure</b> router string pim rp ipv6 bsr-candidate
Tree	bsr-candidate
Introduced	16.0.R1
Platforms	All

**address string**

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	<b>configure router string pim rp ipv6 bsr-candidate address string</b>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the Candidate BSR
Context	<b>configure router string pim rp ipv6 bsr-candidate admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**hash-mask-len number**

Synopsis	Length for bootstrap hash mask
Context	<b>configure router string pim rp ipv6 bsr-candidate hash-mask-len number</b>
Tree	<a href="#">hash-mask-len</a>
Range	0 to 128
Default	126
Introduced	16.0.R1
Platforms	All

**priority number**

Synopsis	Bootstrap priority of the router
Context	<b>configure router string pim rp ipv6 bsr-candidate priority number</b>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	0
Introduced	16.0.R1

Platforms All

## embedded-rp

Synopsis Enable the **embedded-rp** context  
 Context **configure** [router](#) *string* [pim rp ipv6 embedded-rp](#)  
 Tree [embedded-rp](#)  
 Introduced 16.0.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of embedded RP  
 Context **configure** [router](#) *string* [pim rp ipv6 embedded-rp admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

## group-range [[ipv6-prefix](#)] *string*

Synopsis Add a list entry for **group-range**  
 Context **configure** [router](#) *string* [pim rp ipv6 embedded-rp group-range](#) *string*  
 Tree [group-range](#)  
 Introduced 16.0.R1  
 Platforms All

## [[ipv6-prefix](#)] *string*

Synopsis IPv6 address and prefix length  
 Context **configure** [router](#) *string* [pim rp ipv6 embedded-rp group-range](#) *string*  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1

Platforms All

## **rp-candidate**

Synopsis Enter the **rp-candidate** context  
Context **configure** [router](#) [string](#) [pim](#) [rp](#) [ipv6](#) [rp-candidate](#)  
Tree [rp-candidate](#)  
Introduced 16.0.R1  
Platforms All

## **address** *string*

Synopsis Local RP address  
Context **configure** [router](#) [string](#) [pim](#) [rp](#) [ipv6](#) [rp-candidate](#) [address](#) [string](#)  
Tree [address](#)  
Introduced 16.0.R1  
Platforms All

## **admin-state** *keyword*

Synopsis Administrative state of the Candidate RP  
Context **configure** [router](#) [string](#) [pim](#) [rp](#) [ipv6](#) [rp-candidate](#) [admin-state](#) [keyword](#)  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

## **group-range** [[ipv6-prefix](#)] *string*

Synopsis Add a list entry for **group-range**  
Context **configure** [router](#) [string](#) [pim](#) [rp](#) [ipv6](#) [rp-candidate](#) [group-range](#) [string](#)  
Tree [group-range](#)  
Introduced 16.0.R1  
Platforms All

**[ipv6-prefix] string**

Synopsis	IPv6 address and prefix length
Context	<b>configure router string pim rp ipv6 rp-candidate group-range string</b>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**holdtime number**

Synopsis	Time during which the neighboring router considers this router to be up
Context	<b>configure router string pim rp ipv6 rp-candidate holdtime number</b>
Tree	<a href="#">holdtime</a>
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All

**priority number**

Synopsis	Candidate RP priority
Context	<b>configure router string pim rp ipv6 rp-candidate priority number</b>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure router string pim rp ipv6 static</b>
Tree	<a href="#">static</a>

Introduced 16.0.R1  
Platforms All

### **address** [ipv6-address] *string*

Synopsis Enter the **address** list instance  
Context **configure** *router string pim rp ipv6 static address string*  
Tree [address](#)  
Introduced 16.0.R1  
Platforms All

### **[ipv6-address]** *string*

Synopsis Static IP address of the RP  
Context **configure** *router string pim rp ipv6 static address string*  
Tree [address](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **group-prefix** [ipv6-prefix] *string*

Synopsis Add a list entry for **group-prefix**  
Context **configure** *router string pim rp ipv6 static address string group-prefix string*  
Tree [group-prefix](#)  
Introduced 16.0.R1  
Platforms All

### **[ipv6-prefix]** *string*

Synopsis IPv6 address and prefix length  
Context **configure** *router string pim rp ipv6 static address string group-prefix string*  
Tree [group-prefix](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1

Platforms All

### **override** *boolean*

Synopsis Change the precedence for static RP over dynamically learnt RP  
Context **configure** *router string pim rp ipv6 static address string override boolean*  
Tree [override](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **rpfv**

Synopsis Enter the **rpfv** context  
Context **configure** *router string pim rpfv*  
Tree [rpfv](#)  
Introduced 16.0.R1  
Platforms All

### **core** *boolean*

Synopsis Include proxy RPF vector for core  
Context **configure** *router string pim rpfv core boolean*  
Tree [core](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mvpn** *boolean*

Synopsis Include proxy RPF vector for Inter-AS Rosen MVPN  
Context **configure** *router string pim rpfv mvpn boolean*  
Tree [mvpn](#)  
Default false  
Introduced 16.0.R1

Platforms All

### **spt-switchover** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **spt-switchover** list instance

Context **configure router** *string* [pim spt-switchover](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [spt-switchover](#)

Introduced 16.0.R1

Platforms All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP address and mask length

Context **configure router** *string* [pim spt-switchover](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [spt-switchover](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **threshold** (*number* | *keyword*)

Synopsis SPT switchover threshold

Context **configure router** *string* [pim spt-switchover](#) (*ipv4-prefix* | *ipv6-prefix*) [threshold](#) (*number* | *keyword*)

Tree [threshold](#)

Range 1 to 4294967294

Units kilobps

Options infinity

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **ssm-groups**

Synopsis Enter the **ssm-groups** context



Context	<b>configure</b> <i>router string</i> <b>pim ssm-groups</b>
Tree	<b>ssm-groups</b>
Introduced	16.0.R1
Platforms	All

### **group-range** [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for <b>group-range</b>
Context	<b>configure</b> <i>router string</i> <b>pim ssm-groups group-range</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>group-range</b>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address and mask length
Context	<b>configure</b> <i>router string</i> <b>pim ssm-groups group-range</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **radius**

Synopsis	Enter the <b>radius</b> context
Context	<b>configure</b> <i>router string</i> <b>radius</b>
Tree	<b>radius</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy** [**name**] *string*

Synopsis	Enter the <b>proxy</b> list instance
Context	<b>configure</b> <i>router string</i> <b>radius proxy string</b>
Tree	<b>proxy</b>

Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	RADIUS proxy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i>
Tree	<b>proxy</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of RADIUS proxy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **attribute-matching**

Synopsis	Enter the <b>attribute-matching</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>attribute-matching</b>
Tree	<b>attribute-matching</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**entry** [[index](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[index]** *number*

Synopsis	Index of this entry
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-server-policy** *string*

Synopsis	Accounting server policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">entry</a> <i>number</i> <a href="#">accounting-server-policy</a> <i>string</i>
Tree	<a href="#">accounting-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication-server-policy** *string*

Synopsis	Authentication server policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">entry</a> <i>number</i> <a href="#">authentication-server-policy</a> <i>string</i>
Tree	<a href="#">authentication-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-string** *string*

Synopsis Prefix string

Context **configure** [router](#) *string* [radius proxy](#) *string* [attribute-matching entry](#) *number* [prefix-string](#) *string*

Tree [prefix-string](#)

String Length 1 to 128

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix-string** *string*

Synopsis Prefix string

Context **configure** [router](#) *string* [radius proxy](#) *string* [attribute-matching entry](#) *number* [suffix-string](#) *string*

Tree [suffix-string](#)

String Length 1 to 128

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *number*

Synopsis Matching attribute type to RADIUS server policy

Context **configure** [router](#) *string* [radius proxy](#) *string* [attribute-matching type](#) *number*

Tree [type](#)

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor** (*number* | *keyword*)

Synopsis Matching Vendor ID to RADIUS server policy

Context **configure** [router](#) *string* [radius proxy](#) *string* [attribute-matching vendor](#) (*number* | *keyword*)

Tree [vendor](#)

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Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## cache

Synopsis	Enter the <b>cache</b> context
Context	<b>configure</b> <i>router string radius proxy string cache</i>
Tree	<i>cache</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the RADIUS proxy cache
Context	<b>configure</b> <i>router string radius proxy string cache admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## key

Synopsis	Enable the <b>key</b> context
Context	<b>configure</b> <i>router string radius proxy string cache key</i>
Tree	<i>key</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## attribute-type *number*

Synopsis	RADIUS attribute type to cache for this RADIUS proxy server
Context	<b>configure</b> <i>router string radius proxy string cache key attribute-type number</i>

Tree	<a href="#">attribute-type</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **packet-type** *keyword*

Synopsis	Packet type of the RADIUS messages
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache key</b> <b>packet-type</b> <i>keyword</i>
Tree	<a href="#">packet-type</a>
Options	access-request, access-accept
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor** (*number* | *keyword*)

Synopsis	RADIUS Vendor ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache key</b> <b>vendor</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Idle timeout value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>cache</b> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	60 to 3600
Units	seconds
Default	300
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## track-accounting

Synopsis Enter the **track-accounting** context

Context **configure** [router](#) *string* [radius proxy](#) *string* [cache track-accounting](#)

Tree [track-accounting](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## accounting-off *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client

Context **configure** [router](#) *string* [radius proxy](#) *string* [cache track-accounting accounting-off](#) *boolean*

Tree [accounting-off](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## accounting-on *boolean*

Synopsis Remove all ESM hosts associated with the RADIUS client

Context **configure** [router](#) *string* [radius proxy](#) *string* [cache track-accounting accounting-on](#) *boolean*

Tree [accounting-on](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## interim-update *boolean*

Synopsis Update the ESM host with the RADIUS client that generated the interim update

Context **configure** [router](#) *string* [radius proxy](#) *string* [cache track-accounting interim-update](#) *boolean*

Tree [interim-update](#)

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start** *boolean*

Synopsis	Update host with client that generated accounting-start
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache track-accounting</a> <b>start</b> <i>boolean</i>
Tree	<a href="#">start</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stop** *boolean*

Synopsis	Remove ESM host and forward accounting-stop packet
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache track-accounting</a> <b>stop</b> <i>boolean</i>
Tree	<a href="#">stop</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-authentication**

Synopsis	Enter the <b>track-authentication</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache track-authentication</a>
Tree	<a href="#">track-authentication</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accept** *boolean*

Synopsis	Track Access-Accept message for mobility
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache track-authentication</a> <b>accept</b> <i>boolean</i>
Tree	<a href="#">accept</a>



Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-delete-hold-time** *number*

Synopsis	Delete hold time
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <b>track-delete-hold-time</b> <i>number</i>
Tree	<a href="#">track-delete-hold-time</a>
Range	0 to 6000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **defaults**

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <b>defaults</b>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-server-policy** *string*

Synopsis	Default accounting RADIUS server policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">defaults</a> <b>accounting-server-policy</b> <i>string</i>
Tree	<a href="#">accounting-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **authentication-server-policy** *string*

Synopsis	Default authentication RADIUS server policy
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">defaults authentication-server-policy</a> <i>string</i>
Tree	<a href="#">authentication-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface** [[interface-name](#)] *string*

Synopsis	Add a list entry for <b>interface</b>
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## load-balance-key

Synopsis	Enter the <b>load-balance-key</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a>
Tree	<a href="#">load-balance-key</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## attribute-1

Synopsis	Enter the <b>attribute-1</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a>
Tree	<a href="#">attribute-1</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a> <a href="#">type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vendor (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## attribute-2

Synopsis Enter the **attribute-2** context

Context **configure** [router](#) *string* [radius proxy](#) *string* [load-balance-key](#) [attribute-2](#)

Tree [attribute-2](#)

Notes The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type number

Synopsis Attribute type to cache for this RADIUS Proxy server

Context **configure** [router](#) *string* [radius proxy](#) *string* [load-balance-key](#) [attribute-2](#) [type](#) *number*

Tree [type](#)

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vendor (number | keyword)

Synopsis Vendor-Id attribute

Context **configure** [router](#) *string* [radius proxy](#) *string* [load-balance-key](#) [attribute-2](#) [vendor](#) (*number* | *keyword*)

Tree [vendor](#)

Range 1 to 16777215

Options nokia

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## attribute-3

Synopsis Enter the **attribute-3** context

Context **configure** [router](#) *string* [radius proxy](#) *string* [load-balance-key](#) [attribute-3](#)

Tree	<a href="#">attribute-3</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type number**

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-3</a> <i>type number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor (number | keyword)**

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-3</a> <i>vendor (number   keyword)</i>
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **attribute-4**

Synopsis	Enter the <b>attribute-4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-4</a>
Tree	<a href="#">attribute-4</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type number**

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure router string radius proxy string load-balance-key attribute-4 type number</b>
Tree	<b>type</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor (number | keyword)**

Synopsis	Vendor-Id attribute
Context	<b>configure router string radius proxy string load-balance-key attribute-4 vendor (number   keyword)</b>
Tree	<b>vendor</b>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**attribute-5**

Synopsis	Enter the <b>attribute-5</b> context
Context	<b>configure router string radius proxy string load-balance-key attribute-5</b>
Tree	<b>attribute-5</b>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type number**

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure router string radius proxy string load-balance-key attribute-5 type number</b>
Tree	<b>type</b>
Range	1 to 255

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor** (*number* | *keyword*)

Synopsis Vendor-Id attribute  
 Context **configure** *router string radius proxy string load-balance-key attribute-5 vendor* (*number* | *keyword*)  
 Tree [vendor](#)  
 Range 1 to 16777215  
 Options nokia  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-ip-udp**

Synopsis Key to consist of the source IP address and source UDP port of the RADIUS message  
 Context **configure** *router string radius proxy string load-balance-key source-ip-udp*  
 Tree [source-ip-udp](#)  
 Notes The following elements are part of a choice: (**attribute-1**, **attribute-2**, **attribute-3**, **attribute-4**, and **attribute-5**) or **source-ip-udp**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **purpose** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Purpose of the RADIUS proxy  
 Context **configure** *router string radius proxy string purpose keyword*  
 Tree [purpose](#)  
 Options accounting, authentication, accounting-authentication  
 Notes This element is mandatory.  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python policy  
 Context **configure** [router](#) *string* [radius proxy](#) *string* [python-policy](#) *reference*  
 Tree [python-policy](#)  
 Reference **configure** [python](#) [python-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secret** *string*

Synopsis Format of the secret key to access the RADIUS proxy server  
 Context **configure** [router](#) *string* [radius proxy](#) *string* [secret](#) *string*  
 Tree [secret](#)  
 String Length 1 to 115  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **send-accounting-response** *boolean*

Synopsis Allow RADIUS proxy server to respond to Accounting-Response messages  
 Context **configure** [router](#) *string* [radius proxy](#) *string* [send-accounting-response](#) *boolean*  
 Tree [send-accounting-response](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw**

Synopsis Enter the **wlan-gw** context  
 Context **configure** [router](#) *string* [radius proxy](#) *string* [wlan-gw](#)  
 Tree [wlan-gw](#)  
 Introduced 16.0.R1



Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address string**

Synopsis IPv4 address of the distributed RADIUS proxy server

Context **configure** [router string](#) [radius proxy string](#) [wlan-gw address string](#)

Tree [address](#)

Description This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address string**

Synopsis IPv6 address of the distributed RADIUS proxy server

Context **configure** [router string](#) [radius proxy string](#) [wlan-gw ipv6-address string](#)

Tree [ipv6-address](#)

Description This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group reference**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis ISA WLAN gateway group

Context **configure** [router string](#) [radius proxy string](#) [wlan-gw-group reference](#)

Tree [wlan-gw-group](#)

Reference **configure** [isa wlan-gw-group number](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [*name*] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <i>router string radius server string</i>
Tree	<i>server</i>
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	External RADIUS server name
Context	<b>configure</b> <i>router string radius server string</i>
Tree	<i>server</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accept-coa** *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	<b>configure</b> <i>router string radius server string accept-coa boolean</i>
Tree	<i>accept-coa</i>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**acct-port** *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	<b>configure</b> <i>router string radius server string acct-port number</i>
Tree	<i>acct-port</i>
Range	1 to 65535
Default	1813

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>address</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **auth-port** *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>auth-port</b> <i>number</i>
Tree	<b>auth-port</b>
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>radius</b> <b>server</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pending-requests-limit** *number*

Synopsis	Limit of the number for pending RADIUS requests
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Context	<b>configure</b> <i>router string radius server string pending-requests-limit number</i>
Tree	<a href="#">pending-requests-limit</a>
Range	1 to 4096
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python script policy to modify CoA messages
Context	<b>configure</b> <i>router string radius server string python-policy reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secret** *string*

Synopsis	Secret key associated with this RADIUS server
Context	<b>configure</b> <i>router string radius server string secret string</i>
Tree	<a href="#">secret</a>
String Length	1 to 115
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reassembly**

Synopsis	Enable the <b>reassembly</b> context
Context	<b>configure</b> <i>router string reassembly</i>
Tree	<a href="#">reassembly</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group (including WLAN Gateway group) that executes the reassembly
Context	<b>configure</b> <i>router</i> <i>string</i> <i>reassembly</i> <i>nat-group</i> <i>number</i>
Tree	<a href="#">nat-group</a>
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**to-base-network** *boolean*

Synopsis	Allow reassembled traffic sent to network interface
Context	<b>configure</b> <i>router</i> <i>string</i> <i>reassembly</i> <i>to-base-network</i> <i>boolean</i>
Tree	<a href="#">to-base-network</a>
Default	false
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rib-api**

Synopsis	Enter the <b>rib-api</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rib-api</i>
Tree	<a href="#">rib-api</a>
Introduced	16.0.R4
Platforms	All

**mpls**

Synopsis	Enter the <b>mpls</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rib-api</i> <i>mpls</i>
Tree	<a href="#">mpls</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MPLS for RIB-API gRPC service
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rib-api</b> <b>mpls</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**label-name** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure reserved label block.
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rib-api</b> <b>mpls</b> <b>label-name</b> <i>reference</i>
Tree	<b>label-name</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>mpls-labels</b> <b>reserved-label-block</b> <i>string</i>
Introduced	16.0.R4
Platforms	All

**rip**

Synopsis	Enable the <b>rip</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b>
Tree	<b>rip</b>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the RIP instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>

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Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

### **authentication-key *string***

Synopsis	Authentication password passed between RIP neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

### **authentication-type *keyword***

Synopsis	Authentication type used between RIP neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>authentication-type</b> <i>keyword</i>
Tree	<b>authentication-type</b>
Description	<p>This command sets the type of authentication to be used between RIP neighbors.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Default	none
Introduced	16.0.R4
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

**check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>check-zero</b> <i>boolean</i>
Tree	<b>check-zero</b>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All



**export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rip</a> <a href="#">export-limit</a>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R4
Platforms	All

**log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rip</a> <a href="#">export-limit</a> <a href="#">log-percent</a> <i>number</i>
Tree	<a href="#">log-percent</a>
Range	1 to 100
Introduced	16.0.R4
Platforms	All

**number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rip</a> <a href="#">export-limit</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**export-policy** *reference*

Synopsis	Policies to determine exported routes
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">rip</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced 16.0.R4  
 Platforms All

### **group** [*group-name*] *string*

Synopsis Enter the **group** list instance  
 Context **configure** *router string rip group string*  
 Tree *group*  
 Introduced 16.0.R4  
 Platforms All

### **[group-name]** *string*

Synopsis RIP group name  
 Context **configure** *router string rip group string*  
 Tree *group*  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of RIP neighbor interface group  
 Context **configure** *router string rip group string admin-state keyword*  
 Tree *admin-state*  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R4  
 Platforms All

### **authentication-key** *string*

Synopsis Authentication password passed between RIP neighbors  
 Context **configure** *router string rip group string authentication-key string*

Tree	<a href="#">authentication-key</a>
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, the authentication password is removed from the configuration and authentication is disabled.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">authentication-type</a> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, this command enables BFD to control the state of the associated protocol adjacency.</p> <p>When configured to <b>false</b>, this command removes BFD from the associated protocol adjacency.</p>
Introduced	16.0.R4
Platforms	All

**check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <b>check-zero</b> <i>boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.  When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

**export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

## **import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <i>router string rip group string import-policy reference</i>
Tree	<a href="#">import-policy</a>
Description	<p>This command configures import route policies to determine which routes are accepted from RIP neighbors.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

## **message-size** *number*

Synopsis	Maximum number of routes per RIP update message
Context	<b>configure</b> <i>router string rip group string message-size number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

## **metric-in** *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	<b>configure</b> <i>router string rip group string metric-in number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIP
Context	<b>configure</b> <i>router string rip group string metric-out number</i>
Tree	<i>metric-out</i>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**neighbor** [*interface-name*] *string*

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <i>router string rip group string neighbor string</i>
Tree	<i>neighbor</i>
Introduced	16.0.R4
Platforms	All

**[interface-name]** *string*

Synopsis	Neighbor added through the interface to the RIP group
Context	<b>configure</b> <i>router string rip group string neighbor string</i>
Tree	<i>neighbor</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the RIP neighbor interface
Context	<b>configure</b> <i>router string rip group string neighbor string admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**authentication-key *string***

Synopsis	Authentication password passed between RIP neighbors
Context	<b>configure</b> <i>router string rip group string neighbor string authentication-key string</i>
Tree	<a href="#">authentication-key</a>
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

**authentication-type *keyword***

Synopsis	Authentication type
Context	<b>configure</b> <i>router string rip group string neighbor string authentication-type keyword</i>
Tree	<a href="#">authentication-type</a>
Description	<p>This command configures the type of authentication to be used.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.</p>
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

**bfd-liveness *boolean***

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <i>router string rip group string neighbor string bfd-liveness boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.

When configured to **false**, this command removes BFD from the associated protocol adjacency.

Introduced 16.0.R4  
 Platforms All

### **check-zero** *boolean*

Synopsis Enable checking of mandatory zero fields  
 Context **configure** *router string rip group string neighbor string check-zero boolean*  
 Tree [check-zero](#)  
 Description When configured to **true**, this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.  
 When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.  
 Introduced 16.0.R4  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** *router string rip group string neighbor string description string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R4  
 Platforms All

### **export-policy** *reference*

Synopsis Policies used to rule which routes are exported to RIP  
 Context **configure** *router string rip group string neighbor string export-policy reference*  
 Tree [export-policy](#)  
 Description This command specifies the export route policies used to determine which routes are exported to RIP.  
 If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.  
 Reference **configure** *policy-options policy-statement string*



Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes per RIP update message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>message-size</b> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>metric-in</b> <i>number</i>
Tree	<a href="#">metric-in</a>

Range	1 to 16
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>metric-out</b> <i>number</i>
Tree	<b>metric-out</b>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

**receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>receive</b> <i>keyword</i>
Tree	<b>receive</b>
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

**send** *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>send</b> <i>keyword</i>

Tree	<a href="#">send</a>
Options	none, version-1, broadcast, multicast, unicast
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">split-horizon</a> <i>boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

### **timers**

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

### **flush** *number*

Synopsis	RIP flush timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">timers</a> <a href="#">flush</a> <i>number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **timeout** *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>timers</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>timers</b> <b>update</b> <i>number</i>
Tree	<b>update</b>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **unicast-address** [*address*] *string*

Synopsis	Add a list entry for <b>unicast-address</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>unicast-address</b> <i>string</i>

Tree	<a href="#">unicast-address</a>
Introduced	16.0.R4
Platforms	All

**[address]** *string*

Synopsis	Unicast address for the neighbor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">unicast-address</a> <i>string</i>
Tree	<a href="#">unicast-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

**receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">receive</a> <i>keyword</i>
Tree	<a href="#">receive</a>
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

**send** *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">send</a> <i>keyword</i>

Tree	<a href="#">send</a>
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">split-horizon</a> <i>boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

### **timers**

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

### **flush** *number*

Synopsis	RIP flush timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">timers</a> <a href="#">flush</a> <i>number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **timeout** *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <i>router string rip group string timers timeout number</i>
Tree	<i>timeout</i>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <i>router string rip group string timers update number</i>
Tree	<i>update</i>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Import policies to decide routes for routing table
Context	<b>configure</b> <i>router string rip import-policy reference</i>

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Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes in the RIP message
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">message-size</a> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">metric-in</a> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

### **metric-out** *number*

Synopsis	Metric added to routes exported into RIP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rip</a> <a href="#">metric-out</a> <i>number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Default	1



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Introduced	16.0.R4
Platforms	All

### **preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rip</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

### **receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rip</i> <b>receive</b> <i>keyword</i>
Tree	<b>receive</b>
Options	version-1, version-2, both, none
Default	both
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rip</i> <b>send</b> <i>keyword</i>
Tree	<b>send</b>
Options	none, version-1, broadcast, multicast
Default	broadcast
Introduced	16.0.R4
Platforms	All

**split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <i>router string rip split-horizon boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	16.0.R4
Platforms	All

**timers**

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <i>router string rip timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

**flush** *number*

Synopsis	RIP flush timer
Context	<b>configure</b> <i>router string rip timers flush number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **timeout** *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <i>router string rip timers timeout number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <i>router string rip timers update number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **ripng**

Synopsis	Enable the <b>ripng</b> context
Context	<b>configure</b> <i>router string ripng</i>
Tree	<a href="#">ripng</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the RIPng instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

**check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>check-zero</b> <i>boolean</i>
Tree	<b>check-zero</b>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string ripng description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <i>router string ripng export-limit</i>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R4
Platforms	All

### **log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <i>router string ripng export-limit log-percent number</i>
Tree	<a href="#">log-percent</a>
Range	1 to 100
Introduced	16.0.R4
Platforms	All

### **number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <i>router string ripng export-limit number number</i>
Tree	<a href="#">number</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**export-policy** *reference*

Synopsis	Policies to determine exported routes
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**group** [[group-name](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R4
Platforms	All

**[group-name]** *string*

Synopsis	RIP group name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of RIPng neighbor interface group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

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Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

### **check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>check-zero</b> <i>boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4

Platforms All

### **export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All



**message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>message-size</b> <i>number</i>
Tree	<b>message-size</b>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

**metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>metric-in</b> <i>number</i>
Tree	<b>metric-in</b>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>metric-out</b> <i>number</i>
Tree	<b>metric-out</b>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**neighbor** [*interface-name*] *string*

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i>
Tree	<b>neighbor</b>
Introduced	16.0.R4
Platforms	All

**[interface-name] string**

Synopsis	Neighbor added to the RIPng group through the interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i>
Tree	<b>neighbor</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the RIPng neighbor
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**bfd-liveness boolean**

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

**check-zero boolean**

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>check-zero</b> <i>boolean</i>

Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
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Context	<b>configure</b> <i>router string ripng group string neighbor string import-policy reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <i>router string ripng group string neighbor string message-size number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <i>router string ripng group string neighbor string metric-in number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <i>router string ripng group string neighbor string metric-out number</i>
Tree	<a href="#">metric-out</a>

Range	1 to 16
Introduced	16.0.R4
Platforms	All

**preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

**receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>receive</b> <i>keyword</i>
Tree	<b>receive</b>
Options	none, ripng
Introduced	16.0.R4
Platforms	All

**send** *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>send</b> <i>keyword</i>
Tree	<b>send</b>
Options	none, ripng, unicast
Introduced	16.0.R4
Platforms	All

**split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>split-horizon</b> <i>boolean</i>

Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

## flush *number*

Synopsis	RIP flush timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">timers</a> <a href="#">flush</a> <i>number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout *number*

Synopsis	RIP timeout timer
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Context	<b>configure</b> <i>router string ripng group string neighbor string timers timeout number</i>
Tree	<b>timeout</b>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <i>router string ripng group string neighbor string timers update number</i>
Tree	<b>update</b>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **unicast-address** [*address*] *string*

Synopsis	Add a list entry for <b>unicast-address</b>
Context	<b>configure</b> <i>router string ripng group string neighbor string unicast-address string</i>
Tree	<b>unicast-address</b>
Introduced	16.0.R4
Platforms	All

### **[address]** *string*

Synopsis	Unicast address for the neighbor
Context	<b>configure</b> <i>router string ripng group string neighbor string unicast-address string</i>
Tree	<b>unicast-address</b>

---

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

### **receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>receive</b> <i>keyword</i>
Tree	<b>receive</b>
Options	none, ripng
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>send</b> <i>keyword</i>
Tree	<b>send</b>
Options	none, ripng
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>group</b> <i>string</i> <b>split-horizon</b> <i>boolean</i>



Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <i>group</i> <i>string</i> <a href="#">timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

## flush *number*

Synopsis	RIP flush timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <i>group</i> <i>string</i> <a href="#">timers</a> <i>flush</i> <i>number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout *number*

Synopsis	RIP timeout timer
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">timers</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">timers</a> <a href="#">update</a> <i>number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Import policies to decide routes for routing table
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <b>router</b> <i>string ripng message-size number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

**metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <b>router</b> <i>string ripng metric-in number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <b>router</b> <i>string ripng metric-out number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

**preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <b>router</b> <i>string ripng preference number</i>
Tree	<a href="#">preference</a>
Range	1 to 255

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Default	100
Introduced	16.0.R4
Platforms	All

### **receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>receive</b> <i>keyword</i>
Tree	<b>receive</b>
Options	none, ripng
Default	ripng
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>send</b> <i>keyword</i>
Tree	<b>send</b>
Options	none, ripng
Default	ripng
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>split-horizon</b> <i>boolean</i>
Tree	<b>split-horizon</b>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>

Default	true
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <b>timers</b>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

## flush *number*

Synopsis	RIP flush timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <b>timers</b> <a href="#">flush</a> <i>number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">ripng</a> <b>timers</b> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <b>router</b> <i>string</i> <b>ripng</b> <b>timers</b> <b>update</b> <i>number</i>
Tree	<b>update</b>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **router-id** *string*

Synopsis	Unique router ID for the router in the AS
Context	<b>configure</b> <b>router</b> <i>string</i> <b>router-id</b> <i>string</i>
Tree	<b>router-id</b>
Introduced	16.0.R1
Platforms	All

### **rsvp**

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b>
Tree	<b>rsvp</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of RSVP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **authentication-over-bypass** *boolean*

Synopsis	Enable MD5 authentication over bypass LSP of PLR and MP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp authentication-over-bypass</a> <i>boolean</i>
Tree	<a href="#">authentication-over-bypass</a>
Description	<p>When configured to <b>true</b>, this command configures the MD5 authentication over the bypass LSP of all Point of Local Repairs (PLRs) and Merge Points (MPs) on the router. Only enable this command when the TE interfaces in the RSVP-TE network use the same MD5 authentication parameters.</p> <p>When a Point of Local Repair (PLR) activates a bypass LSP towards a Merge Point (MP), by default, the INTEGRITY object corresponding to the bypass LSP interface is not added to a transmitted RSVP message except for packets of routed RSVP messages (Resv, Srefresh, and ACK), and only when the packet is intended for a bypass LSP endpoint (PLR or MP) that is a directly connected neighbor.</p> <p>When this command is enabled, the INTEGRITY object of the interface corresponding to the bypass LSP is added to a transmitted RSVP message regardless of whether the bypass LSP endpoint (PLR or MP) is a directly connected RSVP neighbor. The INTEGRITY object is included with the following RSVP messages: Path, PathTear, Path Err, Resv, ResvTear, ResvErr, Srefresh, and ACK.</p> <p>In all cases, an RSVP message received from a PLR or a MP (sender address in the SenderTemplate or FilterSpec is different from an Extended Tunnel Id in a Session Object), and which includes the INTEGRITY object is authenticated against the bypass LSP interface. An RSVP message received from a PLR or MP without the INTEGRITY object is also accepted.</p> <p>When configured to <b>false</b>, the router disables MD5 authentication over bypass LSP of the PLRs and MPs.</p>
Default	false
Introduced	22.10.R1
Platforms	All

### **dbw-accounting**

Synopsis	Enable the <b>dbw-accounting</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp dbw-accounting</a>

Tree	<a href="#">dbw-accounting</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **dbw-multiplier** *number*

Synopsis	Dark Bandwidth multiplier
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">dbw-accounting</a> <a href="#">dbw-multiplier</a> <i>number</i>
Tree	<a href="#">dbw-multiplier</a>
Range	0 to 1000
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **down-threshold**

Synopsis	Enter the <b>down-threshold</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">dbw-accounting</a> <a href="#">down-threshold</a>
Tree	<a href="#">down-threshold</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **bw** *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">dbw-accounting</a> <a href="#">down-threshold</a> <a href="#">bw</a> <i>number</i>
Tree	<a href="#">bw</a>
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR



**percent** *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp dbw-accounting down-threshold percent</b> <i>number</i>
Tree	<b>percent</b>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**sample-interval** *number*

Synopsis	Dark Bandwidth sample interval
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp dbw-accounting sample-interval</b> <i>number</i>
Tree	<b>sample-interval</b>
Range	10 to 600
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**sample-multiplier** *number*

Synopsis	Dark Bandwidth sample multiplier
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp dbw-accounting sample-multiplier</b> <i>number</i>
Tree	<b>sample-multiplier</b>
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**up-threshold**

Synopsis	Enter the <b>up-threshold</b> context
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Context	<b>configure router string rsvp dbw-accounting up-threshold</b>
Tree	<b>up-threshold</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**bw number**

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	<b>configure router string rsvp dbw-accounting up-threshold bw number</b>
Tree	<b>bw</b>
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**percent number**

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	<b>configure router string rsvp dbw-accounting up-threshold percent number</b>
Tree	<b>percent</b>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**diffserv-te**

Synopsis	Enable the <b>diffserv-te</b> context
Context	<b>configure router string rsvp diffserv-te</b>
Tree	<b>diffserv-te</b>
Introduced	16.0.R1
Platforms	All

**admission-control-model** *keyword*

Synopsis	Parameters for the DiffServ TE node
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>admission-control-model</b> <i>keyword</i>
Tree	<b>admission-control-model</b>
Options	mam, rdm
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**class-type-bw**

Synopsis	Enter the <b>class-type-bw</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>class-type-bw</b>
Tree	<b>class-type-bw</b>
Introduced	16.0.R1
Platforms	All

**ct0** *number*

Synopsis	RSVP interface bandwidth percentage for class type 0
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>class-type-bw</b> <b>ct0</b> <i>number</i>
Tree	<b>ct0</b>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**ct1** *number*

Synopsis	RSVP interface bandwidth percentage for class type 1
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>diffserv-te</b> <b>class-type-bw</b> <b>ct1</b> <i>number</i>
Tree	<b>ct1</b>
Range	0 to 100
Default	0
Introduced	16.0.R1

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Platforms All

### **ct2 number**

Synopsis RSVP interface bandwidth percentage for class type 2

Context **configure router string rsvp diffserv-te class-type-bw ct2 number**

Tree [ct2](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **ct3 number**

Synopsis RSVP interface bandwidth percentage for class type 3

Context **configure router string rsvp diffserv-te class-type-bw ct3 number**

Tree [ct3](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **ct4 number**

Synopsis RSVP interface bandwidth percentage for class type 4

Context **configure router string rsvp diffserv-te class-type-bw ct4 number**

Tree [ct4](#)

Range 0 to 100

Default 0

Introduced 16.0.R1

Platforms All

### **ct5 number**

Synopsis RSVP interface bandwidth percentage for class type 5

Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw ct5 number</i>
Tree	<a href="#">ct5</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**ct6 number**

Synopsis	RSVP interface bandwidth percentage for class type 6
Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw ct6 number</i>
Tree	<a href="#">ct6</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**ct7 number**

Synopsis	RSVP interface bandwidth percentage for class type 7
Context	<b>configure</b> <i>router string rsvp diffserv-te class-type-bw ct7 number</i>
Tree	<a href="#">ct7</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	All

**fc [fc-name] keyword**

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <i>router string rsvp diffserv-te fc keyword</i>
Tree	<a href="#">fc</a>
Introduced	16.0.R1
Platforms	All

**[fc-name] keyword**

Synopsis	Forwarding class for this mapping
Context	<b>configure router</b> <i>string</i> <i>rsvp diffserv-te fc keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**class-type number**

Synopsis	Diff-Serv Class Type (CT) for an LSP
Context	<b>configure router</b> <i>string</i> <i>rsvp diffserv-te fc keyword class-type number</i>
Tree	<a href="#">class-type</a>
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**te-class [te-class-number] number**

Synopsis	Enter the <b>te-class</b> list instance
Context	<b>configure router</b> <i>string</i> <i>rsvp diffserv-te te-class number</i>
Tree	<a href="#">te-class</a>
Introduced	16.0.R1
Platforms	All

**[te-class-number] number**

Synopsis	TE class number
Context	<b>configure router</b> <i>string</i> <i>rsvp diffserv-te te-class number</i>
Tree	<a href="#">te-class</a>
Range	0 to 7
Notes	This element is part of a list key.

Introduced 16.0.R2  
 Platforms All

### **class-type** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Class type (CT) associated with the TE class  
 Context **configure** *router string rsvp diffserv-te te-class number class-type number*  
 Tree *class-type*  
 Range 0 to 7  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **priority** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis TE class priority  
 Context **configure** *router string rsvp diffserv-te te-class number priority number*  
 Tree *priority*  
 Range 0 to 7  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### **entropy-label-capability** *boolean*

Synopsis Allow receiving and processing of the entropy label and ELI on incoming packets of RSVP LSPs  
 Context **configure** *router string rsvp entropy-label-capability boolean*  
 Tree *entropy-label-capability*

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Default	false
Introduced	16.0.R1
Platforms	All

### **graceful-restart**

Synopsis	Enter the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

### **max-recovery** *number*

Synopsis	Maximum time to wait before a graceful helper recovers the session
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">graceful-restart</a> <a href="#">max-recovery</a> <i>number</i>
Tree	<a href="#">max-recovery</a>
Range	1 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	All

### **max-restart** *number*

Synopsis	Maximum time that a graceful helper waits for session restart after the neighbor is considered down
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">graceful-restart</a> <a href="#">max-restart</a> <i>number</i>
Tree	<a href="#">max-restart</a>
Range	1 to 300
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All



**graceful-shutdown** *boolean*

Synopsis	Initiate a graceful shutdown of all RSVP interfaces on the node
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>graceful-shutdown</b> <i>boolean</i>
Tree	<a href="#">graceful-shutdown</a>
Default	false
Introduced	16.0.R1
Platforms	All

**implicit-null-label** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null option for all RSVP LSPs
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>implicit-null-label</b> <i>boolean</i>
Tree	<a href="#">implicit-null-label</a>
Default	false
Introduced	16.0.R1
Platforms	All

**include-node-id-in-rro** *boolean*

Synopsis	Include the node-id sub-object in the RRO (Record Route Object) on the RSVP instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>include-node-id-in-rro</b> <i>boolean</i>
Tree	<a href="#">include-node-id-in-rro</a>
Default	false
Introduced	16.0.R1
Platforms	All

**interface** [[interface-name](#)] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>interface</b> <i>reference</i>
Tree	<a href="#">interface</a>

Description	<p>Commands in this context configure the attributes of the RSVP protocol support on an IP interface. RSVP commands are not executed on an IP interface if RSVP is not enabled.</p> <p>The RSVP interface must be administratively disabled before it can be deleted.</p> <p>A corresponding MPLS interface must also be configured. The RSVP interface cannot be deleted without also deleting the MPLS interface.</p>
Introduced	16.0.R1
Platforms	All

### **[interface-name] reference**

Synopsis	Index for router RSVP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of RSVP on the IP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp interface</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **authentication-key string**

Synopsis	Authentication or hash key string
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp interface</a> <i>reference</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command configures the authentication key for use between RSVP neighbors to authenticate RSVP messages. Authentication uses the MD5 message-based digest.

When enabled on an RSVP interface, authentication of RSVP messages operates in both directions of the interface. A router maintains a security association using one authentication key for each interface to an RSVP neighbor.

An RSVP neighbor transmits an authenticating digest of the RSVP message that is computed using the shared authentication key and a keyed-hash algorithm. The message digest is included in an INTEGRITY object, which also contains a flags field, a key identifier field, and a sequence number field. An RSVP neighbor uses the key together with the authentication algorithm to process received RSVP messages. The RSVP MD5 authentication complies to the procedures for RSVP message generation in RFC 2747, *RSVP Cryptographic Authentication*.

The MD5 implementation does not support the authentication challenge procedures in RFC 2747.

String Length 1 to 51

Introduced 16.0.R1

Platforms All

### **authentication-keychain** *reference*

Synopsis TCP authentication keychain for the session

Context **configure** [router](#) *string* [rsvp interface](#) *reference* [authentication-keychain](#) *reference*

Tree [authentication-keychain](#)

Reference **configure** [system security keychains keychain](#) *string*

Introduced 16.0.R3

Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD

Context **configure** [router](#) *string* [rsvp interface](#) *reference* [bfd-liveness](#) *boolean*

Tree [bfd-liveness](#)

Default false

Introduced 16.0.R1

Platforms All

### **class-type-bw**

Synopsis Enable the **class-type-bw** context

Context **configure** [router](#) *string* [rsvp interface](#) *reference* [class-type-bw](#)

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Tree	<a href="#">class-type-bw</a>
Introduced	16.0.R1
Platforms	All

### **ct0 number**

Synopsis	Percentage of link bandwidth for class type (CT) 0
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct0</a> <i>number</i>
Tree	<a href="#">ct0</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct1 number**

Synopsis	Percentage of link bandwidth for class type (CT) 1
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct1</a> <i>number</i>
Tree	<a href="#">ct1</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct2 number**

Synopsis	Percentage of link bandwidth for class type (CT) 2
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct2</a> <i>number</i>
Tree	<a href="#">ct2</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct3 number**

Synopsis	Percentage of link bandwidth for class type (CT) 3
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct3</a> <i>number</i>

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Tree	<a href="#">ct3</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct4 number**

Synopsis	Percentage of link bandwidth for class type (CT) 4
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct4</a> <i>number</i>
Tree	<a href="#">ct4</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct5 number**

Synopsis	Percentage of link bandwidth for class type (CT) 5
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct5</a> <i>number</i>
Tree	<a href="#">ct5</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct6 number**

Synopsis	Percentage of link bandwidth for class type (CT) 6
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct6</a> <i>number</i>
Tree	<a href="#">ct6</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **ct7 number**

Synopsis	Percentage of link bandwidth for class type (CT) 7
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Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">class-type-bw</a> <a href="#">ct7</a> <i>number</i>
Tree	<a href="#">ct7</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **dbw-down-threshold**

Synopsis	Enable the <b>dbw-down-threshold</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-down-threshold</a>
Tree	<a href="#">dbw-down-threshold</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **bw** *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-down-threshold</a> <a href="#">bw</a> <i>number</i>
Tree	<a href="#">bw</a>
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **percent** *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">dbw-down-threshold</a> <a href="#">percent</a> <i>number</i>
Tree	<a href="#">percent</a>
Range	0 to 100
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**dbw-multiplier** *number*

Synopsis	Configure the Dark Bandwidth multiplier.
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>interface</b> <i>reference</i> <b>dbw-multiplier</b> <i>number</i>
Tree	<b>dbw-multiplier</b>
Range	0 to 1000
Units	percent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**dbw-up-threshold**

Synopsis	Enable the <b>dbw-up-threshold</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>interface</b> <i>reference</i> <b>dbw-up-threshold</b>
Tree	<b>dbw-up-threshold</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**bw** *number*

Synopsis	Minimum difference in MRLB or MRB to trigger an update
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>interface</b> <i>reference</i> <b>dbw-up-threshold</b> <b>bw</b> <i>number</i>
Tree	<b>bw</b>
Range	0 to 1000000
Units	megabps
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

**percent** *number*

Synopsis	Minimum difference in percent between dark bandwidth and sampled data rate, to trigger IGP-TE update
Context	<b>configure</b> <b>router</b> <i>string</i> <b>rsvp</b> <b>interface</b> <i>reference</i> <b>dbw-up-threshold</b> <b>percent</b> <i>number</i>
Tree	<b>percent</b>
Range	0 to 100
Units	percent

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-s, 7950 XRS, VSR

### **graceful-restart-helper-mode** *boolean*

Synopsis	Enable graceful restart helper for the RSVP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp interface</a> <i>reference</i> <a href="#">graceful-restart-helper-mode</a> <i>boolean</i>
Tree	<a href="#">graceful-restart-helper-mode</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **graceful-shutdown** *boolean*

Synopsis	Initiate a graceful shutdown of RSVP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp interface</a> <i>reference</i> <a href="#">graceful-shutdown</a> <i>boolean</i>
Tree	<a href="#">graceful-shutdown</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Time between RSVP Hello messages
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp interface</a> <i>reference</i> <a href="#">hello-interval</a> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	0 to 60
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All



**implicit-null-label** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signal the implicit null label value for all LSPs
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">implicit-null-label</a> <i>boolean</i>
Tree	<a href="#">implicit-null-label</a>
Introduced	16.0.R1
Platforms	All

**refresh-reduction**

Synopsis	Enable the <b>refresh-reduction</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">refresh-reduction</a>
Tree	<a href="#">refresh-reduction</a>
Introduced	16.0.R1
Platforms	All

**reliable-delivery** *boolean*

Synopsis	Reliable delivery of RSVP messages over the RSVP interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">refresh-reduction</a> <a href="#">reliable-delivery</a> <i>boolean</i>
Tree	<a href="#">reliable-delivery</a>
Default	false
Introduced	16.0.R1
Platforms	All

**subscription** *number*

Synopsis	Percentage of the link bandwidth to use for reservation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">subscription</a> <i>number</i>
Tree	<a href="#">subscription</a>
Range	0 to 1000
Default	100

Introduced	16.0.R1
Platforms	All

### **te-down-threshold**

Synopsis	Enable the <b>te-down-threshold</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">te-down-threshold</a>
Tree	<a href="#">te-down-threshold</a>
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Threshold level per interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">te-down-threshold</a> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

### **te-up-threshold**

Synopsis	Enable the <b>te-up-threshold</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">interface</a> <i>reference</i> <a href="#">te-up-threshold</a>
Tree	<a href="#">te-up-threshold</a>
Introduced	16.0.R1
Platforms	All

### **value** *number*

Synopsis	Threshold level per interface
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <i>interface</i> <i>reference</i> <i>te-up-threshold</i> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 100
Max. Instances	16
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R2
Platforms	All

### **keep-multiplier** *number*

Synopsis	Value for the keep-multiplier to declare a reservation or neighbor as down
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <i>keep-multiplier</i> <i>number</i>
Tree	<a href="#">keep-multiplier</a>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

### **msg-pacing**

Synopsis	Enable the <b>msg-pacing</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <i>msg-pacing</i>
Tree	<a href="#">msg-pacing</a>
Introduced	16.0.R1
Platforms	All

### **max-burst** *number*

Synopsis	Maximum RSVP messages that are sent over a specified period when message pacing is enabled
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <i>msg-pacing</i> <i>max-burst</i> <i>number</i>
Tree	<a href="#">max-burst</a>
Range	100 to 1000

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Default	650
Introduced	16.0.R1
Platforms	All

### **period** *number*

Synopsis	Time for RSVP message pacing
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">msg-pacing</a> <a href="#">period</a> <i>number</i>
Tree	<a href="#">period</a>
Range	100 to 1000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **p2mp-merge-point-abort-timer** *number*

Synopsis	Merge pointer timer for abort timer
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">p2mp-merge-point-abort-timer</a> <i>number</i>
Tree	<a href="#">p2mp-merge-point-abort-timer</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **p2p-merge-point-abort-timer** *number*

Synopsis	Merge pointer timer for P2P paths
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">rsvp</a> <a href="#">p2p-merge-point-abort-timer</a> <i>number</i>
Tree	<a href="#">p2p-merge-point-abort-timer</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**preemption-timer** *number*

Synopsis	Preemption timer for the MPLS instance
Context	<b>configure</b> <i>router string rsvp preemption-timer number</i>
Tree	<a href="#">preemption-timer</a>
Range	0 to 1800
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	All

**rapid-retransmit-time** *number*

Synopsis	Rapid retransmission interval to reliably deliver RSVP messages
Context	<b>configure</b> <i>router string rsvp rapid-retransmit-time number</i>
Tree	<a href="#">rapid-retransmit-time</a>
Range	1 to 100
Units	deciseconds
Default	5
Introduced	16.0.R1
Platforms	All

**rapid-retry-limit** *number*

Synopsis	Rapid retry limit to reliably deliver RSVP messages
Context	<b>configure</b> <i>router string rsvp rapid-retry-limit number</i>
Tree	<a href="#">rapid-retry-limit</a>
Range	1 to 6
Default	3
Introduced	16.0.R1
Platforms	All

**refresh-reduction-over-bypass** *boolean*

Synopsis	Enable refresh reduction capabilities over tunnels
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Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <i>refresh-reduction-over-bypass</i> <i>boolean</i>
Tree	<a href="#">refresh-reduction-over-bypass</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **refresh-time** *number*

Synopsis	Interval between refresh messages
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <i>refresh-time</i> <i>number</i>
Tree	<a href="#">refresh-time</a>
Range	1 to 65535
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

### **te-down-threshold** *number*

Synopsis	Value for the te-down-threshold
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <i>te-down-threshold</i> <i>number</i>
Tree	<a href="#">te-down-threshold</a>
Range	0 to 100
Max.	16
Instances	
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **te-threshold-update**

Synopsis	Enable the <b>te-threshold-update</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <i>rsvp</i> <i>te-threshold-update</i>
Tree	<a href="#">te-threshold-update</a>
Introduced	16.0.R1

---

Platforms All

### **on-cac-failure** *boolean*

Synopsis CAC (Call Admission Control) failure-triggered IGP update  
Context **configure** **router** *string* **rsvp** **te-threshold-update** **on-cac-failure** *boolean*  
Tree [on-cac-failure](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **update-timer** *number*

Synopsis Timer-based IGP updates  
Context **configure** **router** *string* **rsvp** **te-threshold-update** **update-timer** *number*  
Tree [update-timer](#)  
Range 1 to 300  
Units seconds  
Introduced 16.0.R1  
Platforms All

### **te-up-threshold** *number*

Synopsis Value for the te-up-threshold  
Context **configure** **router** *string* **rsvp** **te-up-threshold** *number*  
Tree [te-up-threshold](#)  
Range 0 to 100  
Max. 16  
Instances  
Notes This element is ordered by the user.  
Introduced 16.0.R1  
Platforms All

## segment-routing

Synopsis	Enter the <b>segment-routing</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a>
Tree	<a href="#">segment-routing</a>
Introduced	16.0.R1
Platforms	All

## maintenance-policy [[policy-name](#)] *string*

Synopsis	Enter the <b>maintenance-policy</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">maintenance-policy</a> <i>string</i>
Tree	<a href="#">maintenance-policy</a>
Description	Commands in this context configure a named maintenance policy that can be applied to SR policy candidate paths that are either statically configured or imported via BGP.
Introduced	20.10.R1
Platforms	All

## [\[policy-name\]](#) *string*

Synopsis	Maintenance policy name
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">maintenance-policy</a> <i>string</i>
Tree	<a href="#">maintenance-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

## **admin-state** *keyword*

Synopsis	Administrative state of the maintenance policy
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">maintenance-policy</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command sets the administrative state of the maintenance policy. A maintenance policy must be administratively disabled to change any of the parameters.



When a maintenance template is administratively disabled, all applicable candidate paths are removed from the data path.

Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

### **bfd-liveness** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable seamless BFD for segment lists of candidate path
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing maintenance-policy</a> <i>string</i> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables seamless BFD on every segment list of an SR policy candidate path to which the maintenance policy is applied. The BFD template configures the parameters for the BFD session.  When configured to <b>false</b> , seamless BFD is disabled.
Default	false
Introduced	20.10.R1
Platforms	All

### **bfd-template** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	BFD template to be used by seamless BFD
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing maintenance-policy</a> <i>string</i> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Description	This command references a named BFD template to be used by seamless BFD. A BFD template must exist on the system before being referenced from a maintenance policy. The template specifies parameters that are used by the BFD session, such as the minimum transmit and receive control packet timer intervals.
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>

Introduced	20.10.R1
Platforms	All

### **hold-down-timer** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Hold down timer for SR policy candidate paths
Context	<b>configure</b> <i>router string segment-routing maintenance-policy string hold-down-timer number</i>
Tree	<a href="#">hold-down-timer</a>
Description	<p>This command configures the hold down timer for the maintenance policy. The purpose of the timer is to prevent bouncing of the SR policy path state if S-BFD sessions associated with the segment lists flap, causing the threshold to be repeatedly crossed in a short period of time.</p> <p>The timer is started when the number of up S-BFD sessions drops below the threshold. The SR policy path is not considered to be up again until the hold down timer has expired and the number of up S-BFD sessions reaches or exceeds the threshold and the internal hold timer is not running.</p> <p>If the revert timer is also configured, the revert timer is not started until after the number of up S-BFD sessions equals or exceeds the threshold and the hold down timer for the primary candidate path has expired.</p>
Range	0 to 5000
Units	deciseconds
Default	0
Introduced	20.10.R1
Platforms	All

### **mode** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Protection mode for SR policy candidate paths
Context	<b>configure</b> <i>router string segment-routing maintenance-policy string mode keyword</i>
Tree	<a href="#">mode</a>

Description	This command specifies the data path programming and protection mechanism for SR policy candidate paths to which the maintenance policy is applied.
Options	none, ecmp-protected, linear
Default	none
Introduced	20.10.R1
Platforms	All

### return-path-label *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	S-BFD return-path label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>maintenance-policy</b> <i>string</i> <b>return-path-label</b> <i>number</i>
Tree	<a href="#">return-path-label</a>
Description	<p>This command configures the S-BFD session to echo mode and adds an additional MPLS label to the bottom of the label stack for the S-BFD packet.</p> <p>The command applies to the initiator of the S-BFD sessions. The return-path label may be a binding SID for an SR policy or other MPLS path configured on the reflector router. Instead of being routed through the IGP path, the S-BFD packet returns to the initiator through this MPLS return path.</p> <p>If the command is deleted, S-BFD returns to asynchronous mode and no return-path label is pushed by the initiator node. Any S-BFD packets for this LSP or path that the reflector receives are routed through the IGP path.</p>
Range	32 to 1048512
Introduced	22.10.R1
Platforms	All

### revert-timer *number*

Synopsis	Revert timer for SR policy candidate paths
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>maintenance-policy</b> <i>string</i> <b>revert-timer</b> <i>number</i>
Tree	<a href="#">revert-timer</a>
Description	<p>This command configures the revert timer for SR Policy candidate paths.</p> <p>The revert timer is started when the primary path recovers (the number of S-BFD sessions that are up equals or exceeds the threshold value and the hold down timer has expired). When the timer expires, the system reverts to the primary path.</p>

Range	0 to 4320
Units	minutes
Introduced	20.10.R1
Platforms	All

### **threshold** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Minimum number of up S-BFD sessions for up path status
Context	<b>configure</b> <i>router string segment-routing maintenance-policy string threshold number</i>
Tree	<i>threshold</i>
Description	This command configures the minimum number of S-BFD sessions that must be up for the SR policy candidate path to be considered up. If the number of up sessions is below this threshold value, the policy candidate path is marked as BFD degraded by the system.  This command is only valid in the <b>ecmp-protected</b> mode.
Range	1 to 32
Default	1
Introduced	20.10.R1
Platforms	All

### **segment-routing-v6**

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6</i>
Tree	<i>segment-routing-v6</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **base-routing-instance**

Synopsis	Enter the <b>base-routing-instance</b> context
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6 base-routing-instance</i>
Tree	<i>base-routing-instance</i>

Description	Commands in this context configure SRv6 SID functions for End, End.X, and service SIDs for IPv4 and IPv6 prefixes in the base routing instance.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **locator** [[locator-name](#)] *reference*

Synopsis	Enter the <b>locator</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i>
Tree	<a href="#">locator</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[locator-name]** *reference*

Synopsis	SRv6 locator name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i>
Tree	<a href="#">locator</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **function**

Synopsis	Enter the <b>function</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a>
Tree	<a href="#">function</a>
Description	Commands in this context configure the function value of SRv6 SIDs. The <b>end-dt46</b> command is mutually exclusive with the <b>end-dt4</b> and <b>end-dt6</b> commands.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**end** [*value*] *number*

Synopsis	Enter the <b>end</b> list instance
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6 base-routing-instance locator reference function end number</i>
Tree	<i>end</i>
Description	Commands in this context configure the attributes of SRv6 End SID function. The End SID functions for each SRH mode must be statically allocated. The value is not automatically allocated by default for a locator.
Max. Instances	8
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[value]** *number*

Synopsis	SRv6 SID function value
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6 base-routing-instance locator reference function end number</i>
Tree	<i>end</i>
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**srh-mode** *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6 base-routing-instance locator reference function end number srh-mode keyword</i>
Tree	<i>srh-mode</i>
Description	This command configures the popping mode for the SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Default	psp
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**end-dt4**

Synopsis	Enable the <b>end-dt4</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <a href="#">reference</a> <a href="#">function</a> <b>end-dt4</b>
Tree	<a href="#">end-dt4</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <a href="#">reference</a> <a href="#">function</a> <b>end-dt4</b> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**end-dt46**

Synopsis	Enable the <b>end-dt46</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <a href="#">reference</a> <a href="#">function</a> <b>end-dt46</b>
Tree	<a href="#">end-dt46</a>
Description	Commands in this context assign a value for IPv4 and IPV6 routes in the VPRN service instance.  This command and the <b>end-dt4</b> command are mutually exclusive. This command and the <b>end-dt6</b> command are mutually exclusive.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <a href="#">reference</a> <a href="#">function</a> <b>end-dt46</b> <a href="#">value</a> <i>number</i>

Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## end-dt6

Synopsis	Enable the <b>end-dt6</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <b>end-dt6</b>
Tree	<a href="#">end-dt6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value *number*

Synopsis	SRv6 function value
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <b>end-dt6</b> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## end-x [[value](#)] *number*

Synopsis	Enter the <b>end-x</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <b>end-x</b> <i>number</i>
Tree	<a href="#">end-x</a>
Description	<p>Commands in this context configure the attributes of the End.X SID function associated with a P2P interface.</p> <p>A static function value can be configured for each combination of SRH mode and protection type. For a specific interface, the static function value associated with the same combination of protection type and SRH mode overrides any corresponding function value that is automatically allocated (<b>end.x-auto-allocate</b> list configuration).</p> <p>If more than one value is configured for an interface and combination of SRH mode and protection type, they are all advertised in IS-IS.</p>



When used in remote TI-LFA repair tunnel programming, IS-IS uses rules to select one End.X value from the multiple values received in IS-IS link advertisements.

Values assigned to loopback and system interfaces are not advertised in IS-IS.

End.X SID functions for adjacencies over broadcast interfaces are always automatically allocated based on the configuration of the **end.x-auto-allocate** list.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### [value] *number*

Synopsis	SRv6 SID function value
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x</a> <i>number</i>
Tree	<a href="#">end-x</a>
Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **interface-name** *reference*

Synopsis	Interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x</a> <i>number</i> <a href="#">interface-name</a> <i>reference</i>
Tree	<a href="#">interface-name</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <a href="#">interface</a> <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **protection** *keyword*

Synopsis	Adjacency protection type for the SID function
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x</a> <i>number</i> <a href="#">protection</a> <i>keyword</i>
Tree	<a href="#">protection</a>
Options	unprotected, protected
Default	protected

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srh-mode** *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>base-routing-instance</b> <b>locator</b> <i>reference</i> <b>function</b> <b>end-x</b> <i>number</i> <b>srh-mode</b> <i>keyword</i>
Tree	<b>srh-mode</b>
Description	This command configures the popping mode for the SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Default	psp
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **end-x-auto-allocate** [**srh-mode**] *keyword* **protection** *keyword*

Synopsis	Add a list entry for <b>end-x-auto-allocate</b>
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>base-routing-instance</b> <b>locator</b> <i>reference</i> <b>function</b> <b>end-x-auto-allocate</b> <i>keyword</i> <b>protection</b> <i>keyword</i>
Tree	<b>end-x-auto-allocate</b>
Description	<p>This command adds a list entry for the automatic allocation of the End.X SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces).</p> <p>A list entry is a combination of the protection type and the SRH mode. Any combinations in addition to the maximum supported by this command must be allocated statically under each P2P interface (<b>end.x</b> configuration).</p> <p>When no list entries are configured, no End.X function values are automatically allocated by default for a locator.</p>
Max. Instances	2
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[srh-mode]** *keyword*

Synopsis	Segment Routing Header (SRH) mode
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Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x-auto-allocate</a> <i>keyword</i> <a href="#">protection</a> <i>keyword</i>
Tree	<a href="#">end-x-auto-allocate</a>
Description	This command specifies the popping mode for the automatically allocated SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **protection** *keyword*

Synopsis	Adjacency protection for automatic SID function
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-x-auto-allocate</a> <i>keyword</i> <a href="#">protection</a> <i>keyword</i>
Tree	<a href="#">end-x-auto-allocate</a>
Description	This command specifies the adjacency protection for the automatically allocated SID function.
Options	unprotected, protected
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **micro-segment-locator** [[locator-name](#)] *reference*

Synopsis	Enter the <b>micro-segment-locator</b> list instance
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i>
Tree	<a href="#">micro-segment-locator</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[locator-name]** *reference*

Synopsis	SRv6 micro-segment locator name
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i>

Tree	<a href="#">micro-segment-locator</a>
Description	This command references a micro-segment locator name defined in the <b>configure router segment-routing segment-routing-v6</b> context. This command assigns a micro-segment locator to BGP for use with Base router routes.
Reference	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## function

Synopsis	Enter the <b>function</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <b>function</b>
Tree	<a href="#">function</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## ua [*value*] *number*

Synopsis	Enter the <b>ua</b> list instance
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <b>function</b> <b>ua</b> <i>number</i>
Tree	<a href="#">ua</a>
Description	Commands in this context configure the attributes of the uA micro-SID function associated with a P2P interface. The uA micro-SID function encodes the behavior of an adjacency SID.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## [*value*] *number*

Synopsis	SRv6 SID function value
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <b>function</b> <b>ua</b> <i>number</i>
Tree	<a href="#">ua</a>

Range	1 to 1048575
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **interface-name** *reference*

Synopsis	Interface name
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">ua</a> <i>number</i> <a href="#">interface-name</a> <i>reference</i>
Tree	<a href="#">interface-name</a>
Reference	<b>configure</b> <b>router</b> <i>string</i> <a href="#">interface</a> <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **protection** *keyword*

Synopsis	Adjacency protection type for the SID function
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">ua</a> <i>number</i> <a href="#">protection</a> <i>keyword</i>
Tree	<a href="#">protection</a>
Options	unprotected, protected
Default	protected
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **srh-mode** *keyword*

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">ua</a> <i>number</i> <a href="#">srh-mode</a> <i>keyword</i>
Tree	<a href="#">srh-mode</a>
Description	This command configures the popping mode for the SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Default	psp
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **ua-auto-allocate** [**srh-mode**] *keyword protection keyword*

Synopsis Add a list entry for **ua-auto-allocate**

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua-auto-allocate keyword protection keyword*

Tree [ua-auto-allocate](#)

Description Commands in this context define a list entry for the automatic allocation of the uA micro-SID function for all adjacencies over all network interfaces on the router (P2P and broadcast interfaces).

Max. Instances 2

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[srh-mode]** *keyword*

Synopsis Segment Routing Header (SRH) mode

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua-auto-allocate keyword protection keyword*

Tree [ua-auto-allocate](#)

Description This command specifies the popping mode for the automatically allocated SID.

Options psp, usp, psp-usd, usp-usd, psp-usp-usd

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **protection** *keyword*

Synopsis Adjacency protection for automatic SID function

Context **configure** *router string segment-routing segment-routing-v6 base-routing-instance micro-segment-locator reference function ua-auto-allocate keyword protection keyword*

Tree [ua-auto-allocate](#)

Description This command specifies the adjacency protection for the automatically allocated SID function.

Options unprotected, protected

Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## udt4

Synopsis	Enable the <b>udt4</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <i>function</i> <b>udt4</b>
Tree	<a href="#">udt4</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value number

Synopsis	SRv6 function value
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <i>function</i> <b>udt4</b> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## udt46

Synopsis	Enable the <b>udt46</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <i>function</i> <b>udt46</b>
Tree	<a href="#">udt46</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value number

Synopsis	SRv6 function value
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Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt46</a> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## udt6

Synopsis	Enable the <b>udt6</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt6</a>
Tree	<a href="#">udt6</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value *number*

Synopsis	SRv6 function value
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">base-routing-instance</a> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt6</a> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## locator [[locator-name](#)] *string*

Synopsis	Enter the <b>locator</b> list instance
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <i>string</i>
Tree	<a href="#">locator</a>
Max. Instances	16
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR



**[locator-name]** *string*

Synopsis	SRv6 locator name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>locator</b> <i>string</i>
Tree	<b>locator</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the locator
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>locator</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**algorithm** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>locator</b> <i>string</i> <b>algorithm</b> <i>number</i>
Tree	<b>algorithm</b>
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**argument-length** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator argument length
Context	<b>configure</b> <i>router string</i> <i>segment-routing segment-routing-v6 locator string</i> <i>argument-length number</i>
Tree	<i>argument-length</i>
Description	<p>This command configures the SRv6 locator argument length.</p> <p>The sum of the function length, argument length, and the locator prefix length must not exceed 128 bits.</p> <p>The following commands are used to configure the function length and locator prefix length:</p> <ul style="list-style-type: none"> <li>• <b>configure router segment-routing segment-routing-v6 locator function-length</b></li> <li>• <b>configure router segment-routing segment-routing-v6 locator prefix ip-prefix</b></li> </ul>
Range	0   16
Default	0
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**block-length** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator block address length
Context	<b>configure</b> <i>router string</i> <i>segment-routing segment-routing-v6 locator string</i> <i>block-length number</i>
Tree	<i>block-length</i>
Range	0 to 96
Default	0
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**function-length** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Function length
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6 locator string function-length number</i>
Tree	<i>function-length</i>
Description	This command configures the size of the function length. The sum of the function length and the locator prefix length must not exceed 128 bits. Operators can configure the locator level <b>label-block</b> command before they configure a function length of 16. If the function length is configured as 16, the locator level <b>label-block</b> must be configured rather than the static-function level <b>label-block</b> . The validation occurs when committed.
Range	16   20 to 96
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**label-block** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block name for service termination
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6 locator string label-block reference</i>
Tree	<i>label-block</i>
Reference	<b>configure</b> <i>router string mpls-labels reserved-label-block string</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**prefix**

Synopsis	Enter the <b>prefix</b> context
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6 locator string prefix</i>
Tree	<i>prefix</i>
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## ip-prefix *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <a href="#">string</a> <a href="#">prefix</a> <a href="#">ip-prefix</a> <a href="#">string</a>
Tree	<a href="#">ip-prefix</a>
Description	This command configures the IPv6 prefix for the locator.  For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## static-function

Synopsis	Enter the <b>static-function</b> context
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <a href="#">string</a> <a href="#">static-function</a>
Tree	<a href="#">static-function</a>
Description	Commands in this context configure the attributes of the function field range reserved for static End.d, End.X, and service SID assignment.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## label-block *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Label block for the service SIDs of the SRv6 locator
Context	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">locator</a> <a href="#">string</a> <a href="#">static-function</a> <a href="#">label-block</a> <a href="#">reference</a>

Tree	<a href="#">label-block</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls-labels reserved-label-block</a> <i>string</i>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **max-entries** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing segment-routing-v6 locator</a> <i>string</i> <a href="#">static-function</a> <a href="#">max-entries</a> <i>number</i>
Tree	<a href="#">max-entries</a>
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **termination-fpe** *reference*

Synopsis	List of the SRv6 termination FPE
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing segment-routing-v6 locator</a> <i>string</i> <a href="#">termination-fpe</a> <i>reference</i>
Tree	<a href="#">termination-fpe</a>
Description	This command associates the Forwarding Path Extension (FPE) with the locator for terminating SRv6 in local services. Multiple locators can share the same FPE or each locator can use a different FPE. The FPE can be the same or different from the origination FPE.
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <i>number</i>
Max. Instances	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**micro-segment**

Synopsis	Enable the <b>micro-segment</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a>
Tree	<a href="#">micro-segment</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**argument-length** *number*

Synopsis	Micro-segment argument length
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">argument-length</a> <i>number</i>
Tree	<a href="#">argument-length</a>
Description	<p>This command configures the micro-segment argument length.</p> <p>The sum of the function length, argument length, and the locator prefix length must not exceed 128 bits.</p> <p>The following commands are used to configure the function length and locator prefix length:</p> <ul style="list-style-type: none"> <li>• <b>configure router segment-routing segment-routing-v6 locator function-length</b></li> <li>• <b>configure router segment-routing segment-routing-v6 locator prefix ip-prefix</b></li> </ul>
Range	0   16
Default	0
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**block** [[block-name](#)] *string*

Synopsis	Enter the <b>block</b> list instance
Context	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">block</a> <i>string</i>
Tree	<a href="#">block</a>
Max. Instances	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[block-name]** *string*

Synopsis	Micro-SID block name
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <b>block</b> <i>string</i>
Tree	<a href="#">block</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**admin-state** *keyword*

Synopsis	Administrative state of micro-SID block
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <b>block</b> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**label-block** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reserved label block
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <b>block</b> <i>string</i> <a href="#">label-block</a> <i>reference</i>
Tree	<a href="#">label-block</a>
Description	This command associates a pre-configured reserved label block with the micro-SID block.
Reference	<b>configure</b> <b>router</b> <i>string</i> <a href="#">mpls-labels</a> <a href="#">reserved-label-block</a> <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## prefix

Synopsis	Enter the <b>prefix</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment block string</a> <a href="#">prefix</a>
Tree	<a href="#">prefix</a>
Description	Commands in this context configure the IPv6 prefix for an SRv6 micro-segment locator.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## ip-prefix *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 locator prefix
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment block string</a> <a href="#">prefix ip-prefix string</a>
Tree	<a href="#">ip-prefix</a>
Description	This command configures the IPv6 prefix for the locator.  For regular SRv6, the locator prefix length range is the sum of the length of the block field and the length of the node ID field. For micro-segment SRv6, the locator prefix length must be equal to the micro-SID block length.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## static-function

Synopsis	Enter the <b>static-function</b> context
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment block string</a> <a href="#">static-function</a>
Tree	<a href="#">static-function</a>
Description	Commands in this context configure the function field parameters of a static uA or service micro-SID assignment.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR



**max-entries** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of static SID functions
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">block</a> <i>string</i> <a href="#">static-function</a> <a href="#">max-entries</a> <i>number</i>
Tree	<a href="#">max-entries</a>
Description	This command configures the maximum number of values that are reserved from the function field to assign to static SID functions.
Range	1 to 1048575
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**termination-fpe** *reference*

Synopsis	FPE ID for SRv6 termination
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">block</a> <i>string</i> <a href="#">termination-fpe</a> <i>reference</i>
Tree	<a href="#">termination-fpe</a>
Description	This command associates the FPE ID with the locator for SRv6 termination in local services.
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <i>number</i>
Max. Instances	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**block-length** *number*

Synopsis	Micro-SID block length
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">block-length</a> <i>number</i>
Tree	<a href="#">block-length</a>

Range	8   16   24   32   40   48   56   64
Default	32
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **global-sid-entries** *number*

Synopsis	Maximum number of micro-segment locators network wide
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">global-sid-entries</a> <i>number</i>
Tree	<a href="#">global-sid-entries</a>
Description	This command defines the maximum number of unique micro-segment locators that can be configured network wide. The value is expressed in multiples of 1024 and must be the same on every platform network wide.
Range	4 to 60
Default	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **sid-length** *number*

Synopsis	Micro-SID length
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">sid-length</a> <i>number</i>
Tree	<a href="#">sid-length</a>
Description	This command configures the length of the micro-SIDs.
Range	16
Default	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **micro-segment-locator** [[locator-name](#)] *string*

Synopsis	Enter the <b>micro-segment-locator</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>

Tree	<a href="#">micro-segment-locator</a>
Max. Instances	16
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[locator-name]** *string*

Synopsis	SRv6 locator name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>
Tree	<a href="#">micro-segment-locator</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the locator
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**algorithm** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IGP flexible algorithm ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <b>algorithm</b> <i>number</i>

Tree	<a href="#">algorithm</a>
Description	This command configures an IGP flexible algorithm for a locator. A locator can only be part of one algorithm but it can be used in multiple IGP instances.
Range	128 to 255
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### block reference



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-defined micro-SID block
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <a href="#">block</a> <i>reference</i>
Tree	<a href="#">block</a>
Description	This command associates a pre-defined micro-SID block with the micro-segment SRv6 locator.
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment</a> <a href="#">block</a> <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### un

Synopsis	Enter the <b>un</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i> <a href="#">un</a>
Tree	<a href="#">un</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### srh-mode keyword



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Segment Routing Header (SRH) mode
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string un srh-mode keyword</i>
Tree	<a href="#">srh-mode</a>
Description	This command configures the popping mode for the SID.
Options	psp, usp, psp-usd, usp-usd, psp-usp-usd
Default	psp
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### value number



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SRv6 function value
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string un value number</i>
Tree	<a href="#">value</a>
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### origination-fpe reference

Synopsis	List of the SRv6 origination FPEs
Context	<b>configure</b> <i>router string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">origination-fpe</a> <i>reference</i>
Tree	<a href="#">origination-fpe</a>
Description	This command configures the origination Forwarding Path Extension (FPE) for SRv6 tunnels on local services. The origination FPE must be different from any of the SRv6 termination FPEs.
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <i>number</i>
Max. Instances	1
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**source-address** *string*

Synopsis	Source address used in the SRv6 packet
Context	<b>configure</b> <i>router string segment-routing segment-routing-v6 source-address string</i>
Tree	<a href="#">source-address</a>
Description	<p>This command specifies the global default source IPv6 address used in the SA field of the outerIPv6 header of the SRv6 encapsulated packet.</p> <p>The value is inherited in the BGP and services contexts (for example, <b>configure router "base" bgp segment-routing-v6 source-address</b> and <b>configure service vprn bgp-ipvpn segment-routing-v6 source-address</b>), but is overwritten by the value configured in those contexts.</p> <p>A source IPv6 address must be configured in the global context or in the BGP or services context.</p> <p>The system does not check if the entered address is a valid local address.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**sr-mpls**

Synopsis	Enter the <b>sr-mpls</b> context
Context	<b>configure</b> <i>router string segment-routing sr-mpls</i>
Tree	<a href="#">sr-mpls</a>
Introduced	21.10.R1
Platforms	All

**prefix-sids** [[interface-name](#)] *reference*

Synopsis	Enter the <b>prefix-sids</b> list instance
Context	<b>configure</b> <i>router string segment-routing sr-mpls prefix-sids reference</i>
Tree	<a href="#">prefix-sids</a>
Description	Commands in this context configure the prefix SIDs for an interface.
Introduced	21.10.R1
Platforms	All

**[interface-name]** *reference*

Synopsis	Loopback interface name that owns prefix to advertise
----------	---

Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-mpls</a> <a href="#">prefix-sids</a> <i>reference</i>
Tree	<a href="#">prefix-sids</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

## ipv4-sid

Synopsis	Enable the <b>ipv4-sid</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-mpls</a> <a href="#">prefix-sids</a> <i>reference</i> <a href="#">ipv4-sid</a>
Tree	<a href="#">ipv4-sid</a>
Introduced	21.10.R1
Platforms	All

## index *number*

Synopsis	Node SID index for the interface
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-mpls</a> <a href="#">prefix-sids</a> <i>reference</i> <a href="#">ipv4-sid</a> <a href="#">index</a> <i>number</i>
Tree	<a href="#">index</a>
Range	0 to 4294967295
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	21.10.R1
Platforms	All

## label *number*

Synopsis	Label value for the node SID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-mpls</a> <a href="#">prefix-sids</a> <i>reference</i> <a href="#">ipv4-sid</a> <a href="#">label</a> <i>number</i>
Tree	<a href="#">label</a>
Range	32 to 1048575
Notes	The following elements are part of a choice: <b>index</b> or <b>label</b> .
Introduced	21.10.R1

Platforms All

## ipv6-sid

Synopsis Enable the **ipv6-sid** context

Context **configure** [router](#) *string* [segment-routing](#) [sr-mpls](#) [prefix-sids](#) *reference* [ipv6-sid](#)

Tree [ipv6-sid](#)

Introduced 21.10.R1

Platforms All

## index number

Synopsis Node SID index for the interface

Context **configure** [router](#) *string* [segment-routing](#) [sr-mpls](#) [prefix-sids](#) *reference* [ipv6-sid](#) [index](#) *number*

Tree [index](#)

Range 0 to 4294967295

Notes The following elements are part of a choice: **index** or **label**.

Introduced 21.10.R1

Platforms All

## label number

Synopsis Label value for the node SID

Context **configure** [router](#) *string* [segment-routing](#) [sr-mpls](#) [prefix-sids](#) *reference* [ipv6-sid](#) [label](#) *number*

Tree [label](#)

Range 32 to 1048575

Notes The following elements are part of a choice: **index** or **label**.

Introduced 21.10.R1

Platforms All

## node-sid boolean

Synopsis Assign a node SID to the prefix referencing the router

Context **configure** [router](#) *string* [segment-routing](#) [sr-mpls](#) [prefix-sids](#) *reference* [node-sid](#) *boolean*



Tree	<a href="#">node-sid</a>
Default	true
Introduced	21.10.R1
Platforms	All

## sr-policies

Synopsis	Enter the <b>sr-policies</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a>
Tree	<a href="#">sr-policies</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of segment routing policies
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## egress-statistics

Synopsis	Enable the <b>egress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">egress-statistics</a>
Tree	<a href="#">egress-statistics</a>
Description	Commands in this context configure the collection of egress traffic statistics for all segment routing policies.
Introduced	19.10.R1
Platforms	All

### **accounting-policy** *reference*

Synopsis	Accounting policy ID
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">egress-statistics</a> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	23.7.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the traffic statistics
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">egress-statistics</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	All

### **collect-stats** *boolean*

Synopsis	Collect accounting and statistical data
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">egress-statistics</a> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	23.7.R1
Platforms	All

### **ingress-statistics**

Synopsis	Enable the <b>ingress-statistics</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">ingress-statistics</a>
Tree	<a href="#">ingress-statistics</a>
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the traffic statistics

Context **configure** [router](#) *string* [segment-routing](#) [sr-policies](#) [ingress-statistics](#) **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **reserved-label-block** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Reserved local block for segment routing policies

Context **configure** [router](#) *string* [segment-routing](#) [sr-policies](#) [reserved-label-block](#) *reference*

Tree [reserved-label-block](#)

Reference **configure** [router](#) *string* [mpls-labels](#) [reserved-label-block](#) *string*

Introduced 16.0.R1

Platforms All

### **static-policy** [[name](#)] *string*

Synopsis Enter the **static-policy** list instance

Context **configure** [router](#) *string* [segment-routing](#) [sr-policies](#) [static-policy](#) *string*

Tree [static-policy](#)

Max. Instances 32768

Introduced 16.0.R1

Platforms All

**[name]** *string*

Synopsis	Name for the segment routing static policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i>
Tree	<b>static-policy</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of segment routing static policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**binding-sid** *number*

Synopsis	Segment ID that opaquely represents an SR policy to upstream routers
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>binding-sid</b> <i>number</i>
Tree	<b>binding-sid</b>
Range	32 to 1048575
Introduced	16.0.R1
Platforms	All

**color** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Traffic flows to be steered by this policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>color</b> <i>number</i>
Tree	<b>color</b>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **distinguisher** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique value for a policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>distinguisher</b> <i>number</i>
Tree	<b>distinguisher</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination of the source-routed path
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>endpoint</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>endpoint</b>
Introduced	16.0.R1
Platforms	All

**head-end** (*ipv4-address-no-zone | ipv6-address-no-zone | keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Head end address for this static policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>head-end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   keyword</i> )
Tree	<b>head-end</b>
Options	local
Introduced	16.0.R1
Platforms	All

**maintenance-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policy name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>maintenance-policy</b> <i>reference</i>
Tree	<b>maintenance-policy</b>
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>maintenance-policy</b> <i>string</i>
Introduced	20.10.R1
Platforms	All

**preference** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Preference value of this static policy
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Max. Range	0 to 4294967295

Default	100
Introduced	16.0.R1
Platforms	All

### **segment-list** [[seg-list-index](#)] *number*

Synopsis	Enter the <b>segment-list</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i>
Tree	<a href="#">segment-list</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **[seg-list-index]** *number*

Synopsis	Index for identifying a particular segment list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i>
Tree	<a href="#">segment-list</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of segment list for static policy
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**segment** [[segment-index](#)] *number*

Synopsis	Enter the <b>segment</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">segment</a> <i>number</i>
Tree	<a href="#">segment</a>
Description	<p>Commands in this context configure a segment inside a segment-list of a statically-defined segment routing policy candidate path.</p> <p>A segment list of a statically-defined SR policy candidate path of type <b>sr-mpls</b> can only accept a segment of type <b>mpls-label</b>.</p> <p>A segment list of a statically-defined SR policy candidate path of type <b>srv6</b> can only accept a segment of type <b>srv6-sid</b>. However, you can mix SRv6 segments derived from both classic SRv6 and micro-segment SRv6 locators.</p>
Max. Instances	24
Introduced	16.0.R1
Platforms	All

**[segment-index]** *number*

Synopsis	Index for identifying a segment in a segment list
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">segment</a> <i>number</i>
Tree	<a href="#">segment</a>
Description	<p>This command configures the index for identifying a segment in a segment list.</p> <p>Each segment list can have up to 11 segments for SR-MPLS policies, and 24 segments for an SRv6 segment list which only includes micro-segments. For an SRv6 segment list that mixes regular and micro-segments, up to 7 regular segments can be configured.</p>
Range	1 to 24
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**behavior-and-structure**

Synopsis	Enable the <b>behavior-and-structure</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">segment</a> <i>number</i> <a href="#">behavior-and-structure</a>



Tree	<a href="#">behavior-and-structure</a>
Description	<p>Commands in this context configure the behavior and structure of the SRv6 policy micro-segment.</p> <p>Behavior and structure are necessary (but not sufficient) for the SRv6 policy micro-segment to be compressed by a head-end.</p>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **behavior** *keyword*

Synopsis	Behavior of the SRv6 uSID
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">segment</a> <i>number</i> <a href="#">behavior-and-structure</a> <a href="#">behavior</a> <i>keyword</i>
Tree	<a href="#">behavior</a>
Description	<p>This command configures the behavior of the SRv6 policy micro-segment (uSID).</p> <p>The only allowed values are flavorless behaviors of NEXT-CSID. The compression algorithm however supports all flavors.</p> <p>Although END.T with NEXT-CSID is a configurable value, SR OS does not support this behavior for locally-instantiated SIDs. However, configuring this value allows a traffic-engineered path to be built that includes nodes that would support such behavior.</p>
Options	<a href="#">end-next-csid</a> , <a href="#">end-x-next-csid</a> , <a href="#">end-t-next-csid</a> , <a href="#">end-b6-encaps-next-csid</a> , <a href="#">end-b6-encaps-red-next-csid</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **block-length** *number*

Synopsis	Locator block length of the SRv6 uSID
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">segment</a> <i>number</i> <a href="#">behavior-and-structure</a> <a href="#">block-length</a> <i>number</i>
Tree	<a href="#">block-length</a>
Range	8   16   24   32   40   48   56   64
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**function-length** *number*

Synopsis	Function length of the SRv6 uSID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>segment-list</b> <i>number</i> <b>segment</b> <i>number</i> <b>behavior-and-structure</b> <b>function-length</b> <i>number</i>
Tree	<b>function-length</b>
Range	0   16
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**node-length** *number*

Synopsis	Length of the node part of the SRv6 uSID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>segment-list</b> <i>number</i> <b>segment</b> <i>number</i> <b>behavior-and-structure</b> <b>node-length</b> <i>number</i>
Tree	<b>node-length</b>
Range	0   16
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**mpls-label** *number*

Synopsis	Value for the MPLS label
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>segment-list</b> <i>number</i> <b>segment</b> <i>number</i> <b>mpls-label</b> <i>number</i>
Tree	<b>mpls-label</b>
Range	0 to 1048575
Introduced	16.0.R1
Platforms	All

**srv6-sid** *string*

Synopsis	Segment ID for segment routing IPv6
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Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">segment</a> <i>number</i> <a href="#">srv6-sid</a> <i>string</i>
Tree	<a href="#">srv6-sid</a>
Description	This command defines the 128-bit SRv6 SID for the segment.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## weight *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Weight of this segment list
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-list</a> <i>number</i> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Max. Range	0 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

## segment-routing-v6



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>segment-routing-v6</b> context
Context	<b>configure</b> <i>router</i> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-routing-v6</a>
Tree	<a href="#">segment-routing-v6</a>
Description	Commands in this context configure a static SRv6 policy.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**binding-sid** [[index](#)] *number*

Synopsis	Enter the <b>binding-sid</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-routing-v6</a> <a href="#">binding-sid</a> <i>number</i>
Tree	<a href="#">binding-sid</a>
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[index]** *number*

Synopsis	Binding SID index
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-routing-v6</a> <a href="#">binding-sid</a> <i>number</i>
Tree	<a href="#">binding-sid</a>
Range	1
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**ip-address** *string*

Synopsis	Remote SRv6 binding SID
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">sr-policies</a> <a href="#">static-policy</a> <i>string</i> <a href="#">segment-routing-v6</a> <a href="#">binding-sid</a> <i>number</i> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Description	<p>This command configures an SRv6 binding SID for a remote SRv6 policy. The command cannot be used with a local head-end location (<b>configure router segment-routing sr-policies static-policy head-end local</b>).</p> <p>This command and the <b>configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid locator</b> command or the <b>configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid micro-segment-locator</b> command are mutually exclusive.</p> <p>If the remote head-end is an SR OS system, the binding SID can either be a regular SID or uSID. If it is a uSID, it must be configured with a node ID in the following format: &lt;block&gt;&lt;uN&gt;&lt;uB6&gt;::)</p> <p>The format of the binding SID is a 128-bit IPv6 address.</p>

Notes	The following elements are part of a choice: <b>ip-address</b> or ( <b>locator</b> and <b>micro-segment-locator</b> ).
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## locator

Synopsis	Enable the <b>locator</b> context
Context	<b>configure</b> <i>router string</i> <i>segment-routing sr-policies static-policy string</i> <i>segment-routing-v6 binding-sid number</i> <b>locator</b>
Tree	<a href="#">locator</a>
Description	Commands in this context configure a binding SID locator for a local SRv6 policy. This command and the <b>configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid ip-address</b> command for a non-local SRv6 policy are mutually exclusive.
Notes	The following elements are part of a choice: <b>ip-address</b> or ( <b>locator</b> and <b>micro-segment-locator</b> ).
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## function *keyword*

Synopsis	Behavior of the local SRv6 regular binding SID
Context	<b>configure</b> <i>router string</i> <i>segment-routing sr-policies static-policy string</i> <i>segment-routing-v6 binding-sid number</i> <i>locator</i> <i>function</i> <i>keyword</i>
Tree	<a href="#">function</a>
Options	end-b6-encaps-red
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## function-value *number*

Synopsis	Value of the local SRv6 regular binding SID
Context	<b>configure</b> <i>router string</i> <i>segment-routing sr-policies static-policy string</i> <i>segment-routing-v6 binding-sid number</i> <i>locator</i> <i>function-value</i> <i>number</i>
Tree	<a href="#">function-value</a>

Description	This command configures the function value of the local SRv6 regular binding SID. If this command is not configured, the system automatically selects a value within the range of the dynamic SID function values. The value must be within the range of static SID function values, and must be available.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **locator-name** *reference*

Synopsis	Name of the locator of the local SRv6 regular binding SID
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>segment-routing-v6</b> <b>binding-sid</b> <i>number</i> <b>locator</b> <b>locator-name</b> <i>reference</i>
Tree	<b>locator-name</b>
Description	This command configures the name of the locator of the local SRv6 regular binding SID. The locator must exist on the system.
Reference	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>segment-routing-v6</b> <b>locator</b> <i>string</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **micro-segment-locator**

Synopsis	Enable the <b>micro-segment-locator</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>segment-routing</b> <b>sr-policies</b> <b>static-policy</b> <i>string</i> <b>segment-routing-v6</b> <b>binding-sid</b> <i>number</i> <b>micro-segment-locator</b>
Tree	<b>micro-segment-locator</b>
Description	Commands in this context configure the local SRv6 microbinding SID. This command and the <b>configure router segment-routing sr-policies static-policy segment-routing-v6 binding-sid ip-address</b> command for a non-local SRv6 policy are mutually exclusive.
Notes	The following elements are part of a choice: <b>ip-address</b> or ( <b>locator</b> and <b>micro-segment-locator</b> ).
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**function** *keyword*

Synopsis	Behavior of the local SRv6 microbinding SID
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-routing-v6</i> <i>binding-sid</i> <i>number</i> <i>micro-segment-locator</i> <i>function</i> <i>keyword</i>
Tree	<i>function</i>
Options	end-b6-encaps-red-next-csid
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**function-value** *number*

Synopsis	Value of the local SRv6 microbinding SID
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-routing-v6</i> <i>binding-sid</i> <i>number</i> <i>micro-segment-locator</i> <i>function-value</i> <i>number</i>
Tree	<i>function-value</i>
Description	This command configures the function value of the local SRv6 microbinding SID. If this command is not configured, the system automatically selects a value within the range of local and dynamic SID function values. The value must be within the range of local and static SID function values, and must be available.
Range	1 to 65535
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**locator-name** *reference*

Synopsis	Name of the locator of the local SRv6 microbinding SID
Context	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>sr-policies</i> <i>static-policy</i> <i>string</i> <i>segment-routing-v6</i> <i>binding-sid</i> <i>number</i> <i>micro-segment-locator</i> <i>locator-name</i> <i>reference</i>
Tree	<i>locator-name</i>
Description	This command configures the name of the locator of the local SRv6 microbinding SID. The locator must be a micro-segment locator and must exist on the system.
Reference	<b>configure</b> <i>router</i> <i>string</i> <i>segment-routing</i> <i>segment-routing-v6</i> <i>micro-segment-locator</i> <i>string</i>
Notes	This element is mandatory.

Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **return-path-bfd-sid** *string*

Synopsis	BFD controlled return path for SRv6
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing sr-policies static-policy</a> <i>string</i> <a href="#">segment-routing-v6 return-path-bfd-sid</a> <i>string</i>
Tree	<a href="#">return-path-bfd-sid</a>
Description	This command configures the Seamless Bidirectional Forwarding Detection (S-BFD) session to echo mode and pushes an additional SRv6 SID in the SRH on S-BFD packets only.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **type** *keyword*

Synopsis	Static policy type
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">segment-routing sr-policies static-policy</a> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the type of static policy. Only commands relevant to the type of the static policy can be executed. The type of the static policy can only be changed to a new type if there is no configuration present for the old type, or if all configuration for the old type is deleted.
Options	sr-mpls, srv6
Default	sr-mpls
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **selective-fib** *boolean*

Synopsis	Enable selective FIB
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">selective-fib</a> <i>boolean</i>
Tree	<a href="#">selective-fib</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## sfm-overload

Synopsis	Enable the <b>sfm-overload</b> context
Context	<b>configure</b> <i>router string sfm-overload</i>
Tree	<a href="#">sfm-overload</a>
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

## holdoff-time *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	<b>configure</b> <i>router string sfm-overload holdoff-time number</i>
Tree	<a href="#">holdoff-time</a>
Range	1 to 600
Units	seconds
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

## sgt-qos

Synopsis	Enter the <b>sgt-qos</b> context
Context	<b>configure</b> <i>router string sgt-qos</i>
Tree	<a href="#">sgt-qos</a>
Introduced	16.0.R1
Platforms	All

## dot1p

Synopsis	Enter the <b>dot1p</b> context
Context	<b>configure</b> <i>router string sgt-qos dot1p</i>
Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

**application** [[dot1p-app-name](#)] *keyword*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure router</b> <i>string</i> <a href="#">sgt-qos dot1p application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Introduced	16.0.R1
Platforms	All

**[dot1p-app-name]** *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	<b>configure router</b> <i>string</i> <a href="#">sgt-qos dot1p application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Options	arp, isis, pppoe
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**dot1p** (*keyword | number*)

Synopsis	Dot1p value to the traffic generated by this application
Context	<b>configure router</b> <i>string</i> <a href="#">sgt-qos dot1p application</a> <i>keyword</i> <a href="#">dot1p</a> ( <i>keyword   number</i> )
Tree	<a href="#">dot1p</a>
Range	0 to 7
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

**dscp**

Synopsis	Enter the <b>dscp</b> context
Context	<b>configure router</b> <i>string</i> <a href="#">sgt-qos dscp</a>
Tree	<a href="#">dscp</a>
Introduced	16.0.R1
Platforms	All

**application** [[dscp-app-name](#)] *keyword*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure router</b> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Introduced	16.0.R1
Platforms	All

**[dscp-app-name]** *keyword*

Synopsis	DSCP application identifier on the NOKIA SR OS router that generates control traffic over IP
Context	<b>configure router</b> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">application</a> <i>keyword</i>
Tree	<a href="#">application</a>
Options	bgp, cflowd, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, igmp-reporter, gtp, sflow, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, mpls-udp-return, pfc, ibcp, bfd
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**dscp** (*keyword* | *number*)

Synopsis	DSCP value to the traffic generated by this application
Context	<b>configure router</b> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">application</a> <i>keyword</i> <a href="#">dscp</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">dscp</a>
Range	0 to 63
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	All

**dscp-map** [[dscp-name](#)] *keyword*

Synopsis	Enter the <b>dscp-map</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">dscp-map</a> <i>keyword</i>
Tree	<a href="#">dscp-map</a>
Introduced	16.0.R2
Platforms	All

**[dscp-name]** *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">dscp-map</a> <i>keyword</i>
Tree	<a href="#">dscp-map</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**fc** *keyword*

Synopsis	Value for the forwarding class for this mapping
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">dscp-map</a> <i>keyword</i> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R2
Platforms	All

**static-routes**

Synopsis	Enter the <b>static-routes</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a>
Tree	<a href="#">static-routes</a>
Introduced	16.0.R1

Platforms All

## hold-down

Synopsis Enable the **hold-down** context

Context **configure** *router string static-routes hold-down*

Tree [hold-down](#)

Description Commands in this context enable the hold-down time feature globally for static routes in the system.

The static route hold-down time is a mechanism to protect from rapid, fluctuating state changes of static routes resulting from issues with reachability because of link flap.

The commands in this context apply to all static routes in the VPRN and the base router instance in which this hold-down time is configured in.

Introduced 16.0.R1

Platforms All

## initial number

Synopsis Value for the initial hold-down time

Context **configure** *router string static-routes hold-down initial number*

Tree [initial](#)

Description This command specifies the initial value of the hold-down time globally for static routes in the system.

When a static route is ready to become active, it remains inactive for the hold-down time before activating the static-route. If, during this hold-down period, the static route becomes inactive again because of factors such as interface failure, the hold-down timer is reset, effectively postponing the activation of the route until the next opportunity.

Range 1 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

## max-value number

Synopsis Maximum value of the hold-down time

Context **configure** *router string static-routes hold-down max-value number*

Tree [max-value](#)

Description	This command specifies the maximum value of the hold-down time globally for static routes in the system.
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Multiplier of the previous hold-down time
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>hold-down</b> <b>multiplier</b> <i>number</i>
Tree	<b>multiplier</b>
Description	This command specifies the multiplier value by which the previous hold-down time is multiplied to calculate the new one. This value applies globally for static routes in the system.
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **route** [**ip-prefix**] (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*

Synopsis	Enter the <b>route</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i>
Tree	<b>route</b>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length for the static routes
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i>
Tree	<b>route</b>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **route-type** *keyword*

Synopsis Static route type for unicast or multicast RPF

Context **configure** *router string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword*

Tree [route](#)

Options unicast, multicast

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **backup-tag** *number*

Synopsis Static route backup tag

Context **configure** *router string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword backup-tag number*

Tree [backup-tag](#)

Description This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route.

The tag specified at this level of the static route causes the tag values that are configured under the **next-hop**, **black-hole**, and **indirect** contexts of the static route to be ignored.

Range 1 to 4294967295

Introduced 21.2.R1

Platforms All

### **blackhole**

Synopsis Enable the **blackhole** context

Context **configure** *router string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword blackhole*

Tree [blackhole](#)

Introduced 16.0.R1

Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dynamic-bgp** *boolean*

Synopsis	Derive static route next hop from BGP next hop value
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>dynamic-bgp</b> <i>boolean</i>
Tree	<b>dynamic-bgp</b>



Default	false
Introduced	16.0.R1
Platforms	All

### **generate-icmp** *boolean*

Synopsis	Send ICMP unreachable messages when received packets match a static route with black-hole next-hop
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>generate-icmp</b> <i>boolean</i>
Tree	<b>generate-icmp</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **metric** *number*

Synopsis	Static route metric
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

**prefix-list**

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>prefix-list</b>
Tree	<b>prefix-list</b>
Introduced	16.0.R1
Platforms	All

**flag** *keyword*

Synopsis	Static route match condition from prefix list
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>prefix-list</b> <b>flag</b> <i>keyword</i>
Tree	<b>flag</b>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

**name** *reference*

Synopsis	Prefix list name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>prefix-list</b> <i>name reference</i>
Tree	<b>name</b>
Reference	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**tag** *number*

Synopsis	Static route tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>blackhole</b> <b>tag</b> <i>number</i>
Tree	<b>tag</b>

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **indirect** [**ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>indirect</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>indirect</b>
Introduced	16.0.R1
Platforms	All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>indirect</b>
Description	This command specifies the next-hop IP address used to reach the destination. The specified IP address can be either on the network side or the access side and is typically at least one hop away from the node.
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the static route operation

Context **configure router string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type keyword**  
**indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*) **admin-state keyword**

Tree **admin-state**

Options enable, disable

Introduced 16.0.R1

Platforms All

### **community** *string*

Synopsis Community ID associated with the static route

Context **configure router string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type keyword**  
**indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*) **community string**

Tree **community**

String Length 1 to 72

Introduced 16.0.R1

Platforms All

### **cpe-check** [**address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Enter the **cpe-check** list instance

Context **configure router string static-routes route** (*ipv4-prefix | ipv6-prefix*) **route-type keyword**  
**indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*) **cpe-check** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree **cpe-check**

Description When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.

This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.

**Note:** A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the

duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances	1
Introduced	16.0.R1
Platforms	All

### [**address**] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i>

Tree	<a href="#">interval</a>
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">static-routes</a> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">cpe-check</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">log</a> <i>boolean</i>
Tree	<a href="#">log</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">static-routes</a> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">cpe-check</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">padding-size</a> <i>number</i>
Tree	<a href="#">padding-size</a>
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <a href="#">static-routes</a> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>

String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **destination-class** *number*

Synopsis	Destination class for this static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>destination-class</b> <i>number</i>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **metric** *number*

Synopsis	Static route metric
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

**prefix-list**

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>prefix-list</b>
Tree	<b>prefix-list</b>
Introduced	16.0.R1
Platforms	All

**flag keyword**

Synopsis	Static route match condition from prefix list
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>prefix-list flag</b> <i>keyword</i>
Tree	<b>flag</b>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

**name reference**

Synopsis	Prefix list name
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>prefix-list name</b> <i>reference</i>
Tree	<b>name</b>
Reference	<b>configure policy-options prefix-list</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>qos</b>
Tree	<b>qos</b>



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **forwarding-class** *keyword*

Synopsis	Forwarding class associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>qos</b> <b>forwarding-class</b> <i>keyword</i>
Tree	<b>forwarding-class</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *keyword*

Synopsis	Static route priority
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>qos</b> <b>priority</b> <i>keyword</i>
Tree	<b>priority</b>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source-class** *number*

Synopsis	Source class for the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-class</b> <i>number</i>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **tag** *number*

Synopsis	Static route tag
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Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## tunnel-next-hop

Synopsis	Enter the <b>tunnel-next-hop</b> context
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b>
Tree	<b>tunnel-next-hop</b>
Introduced	16.0.R1
Platforms	All

## disallow-igp *boolean*

Synopsis	Do not resolve indirect static routes using IGP next-hops in RTM if no tunnel next-hops found in TTM
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>disallow-igp</b> <i>boolean</i>
Tree	<b>disallow-igp</b>
Default	false
Introduced	16.0.R1
Platforms	All

## flex-algo *number*

Synopsis	Flexible Algorithm ID
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>flex-algo</b> <i>number</i>
Tree	<b>flex-algo</b>
Range	128 to 255
Introduced	20.7.R1

Platforms All

### **resolution** *keyword*

Synopsis Tunnel next hop resolution to resolve indirect static route

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **tunnel-next-hop** **resolution** *keyword*

Tree **resolution**

Options none, filter, any

Default none

Introduced 16.0.R1

Platforms All

### **resolution-filter**

Synopsis Enter the **resolution-filter** context

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **tunnel-next-hop** **resolution-filter**

Tree **resolution-filter**

Introduced 16.0.R1

Platforms All

### **ldp** *boolean*

Synopsis Use LDP Route Forwarding Equivalence Class (FEC) tunneling for next-hop resolution

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **tunnel-next-hop** **resolution-filter** **ldp** *boolean*

Tree **ldp**

Default false

Introduced 16.0.R1

Platforms All

### **mpls-fwd-policy** *boolean*

Synopsis Use MPLS forwarding policy for tunnel-next-hop

Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>mpls-fwd-policy</b> <i>boolean</i>
Tree	<b>mpls-fwd-policy</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **rib-api** *boolean*

Synopsis	Set RIB API type for use with tunnel next-hop
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>rib-api</b> <i>boolean</i>
Tree	<b>rib-api</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **rsvp-te**

Synopsis	Enable the <b>rsvp-te</b> context
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>rsvp-te</b>
Tree	<b>rsvp-te</b>
Introduced	16.0.R1
Platforms	All

### **lsp** [*lsp-name*] *string*

Synopsis	Add a list entry for <b>lsp</b>
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop</b> <b>resolution-filter</b> <b>rsvp-te</b> <b>lsp</b> <i>string</i>
Tree	<b>lsp</b>
Introduced	16.0.R1

Platforms All

### [lsp-name] *string*

Synopsis Labeled Switch Path name

Context **configure router** *string* [static-routes route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type keyword](#) [indirect](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [tunnel-next-hop resolution-filter rsvp-te lsp](#) *string*

Tree [lsp](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### sr-isis *boolean*

Synopsis Use the SR ISIS tunneling mechanism to resolve next hop for the static route

Context **configure router** *string* [static-routes route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type keyword](#) [indirect](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [tunnel-next-hop resolution-filter sr-isis](#) *boolean*

Tree [sr-isis](#)

Default false

Introduced 16.0.R1

Platforms All

### sr-ospf *boolean*

Synopsis Use SR OSPF tunneling for next-hop resolution

Context **configure router** *string* [static-routes route](#) (*ipv4-prefix* | *ipv6-prefix*) [route-type keyword](#) [indirect](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [tunnel-next-hop resolution-filter sr-ospf](#) *boolean*

Tree [sr-ospf](#)

Default false

Introduced 16.0.R1

Platforms All

**sr-ospf3 boolean**

Synopsis	Use SR OSPFv3 tunneling mechanism to resolve next-hop
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-ospf3 boolean</b>
Tree	<b>sr-ospf3</b>
Default	false
Introduced	16.0.R6
Platforms	All

**sr-te**

Synopsis	Enable the <b>sr-te</b> context
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-te</b>
Tree	<b>sr-te</b>
Introduced	16.0.R1
Platforms	All

**lsp [*lsp-name*] string**

Synopsis	Add a list entry for <b>lsp</b>
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-te lsp string</b>
Tree	<b>lsp</b>
Introduced	16.0.R1
Platforms	All

**[*lsp-name*] string**

Synopsis	Labeled Switch Path name
Context	<b>configure router string static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tunnel-next-hop resolution-filter sr-te lsp string</b>
Tree	<b>lsp</b>

String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	Router interface name
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**community string**

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

**cpe-check [address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	Enter the <b>cpe-check</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[address] (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**drop-count number**

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>



Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <i>boolean</i>
Tree	<b>log</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i>
Tree	<b>padding-size</b>
Range	0 to 16384
Units	bytes

Default	56
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **destination-class** *number*

Synopsis	Destination class for this static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>destination-class</b> <i>number</i>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **load-balancing-weight** *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>load-balancing-weight</b> <i>number</i>
Tree	<b>load-balancing-weight</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **metric** *number*

Synopsis	Static route metric
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

### **prefix-list**

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>prefix-list</b>
Tree	<b>prefix-list</b>
Introduced	16.0.R1
Platforms	All

### **flag** *keyword*

Synopsis	Static route match condition from prefix list
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>prefix-list</b> <b>flag</b> <i>keyword</i>
Tree	<b>flag</b>

Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

### **name** *reference*

Synopsis	Prefix list name
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>prefix-list</b> <b>name</b> <i>reference</i>
Tree	<b>name</b>
Reference	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **forwarding-class** *keyword*

Synopsis	Forwarding class associated with the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>qos</b> <b>forwarding-class</b> <i>keyword</i>
Tree	<b>forwarding-class</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** *keyword*

Synopsis	Static route priority
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>qos</b> <b>priority</b> <i>keyword</i>
Tree	<b>priority</b>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source-class** *number*

Synopsis	Source class for the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>source-class</b> <i>number</i>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**tag** *number*

Synopsis	Static route tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>interface</b> <i>string</i> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**ipsec-tunnel** [**ipsec-tunnel-name**] *string*

Synopsis	Enter the <b>ipsec-tunnel</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i>
Tree	<b>ipsec-tunnel</b>
Introduced	22.7.R1

Platforms VSR

### **[ipsec-tunnel-name]** *string*

Synopsis IPsec tunnel name.

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*  
**ipsec-tunnel** *string*

Tree **ipsec-tunnel**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 22.7.R1

Platforms VSR

### **admin-state** *keyword*

Synopsis Administrative state of the static route operation

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*  
**ipsec-tunnel** *string* **admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Introduced 22.7.R1

Platforms VSR

### **community** *string*

Synopsis Community ID associated with the static route

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword*  
**ipsec-tunnel** *string* **community** *string*

Tree **community**

String Length 1 to 72

Introduced 22.7.R1

Platforms VSR

### **description** *string*

Synopsis Text description

Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

**metric** *number*

Synopsis	Static route metric
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	22.7.R1
Platforms	VSR

**preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	22.7.R1
Platforms	VSR

**tag** *number*

Synopsis	Static route tag
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295

Introduced 22.7.R1  
 Platforms VSR

### **next-hop** [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis Enter the **next-hop** list instance  
 Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
 Tree [next-hop](#)  
 Introduced 16.0.R1  
 Platforms All

### **[ip-address]** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis IP address of the directly-connected next hop  
 Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)  
 Tree [next-hop](#)  
 Description This command specifies the IP address of the directly-connected next hop. The IP address can either be on the network side or the access side on the node. The address must be associated with a network directly connected to a network configured on the node.  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the static route operation  
 Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Introduced 16.0.R1  
 Platforms All



**backup-next-hop**

Synopsis	Enter the <b>backup-next-hop</b> context
Context	<b>configure</b> <i>router string</i> <b>static-routes</b> <i>route (ipv4-prefix   ipv6-prefix)</i> <b>route-type</b> <i>keyword</i> <b>next-hop</b> <i>(ipv4-address-with-zone   ipv6-address-with-zone)</i> <b>backup-next-hop</b>
Tree	<b>backup-next-hop</b>
Description	Commands in this context configure static route entry fast failover.
Introduced	21.2.R1
Platforms	All

**address** *(ipv4-address-no-zone | ipv6-address-no-zone)*

Synopsis	Backup next-hop IP address
Context	<b>configure</b> <i>router string</i> <b>static-routes</b> <i>route (ipv4-prefix   ipv6-prefix)</i> <b>route-type</b> <i>keyword</i> <b>next-hop</b> <i>(ipv4-address-with-zone   ipv6-address-with-zone)</i> <b>backup-next-hop</b> <b>address</b> <i>(ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<b>address</b>
Description	<p>This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails.</p> <p>The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path.</p> <p>One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP.</p> <p>The configured IP address can be either on the network or the access side.</p>
Introduced	21.2.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
Context	<b>configure</b> <i>router string</i> <b>static-routes</b> <i>route (ipv4-prefix   ipv6-prefix)</i> <b>route-type</b> <i>keyword</i> <b>next-hop</b> <i>(ipv4-address-with-zone   ipv6-address-with-zone)</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Default	false
Introduced	16.0.R1

Platforms All

### **community** *string*

Synopsis Community ID associated with the static route

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **community** *string*

Tree **community**

String Length 1 to 72

Introduced 16.0.R1

Platforms All

### **cpe-check** [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **cpe-check** list instance

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **cpe-check** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **cpe-check**

Description When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.

This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.

**Note:** A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of **cpe-ping**, the node paces these minor events.

Max. Instances 1

Introduced 16.0.R1

Platforms All

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <i>boolean</i>
Tree	<b>log</b>
Default	false
Introduced	16.0.R1
Platforms	All

**padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i>
Tree	<b>padding-size</b>
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**destination-class** *number*

Synopsis	Destination class for this static route
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Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>destination-class</b> <i>number</i>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **ldp-sync** *boolean*

Synopsis	Use LDP synchronization feature for a static route
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ldp-sync</b> <i>boolean</i>
Tree	<b>ldp-sync</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **load-balancing-weight** *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>load-balancing-weight</b> <i>number</i>
Tree	<b>load-balancing-weight</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **metric** *number*

Synopsis	Static route metric
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1

Platforms All

### **preference** *number*

Synopsis Priority of this static route over the routes from different sources

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **preference** *number*

Tree [preference](#)

Range 1 to 255

Default 5

Introduced 16.0.R1

Platforms All

### **prefix-list**

Synopsis Enter the **prefix-list** context

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **prefix-list**

Tree [prefix-list](#)

Introduced 16.0.R1

Platforms All

### **flag** *keyword*

Synopsis Static route match condition from prefix list

Context **configure** **router** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** *keyword* **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **prefix-list** **flag** *keyword*

Tree [flag](#)

Options any, all, none

Default any

Introduced 16.0.R1

Platforms All

### **name** *reference*

Synopsis Prefix list name

Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-list name</b> <i>reference</i>
Tree	<b>name</b>
Reference	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## forwarding-class *keyword*

Synopsis	Forwarding class associated with the static route
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>qos forwarding-class</b> <i>keyword</i>
Tree	<b>forwarding-class</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## priority *keyword*

Synopsis	Static route priority
Context	<b>configure router</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>qos priority</b> <i>keyword</i>
Tree	<b>priority</b>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source-class** *number*

Synopsis	Source class for the static route
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>source-class</b> <i>number</i>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**tag** *number*

Synopsis	Static route tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**validate-next-hop** *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>validate-next-hop</b> <i>boolean</i>
Tree	<b>validate-next-hop</b>
Default	false
Introduced	16.0.R1
Platforms	All

**tag** *number*

Synopsis	Static route tag
Context	<b>configure</b> <b>router</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>tag</b> <i>number</i>
Tree	<b>tag</b>



Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## subscriber-mgmt

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">subscriber-mgmt</a>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcpv4

Synopsis	Enter the <b>dhcpv4</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dhcpv4</a>
Tree	<a href="#">dhcpv4</a>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## routed-subnet-transparent-forward *boolean*

Synopsis	Transparently forward DHCPv4 from CPE LAN over IPoE
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">subscriber-mgmt</a> <a href="#">dhcpv4</a> <a href="#">routed-subnet-transparent-forward</a> <i>boolean</i>
Tree	<a href="#">routed-subnet-transparent-forward</a>
Description	<p>When configured to <b>true</b>, the router transparently forwards DHCPv4 packets received on a subscriber interface with a source IP in a routed subnet that is associated with a routed IPoE session or host.</p> <p>Supported routed subnets are:</p> <ul style="list-style-type: none"> <li>• RADIUS and NASREQ framed routes</li> <li>• routes learned via an ESM dynamic BGP peer</li> <li>• managed routes that are associated with a static IPv4 host</li> </ul> <p>When configured to <b>false</b>, the system disables transparent forwarding of DHCPv4 packets.</p>
Default	false

Introduced 23.3.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **triggered-policy** *boolean*

Synopsis Trigger route policy re-evaluation  
Context **configure** *router string triggered-policy boolean*  
Tree [triggered-policy](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ttl-propagate**

Synopsis Enter the **ttl-propagate** context  
Context **configure** *router string ttl-propagate*  
Tree [ttl-propagate](#)  
Introduced 16.0.R1  
Platforms All

### **label-route-local** *keyword*

Synopsis TTL propagation from IP header into label stack for local packets  
Context **configure** *router string ttl-propagate label-route-local keyword*  
Tree [label-route-local](#)  
Options none, all  
Default none  
Introduced 16.0.R1  
Platforms All

### **label-route-transit** *keyword*

Synopsis TTL propagation from IP header into label stack for transit packets  
Context **configure** *router string ttl-propagate label-route-transit keyword*  
Tree [label-route-transit](#)

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Options	none, all
Default	none
Introduced	16.0.R1
Platforms	All

### **lsr-label-route** *keyword*

Synopsis	TTL propagation from IP header into label stack
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tli-propagate</b> <b>lsr-label-route</b> <i>keyword</i>
Tree	<b>lsr-label-route</b>
Options	none, all
Default	none
Introduced	16.0.R1
Platforms	All

### **vprn-local** *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN local packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tli-propagate</b> <b>vprn-local</b> <i>keyword</i>
Tree	<b>vprn-local</b>
Options	none, all, vc-only
Default	vc-only
Introduced	16.0.R1
Platforms	All

### **vprn-transit** *keyword*

Synopsis	TTL propagation from IP header into label stack for VPRN transit packets
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tli-propagate</b> <b>vprn-transit</b> <i>keyword</i>
Tree	<b>vprn-transit</b>
Options	none, all, vc-only
Default	vc-only
Introduced	16.0.R1
Platforms	All

**tunnel-interface**

Synopsis	Enter the <b>tunnel-interface</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a>
Tree	<a href="#">tunnel-interface</a>
Introduced	16.0.R1
Platforms	All

**ldp-p2mp-leaf** [[p2mp-id](#)] *number* [sender-address](#) *string*

Synopsis	Enter the <b>ldp-p2mp-leaf</b> list instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-leaf</a> <i>number</i> <a href="#">sender-address</a> <i>string</i>
Tree	<a href="#">ldp-p2mp-leaf</a>
Introduced	16.0.R1
Platforms	All

**[p2mp-id]** *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-leaf</a> <i>number</i> <a href="#">sender-address</a> <i>string</i>
Tree	<a href="#">ldp-p2mp-leaf</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sender-address** *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">tunnel-interface</a> <a href="#">ldp-p2mp-leaf</a> <i>number</i> <a href="#">sender-address</a> <i>string</i>
Tree	<a href="#">ldp-p2mp-leaf</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-leaf</b> <i>number</i> <b>sender-address</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**ldp-p2mp-root** [**p2mp-id**] *number* **sender-address** *string*

Synopsis	Enter the <b>ldp-p2mp-root</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>number</i> <b>sender-address</b> <i>string</i>
Tree	<b>ldp-p2mp-root</b>
Introduced	16.0.R1
Platforms	All

**[p2mp-id]** *number*

Synopsis	Identifier used for signaling MLDP P2MP LSP
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>number</i> <b>sender-address</b> <i>string</i>
Tree	<b>ldp-p2mp-root</b>
Range	1 to 8192
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**sender-address** *string*

Synopsis	Address of an LDP sender for the P2MP RSVP tunnel interface instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>ldp-p2mp-root</b> <i>number</i> <b>sender-address</b> <i>string</i>
Tree	<b>ldp-p2mp-root</b>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** *router string tunnel-interface ldp-p2mp-root number sender-address string description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **rsvp-p2mp-leaf** [*lsp-name*] *string sender-address string*

Synopsis Enter the **rsvp-p2mp-leaf** list instance

Context **configure** *router string tunnel-interface rsvp-p2mp-leaf string sender-address string*

Tree [rsvp-p2mp-leaf](#)

Introduced 16.0.R1

Platforms All

### **[lsp-name]** *string*

Synopsis LSP name of the P2MP RSVP tunnel interface

Context **configure** *router string tunnel-interface rsvp-p2mp-leaf string sender-address string*

Tree [rsvp-p2mp-leaf](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **sender-address** *string*

Synopsis Address of a sender for the P2MP RSVP tunnel interface instance

Context **configure** *router string tunnel-interface rsvp-p2mp-leaf string sender-address string*

Tree [rsvp-p2mp-leaf](#)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>rsvp-p2mp-leaf</b> <i>string</i> <b>sender-address</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**rsvp-p2mp-root** [**lsp-name**] *string*

Synopsis	Enter the <b>rsvp-p2mp-root</b> list instance
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>rsvp-p2mp-root</b> <i>string</i>
Tree	<b>rsvp-p2mp-root</b>
Introduced	16.0.R1
Platforms	All

**[lsp-name]** *string*

Synopsis	LSP name of the P2MP RSVP tunnel interface
Context	<b>configure</b> <b>router</b> <i>string</i> <b>tunnel-interface</b> <b>rsvp-p2mp-root</b> <i>string</i>
Tree	<b>rsvp-p2mp-root</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
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Context	<b>configure</b> <i>router string tunnel-interface rsvp-p2mp-root string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## twamp-light

Synopsis	Enter the <b>twamp-light</b> context
Context	<b>configure</b> <i>router string twamp-light</i>
Tree	<a href="#">twamp-light</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## reflector

Synopsis	Enable the <b>reflector</b> context
Context	<b>configure</b> <i>router string twamp-light reflector</i>
Tree	<a href="#">reflector</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of TWAMP Light functionality
Context	<b>configure</b> <i>router string twamp-light reflector admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**allow-ipv6-udp-checksum-zero** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	<b>configure</b> <i>router string twamp-light reflector allow-ipv6-udp-checksum-zero boolean</i>
Tree	<a href="#">allow-ipv6-udp-checksum-zero</a>
Description	<p>When configured to <b>true</b>, this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior.</p> <p>When configured to <b>false</b>, IPv6 packets that arrive with a UDP checksum of zero are discarded.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>router string twamp-light reflector description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**prefix** [*ip-prefix*] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <i>router string twamp-light reflector prefix (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">prefix</a>
Max. Instances	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the TWAMP-Light reflector
Context	<b>configure</b> <b>router</b> <i>string twamp-light reflector prefix</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>prefix</b>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>router</b> <i>string twamp-light reflector prefix</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type** *keyword*

Synopsis	Processing behavior type for the reflector
Context	<b>configure</b> <b>router</b> <i>string twamp-light reflector type</i> <i>keyword</i>
Tree	<b>type</b>
Description	<p>This command configures the processing behavior of the TWAMP Light reflector. When the value is <b>twamp-light</b> the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is <b>stamp</b>, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to <b>stamp</b>. When the reflector is operating in <b>stamp</b> mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.</p>
Options	stamp, twamp-light
Default	twamp-light
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**udp-port** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs
Context	<b>configure</b> <i>router string twamp-light reflector udp-port number</i>
Tree	<a href="#">udp-port</a>
Range	862   64364 to 64373
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vrgw**

Synopsis	Enter the <b>vrgw</b> context
Context	<b>configure</b> <i>router string vrgw</i>
Tree	<a href="#">vrgw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lanext**

Synopsis	Enable the <b>lanext</b> context
Context	<b>configure</b> <i>router string vrgw lanext</i>
Tree	<a href="#">lanext</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of Home LAN Extension
Context	<b>configure</b> <i>router string vrgw lanext admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vxlan-port** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	UDP port to be used by local or remote VXLAN VTEP
Context	<b>configure</b> <i>router string vrgw lanext vxlan-port number</i>
Tree	<a href="#">vxlan-port</a>
Range	4789   8472
Default	4789
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vxlan-vtep-range**

Synopsis	Enter the <b>vxlan-vtep-range</b> context
Context	<b>configure</b> <i>router string vrgw lanext vxlan-vtep-range</i>
Tree	<a href="#">vxlan-vtep-range</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** (*ipv4-address-no-zone | ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the VXLAN VTEP range
Context	<b>configure</b> <i>router string vrgw lanext vxlan-vtep-range end (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">end</a>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start** (*ipv4-address-no-zone | ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the VXLAN VTEP range

Context **configure** *router string vrgw lanext vxlan-vtep-range start* (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree [start](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis WLAN-GW group used for Home LAN Extension

Context **configure** *router string vrgw lanext wlan-gw-group reference*

Tree [wlan-gw-group](#)

Reference **configure** *isa wlan-gw-group number*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **weighted-ecmp** *keyword*

Synopsis Weighted load-balancing capability for ECMP routes

Context **configure** *router string weighted-ecmp keyword*

Tree [weighted-ecmp](#)

Options false, true, strict

Default	false
Introduced	16.0.R1
Platforms	All

## wlan-gw

Synopsis	Enable the <b>wlan-gw</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw</a>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## distributed-subscriber-mgmt

Synopsis	Enter the <b>distributed-subscriber-mgmt</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">distributed-subscriber-mgmt</a>
Tree	<a href="#">distributed-subscriber-mgmt</a>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6-tcp-mss-adjust *number*

Synopsis	TCP-MSS adjustment value in upstream direction for DSM
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">distributed-subscriber-mgmt</a> <a href="#">ipv6-tcp-mss-adjust</a> <i>number</i>
Tree	<a href="#">ipv6-tcp-mss-adjust</a>
Range	160 to 10240
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mobility-triggered-accounting

Synopsis	Enter the <b>mobility-triggered-accounting</b> context
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">mobility-triggered-accounting</a>
Tree	<a href="#">mobility-triggered-accounting</a>
Introduced	16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of mobility triggered accounting  
Context **configure** **router** *string* **wlan-gw** **mobility-triggered-accounting** **admin-state** *keyword*  
Tree **admin-state**  
Options enable, disable  
Default disable  
Introduced 16.0.R4  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **hold-down** *number*

Synopsis Hold additional mobility-triggered update until this timer expires  
Context **configure** **router** *string* **wlan-gw** **mobility-triggered-accounting** **hold-down** *number*  
Tree **hold-down**  
Range 60 to 86400  
Units seconds  
Introduced 16.0.R4  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **include-counters** *boolean*

Synopsis Include counters in interim updates  
Context **configure** **router** *string* **wlan-gw** **mobility-triggered-accounting** **include-counters** *boolean*  
Tree **include-counters**  
Default false  
Introduced 16.0.R4  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect**

Synopsis Enter the **xconnect** context  
Context **configure** **router** *string* **wlan-gw** **xconnect**

Tree	<a href="#">xconnect</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the WLAN-GW cross-connect
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">xconnect</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-source-ip** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address and prefix for the tunnel source
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">xconnect</a> <b>tunnel-source-ip</b> <i>string</i>
Tree	<a href="#">tunnel-source-ip</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN-GW Group
Context	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">xconnect</a> <b>wlan-gw-group</b> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>
Introduced	16.0.R1



Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## wpp

Synopsis Enable the **wpp** context  
 Context **configure router string wpp**  
 Tree **wpp**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of WPP  
 Context **configure router string wpp admin-state keyword**  
 Tree **admin-state**  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## portal [*name*] *string*

Synopsis Enter the **portal** list instance  
 Context **configure router string wpp portal string**  
 Tree **portal**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [*name*] *string*

Synopsis Web portal name  
 Context **configure router string wpp portal string**  
 Tree **portal**  
 String Length 1 to 32  
 Notes This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ack-auth-retry-count** *number*

Synopsis	Number of retransmissions of an ACK_OUT message
Context	<b>configure</b> <b>router</b> <i>string</i> <b>wpp portal</b> <i>string</i> <b>ack-auth-retry-count</b> <i>number</i>
Tree	<a href="#">ack-auth-retry-count</a>
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WPP portal address
Context	<b>configure</b> <b>router</b> <i>string</i> <b>wpp portal</b> <i>string</i> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the WPP portal server
Context	<b>configure</b> <b>router</b> <i>string</i> <b>wpp portal</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ntf-logout-retry-count** *number*

Synopsis	Number of retransmissions of an NTF_LOGOUT message
Context	<b>configure</b> <i>router string wpp portal string ntf-logout-retry-count number</i>
Tree	<a href="#">ntf-logout-retry-count</a>
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**port-format** *keyword*

Synopsis	Format of the port in the ACK_INO message
Context	<b>configure</b> <i>router string wpp portal string port-format keyword</i>
Tree	<a href="#">port-format</a>
Options	standard, vendor-specific
Default	standard
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retry-interval** *number*

Synopsis	Time between two consecutive retransmissions
Context	<b>configure</b> <i>router string wpp portal string retry-interval number</i>
Tree	<a href="#">retry-interval</a>
Range	10 to 2000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**secret** *string*

Synopsis	Message authentication between portal and BRAS by applying the secret used by WPPv2
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Context	<b>configure</b> <i>router string wpp portal string secret string</i>
Tree	<b>secret</b>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **version number**

Synopsis	Protocol version to be expected by the WPP portal
Context	<b>configure</b> <i>router string wpp portal string version number</i>
Tree	<b>version</b>
Range	1   2
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## 3.40 routing-options commands

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  - route-admin-tag-policy string
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  - apply-groups-exclude reference
  - exclude reference
  - include reference
- apply-groups reference
- apply-groups-exclude reference
- flexible-algorithm-definitions
  - apply-groups reference
  - apply-groups-exclude reference
  - flex-algo string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - exclude
    - admin-group reference
  - flags-tlv boolean
  - include-all
    - admin-group reference
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  - metric-type keyword
  - priority number
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  - admin-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - value number
  - apply-groups reference
  - apply-groups-exclude reference
  - srlg-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - penalty-weight number
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- ip-fast-reroute boolean
- policy-accounting
  - apply-groups reference
  - apply-groups-exclude reference
  - policy-acct-template string
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-class number
  - apply-groups reference
  - apply-groups-exclude reference
  - policer reference
  - policer number
  - apply-groups reference
  - apply-groups-exclude reference
  - max-burst-size (number | keyword)
  - peak-rate (number | keyword)
  - source-class number
- route-next-hop-policy
  - apply-groups reference

```

---

configure routing-options route-next-hop-policy apply-groups-exclude

- **apply-groups-exclude** *reference*
- **template** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **exclude-group** *reference*
  - **include-group** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **preference** *number*
- **nh-type** *keyword*
- **protection-type** *keyword*
- **srlg** *boolean*

### 3.40.1 routing-options command descriptions

#### routing-options

Synopsis	Enter the <b>routing-options</b> context
Context	<b>configure</b> <a href="#">routing-options</a>
Tree	<a href="#">routing-options</a>
Introduced	16.0.R1
Platforms	All

#### admin-tags

Synopsis	Enter the <b>admin-tags</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a>
Tree	<a href="#">admin-tags</a>
Introduced	16.0.R1
Platforms	All

#### admin-tag [[tag](#)] *string*

Synopsis	Add a list entry for <b>admin-tag</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Tree	<a href="#">admin-tag</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	All

#### [[tag](#)] *string*

Synopsis	Administrative tag value
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Tree	<a href="#">admin-tag</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1  
 Platforms All

### **route-admin-tag-policy** [[policy-name](#)] *string*

Synopsis Enter the **route-admin-tag-policy** list instance  
 Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*  
 Tree [route-admin-tag-policy](#)  
 Max. Instances 2048  
 Introduced 16.0.R1  
 Platforms All

### **[policy-name]** *string*

Synopsis Name of the route admin tag policy  
 Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string*  
 Tree [route-admin-tag-policy](#)  
 String Length 1 to 64  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **exclude** [[tag](#)] *reference*

Synopsis Add a list entry for **exclude**  
 Context **configure** [routing-options](#) [admin-tags](#) [route-admin-tag-policy](#) *string* [exclude](#) *reference*  
 Tree [exclude](#)  
 Max. Instances 8  
 Introduced 16.0.R1  
 Platforms All

### **[tag]** *reference*

Synopsis Administrative tag value



Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">route-admin-tag-policy</a> <i>string</i> <a href="#">exclude</a> <a href="#">reference</a>
Tree	<a href="#">exclude</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **include** [[tag](#)] [reference](#)

Synopsis	Add a list entry for <b>include</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">route-admin-tag-policy</a> <i>string</i> <a href="#">include</a> <a href="#">reference</a>
Tree	<a href="#">include</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[tag]** [reference](#)

Synopsis	Administrative tag value
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">route-admin-tag-policy</a> <i>string</i> <a href="#">include</a> <a href="#">reference</a>
Tree	<a href="#">include</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">admin-tags</a> <a href="#">admin-tag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **flexible-algorithm-definitions**

Synopsis	Enter the <b>flexible-algorithm-definitions</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a>
Tree	<a href="#">flexible-algorithm-definitions</a>
Description	Commands in this context enable locally-configured algorithm definitions and configure administrative groups.
Introduced	20.7.R1

Platforms All

### **flex-algo** [[flex-algo-name](#)] *string*

Synopsis Enter the **flex-algo** list instance

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string*

Tree [flex-algo](#)

Description Commands in this context configure the definition context for a Flexible Algorithm Definition (FAD).

Max. Instances 256

Introduced 20.7.R1

Platforms All

### **[flex-algo-name]** *string*

Synopsis Flexible Algorithm Definition (FAD) name

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string*

Tree [flex-algo](#)

Description This command specifies the name of the flexible algorithm definition that is used as a reference anchor for the configuration.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 20.7.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the FAD

Context **configure** [routing-options](#) [flexible-algorithm-definitions](#) [flex-algo](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 20.7.R1

Platforms All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.7.R1
Platforms	All

**exclude****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>exclude</b>
Tree	<a href="#">exclude</a>
Description	<p>Commands in this context define administrative groups that are used to exclude links from the Flexible Algorithm topology graph.</p> <p>Administrative groups, also known as link colors, are attributes associated with a link. The exclude rule that is part of the FAD specifies that links with the named administrative groups set are to be excluded from the topology graph.</p>
Introduced	20.7.R1
Platforms	All

**admin-group** [[group-name](#)] *reference*

Synopsis	Add a list entry for <b>admin-group</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>exclude</b> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Introduced	20.7.R1
Platforms	All

**[group-name] reference**

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">exclude</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

**flags-tlv boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise the FAD Flags TLV
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">flags-tlv</a> <i>boolean</i>
Tree	<a href="#">flags-tlv</a>
Description	<p>When configured to <b>true</b>, the router advertises the FAD Flags TLV within the FAD. The M-flag within the TLV is set to 1, specifying the use of a Flex-Algorithm specific prefix metric. A router receiving the TLV modifies the constrained SPF (cSPF) based on the M-flag status.</p> <p>When configured to <b>false</b>, the FAD Flags TLV is not included with the FAD advertisement.</p>
Default	true
Introduced	20.10.R1
Platforms	All

**include-all****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>include-all</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-all</a>
Tree	<a href="#">include-all</a>

Description	Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph.  Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that all named administrative groups must be present in a link to be included in the topology graph.
Introduced	20.7.R1
Platforms	All

### **admin-group** [[group-name](#)] *reference*

Synopsis	Add a list entry for <b>admin-group</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-all</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Introduced	20.7.R1
Platforms	All

### **[group-name]** *reference*

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-all</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

### **include-any**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>include-any</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-any</a>
Tree	<a href="#">include-any</a>

Description	Commands in this context define administrative groups that are used to include links from the Flexible Algorithm topology graph.  Administrative groups, also known as link colors, are attributes associated with a link. The include-all rule that is part of the FAD specifies that any link with the named administrative groups is included in the topology graph.
Introduced	20.7.R1
Platforms	All

### **admin-group** [[group-name](#)] *reference*

Synopsis	Add a list entry for <b>admin-group</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-any</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Introduced	20.7.R1
Platforms	All

### **[group-name]** *reference*

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">include-any</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	20.7.R1
Platforms	All

### **metric-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD metric type
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <a href="#">metric-type</a> <i>keyword</i>
Tree	<a href="#">metric-type</a>

Options	igp, delay, te-metric
Default	igp
Introduced	20.7.R1
Platforms	All

### priority *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FAD priority
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">flexible-algorithm-definitions</a> <a href="#">flex-algo</a> <i>string</i> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Description	This command configures the priority of the FAD. The priority is used as a tie-breaker when the router has received multiple FADs for the same flexible algorithm.
Range	0 to 255
Default	100
Introduced	20.7.R1
Platforms	All

### if-attribute

Synopsis	Enter the <b>if-attribute</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a>
Tree	<a href="#">if-attribute</a>
Introduced	16.0.R1
Platforms	All

### admin-group [[group-name](#)] *string*

Synopsis	Enter the <b>admin-group</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Tree	<a href="#">admin-group</a>
Max. Instances	256

Introduced 16.0.R1  
 Platforms All

### [group-name] *string*

Synopsis Interface group name  
 Context **configure** [routing-options](#) [if-attribute](#) [admin-group](#) *string*  
 Tree [admin-group](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### value *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Integer value associated with the group  
 Context **configure** [routing-options](#) [if-attribute](#) [admin-group](#) *string* [value](#) *number*  
 Tree [value](#)  
 Range 0 to 255  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms All

### srlg-group [name] *string*

Synopsis Enter the **srlg-group** list instance  
 Context **configure** [routing-options](#) [if-attribute](#) [srlg-group](#) *string*  
 Tree [srlg-group](#)  
 Max. Instances 1024  
 Introduced 16.0.R1  
 Platforms All



**[name]** *string*

Synopsis	SRLG name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute srlg-group</a> <i>string</i>
Tree	<a href="#">srlg-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**penalty-weight** *number*

Synopsis	Integer value of the penalty weight assigned to SRLG
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute srlg-group</a> <i>string</i> <a href="#">penalty-weight</a> <i>number</i>
Tree	<a href="#">penalty-weight</a>
Description	This command specifies the penalty weight associated with a SRLG. The higher the penalty weight, the less desirable it is to use the link with a given SRLG.
Range	0 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

**value** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Integer value associated with the SRLG
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute srlg-group</a> <i>string</i> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**ip-fast-reroute** *boolean*

Synopsis	Enable IP fast reroute capability
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">ip-fast-reroute</a> <i>boolean</i>
Tree	<a href="#">ip-fast-reroute</a>
Default	false
Introduced	16.0.R1
Platforms	All

**policy-accounting**

Synopsis	Enter the <b>policy-accounting</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a>
Tree	<a href="#">policy-accounting</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**policy-acct-template** [[name](#)] *string*

Synopsis	Enter the <b>policy-acct-template</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>
Tree	<a href="#">policy-acct-template</a>
Max. Instances	1024
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[name]** *string*

Synopsis	Policy accounting template name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>
Tree	<a href="#">policy-acct-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **destination-class** [[index](#)] *number*

Synopsis Enter the **destination-class** list instance

Context **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string* **destination-class** *number*

Tree [destination-class](#)

Max. Instances 255

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **[index]** *number*

Synopsis Destination class index

Context **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string* **destination-class** *number*

Tree [destination-class](#)

Range 1 to 255

Notes This element is part of a list key.

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **policer** *reference*

Synopsis Policer ID

Context **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string* **destination-class** *number* [policer](#) *reference*

Tree [policer](#)

Reference **configure** [routing-options](#) [policy-accounting](#) [policy-acct-template](#) *string* [policer](#) *number*

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**policer** [**policer-id**] *number*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <b>policer</b> <i>number</i>
Tree	<a href="#">policer</a>
Description	Commands in this context configure the policer definition for the instance. Policing by action of a policy accounting template is only supported by cards and systems that are FP4 and later.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[policer-id]** *number*

Synopsis	Policer ID
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <b>policer</b> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**max-burst-size** (*number* | *keyword*)

Synopsis	Exceed threshold to drop packets from PIR leaky bucket
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <b>policer</b> <i>number</i> <a href="#">max-burst-size</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-burst-size</a>
Description	This command specifies the maximum burst size for the policer. When this value is exceeded, packets are considered violating and are dropped.
Range	0 to 16777216
Units	bytes
Options	auto
Default	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**peak-rate** (*number* | *keyword*)

Synopsis	Peak rate of the policy accounting policer
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">policer</a> <i>number</i> <b>peak-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">peak-rate</a>
Description	This command configures the peak rate of the policy accounting policer, which is the fill or drain rate of the bucket.
Range	1 to 6400000000
Options	max
Default	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**source-class** [[index](#)] *number*

Synopsis	Add a list entry for <b>source-class</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">source-class</a> <i>number</i>
Tree	<a href="#">source-class</a>
Max. Instances	255
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[[index](#)]** *number*

Synopsis	Source-class index
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i> <a href="#">source-class</a> <i>number</i>
Tree	<a href="#">source-class</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## route-next-hop-policy

Synopsis	Enter the <b>route-next-hop-policy</b> context
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a>
Tree	<a href="#">route-next-hop-policy</a>
Introduced	16.0.R1
Platforms	All

## template [[template-name](#)] *string*

Synopsis	Enter the <b>template</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Tree	<a href="#">template</a>
Introduced	16.0.R1
Platforms	All

## [[template-name](#)] *string*

Synopsis	Template name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Tree	<a href="#">template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**exclude-group** [group-name] *reference*

Synopsis	Add a list entry for <b>exclude-group</b>
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">exclude-group</a> <i>reference</i>
Tree	<a href="#">exclude-group</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[group-name]** *reference*

Synopsis	Administrative group name
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">exclude-group</a> <i>reference</i>
Tree	<a href="#">exclude-group</a>
Description	This command specifies the name of the administrative group.  If the same group name is part of both include and exclude statements, the exclude statement wins. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**include-group** [group-name] *reference*

Synopsis	Enter the <b>include-group</b> list instance
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">include-group</a> <i>reference</i>
Tree	<a href="#">include-group</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[group-name]** *reference*

Synopsis	Administrative group name
----------	---------------------------

Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">include-group</a> <i>reference</i>
Tree	<a href="#">include-group</a>
Description	This command specifies the name of the administrative group. If the same group name is part of both include and exclude statements, the exclude statement wins. In other words, the exclude statement can be viewed as having an implicit preference value of 0.
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Preference number for configured admin-group.
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">include-group</a> <i>reference</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	All

### **nh-type** *keyword*

Synopsis	Preferred next hop
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">nh-type</a> <i>keyword</i>
Tree	<a href="#">nh-type</a>
Options	ip, tunnel
Default	ip
Introduced	16.0.R1
Platforms	All

### **protection-type** *keyword*

Synopsis	Protection type used
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">protection-type</a> <i>keyword</i>



---

Tree	<a href="#">protection-type</a>
Options	link, node
Default	node
Introduced	16.0.R1
Platforms	All

### **srlg** *boolean*

Synopsis	Select next hops from the SRLG
Context	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i> <a href="#">srlg</a> <i>boolean</i>
Tree	<a href="#">srlg</a>
Default	false
Introduced	16.0.R1
Platforms	All

### 3.41 saa commands

```

configure
- saa
- apply-groups reference
- apply-groups-exclude reference
- owner string test string
- accounting-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- continuous boolean
- description string
- jitter-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- latency-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- loss-event keyword threshold-type keyword
- apply-groups reference
- apply-groups-exclude reference
- threshold number
- probe-history keyword
- type
- dns
- apply-groups reference
- apply-groups-exclude reference
- count number
- interval number
- name-server (ipv4-address-no-zone | ipv6-address-no-zone)
- record-type keyword
- router-instance string
- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- target-address string
- timeout number
- trap-generation
- probe-fail boolean
- probe-fail-threshold number
- test-complete boolean
- test-fail boolean
- test-fail-threshold number
- icmp-ping
- apply-groups reference
- apply-groups-exclude reference
- bypass-routing boolean
- count number
- destination-address (ipv4-address-no-zone | ipv6-address-no-zone | string-
not-all-spaces)
- do-not-fragment boolean
- interface string
- interval (number | decimal-number)
- next-hop-address (ipv4-address-no-zone | ipv6-address-no-zone)
- pattern (keyword | number)
- qos
- fc keyword
- tos number
- router-instance string
- size number

```

configure saa owner type icmp-ping source-address

```

- source-address (ipv4-address-no-zone | ipv6-address-no-zone)
- timeout number
- trap-generation
  - probe-fail boolean
  - probe-fail-threshold number
  - test-complete boolean
  - test-fail boolean
  - test-fail-threshold number
- ttl number
- lsp-ping
  - apply-groups reference
  - apply-groups-exclude reference
  - interval number
  - qos
    - fc keyword
    - profile keyword
  - send-count number
  - size number
  - source-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - sub-type
    - bgp-label
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
      - ldp
        - path-destination
          - interface string
          - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
          - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
          - prefix (ipv4-prefix | ipv6-prefix)
      - rsvp-te
        - lsp-name string
        - path string
    - sr-isis
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-ospf
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-ospf3
      - igp-instance number
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
        - prefix (ipv4-prefix | ipv6-prefix)
    - sr-policy
      - color number
      - endpoint (ipv4-address-no-zone | ipv6-address-no-zone)
      - path-destination
        - interface string
        - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - segment-list number

```

configure saa owner type lsp-ping sub-type sr-te

```

- sr-te
  - lsp-name string
  - path string
  - path-destination
    - interface string
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
  - timeout number
- trap-generation
  - probe-fail boolean
  - probe-fail-threshold number
  - test-complete boolean
  - test-fail boolean
  - test-fail-threshold number
- ttl number
- vccv-ping
  - apply-groups reference
  - apply-groups-exclude reference
  - count number
  - interval number
  - qos
    - fc keyword
    - profile keyword
  - size number
  - sub-type
    - fec-128
      - pseudowire
        - destination-ip-address string
        - pw-id number
        - source-ip-address string
      - reply-mode keyword
      - sdp-bind-id string
  - timeout number
- trap-generation
  - probe-fail boolean
  - probe-fail-threshold number
  - test-complete boolean
  - test-fail boolean
  - test-fail-threshold number
- ttl number

```

### 3.41.1 saa command descriptions

#### **saa**

Synopsis	Enter the <b>saa</b> context
Context	<b>configure saa</b>
Tree	<a href="#">saa</a>
Description	Commands in this context configure the Service Assurance Agent (SAA) tests.
Introduced	16.0.R4
Platforms	All

#### **owner** [[owner-name](#)] [string test string](#)

Synopsis	Enter the <b>owner</b> list instance
Context	<b>configure saa owner <a href="#">string test string</a></b>
Tree	<a href="#">owner</a>
Introduced	16.0.R4
Platforms	All

#### **[owner-name]** [string](#)

Synopsis	Optional owner name of the SAA operation
Context	<b>configure saa owner <a href="#">string test string</a></b>
Tree	<a href="#">owner</a>
Description	This command configures the owner associated with the SAA operation.
String Length	1 to 32
MD-CLI	TiMOS CLI
Default	
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

#### **test** [string](#)

Synopsis	SAA test name
----------	---------------

Context	<b>configure</b> <i>saa owner string test string</i>
Tree	<i>owner</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **accounting-policy** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accounting policy associated with the SAA test
Context	<b>configure</b> <i>saa owner string test string accounting-policy reference</i>
Tree	<i>accounting-policy</i>
Reference	<b>configure</b> <i>log accounting-policy number</i>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the SAA test
Context	<b>configure</b> <i>saa owner string test string admin-state keyword</i>
Tree	<i>admin-state</i>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **continuous** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Execute the SAA tests as continuous
Context	<b>configure</b> <i>saa owner string test string continuous boolean</i>
Tree	<i>continuous</i>
Description	<p>When configured to <b>true</b>, the SAA test execution is continuous, that is, it cannot be started or stopped with the <b>oam saa test start</b> or <b>stop</b> commands.</p> <p>The SAA test types supported by this command include the following:</p> <ul style="list-style-type: none"> <li>• <b>cpe-ping</b></li> <li>• <b>dns</b></li> <li>• <b>eth-cfm-loopback</b></li> <li>• <b>eth-cfm-two-way-delay</b></li> <li>• <b>eth-cfm-two-way-slm</b></li> <li>• <b>icmp-ping</b> (not applicable to <b>rapid</b> type)</li> <li>• <b>lsp-ping</b></li> <li>• <b>mac-ping</b></li> <li>• <b>sdp-ping</b></li> <li>• <b>vccv-ping</b></li> <li>• <b>vprn-ping</b></li> </ul>
Default	false
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>saa owner string test string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **jitter-event** [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the <b>jitter-event</b> list instance
Context	<b>configure</b> <i>saa owner string test string jitter-event keyword threshold-type keyword</i>
Tree	<i>jitter-event</i>

Description	Commands in this context configure the jitter event thresholds used to evaluate the jitter event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

### **[direction]** *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	<b>configure</b> <b>saa owner</b> <i>string test string jitter-event keyword threshold-type keyword</i>
Tree	<i>jitter-event</i>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **threshold-type** *keyword*

Synopsis	Threshold type
Context	<b>configure</b> <b>saa owner</b> <i>string test string jitter-event keyword threshold-type keyword</i>
Tree	<i>jitter-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **threshold** *number*

Synopsis	Threshold jitter value
Context	<b>configure</b> <b>saa owner</b> <i>string test string jitter-event keyword threshold-type keyword threshold number</i>
Tree	<i>threshold</i>
Description	This command specifies the threshold jitter value. The system generates an SAA threshold event when the jitter value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds



Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **latency-event** [*direction*] *keyword* *threshold-type* *keyword*

Synopsis	Enter the <b>latency-event</b> list instance
Context	<b>configure</b> <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <i>latency-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>latency-event</i>
Description	Commands in this context configure the latency event thresholds used to evaluate the latency event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

### **[direction]** *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	<b>configure</b> <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <i>latency-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>latency-event</i>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **threshold-type** *keyword*

Synopsis	Threshold type
Context	<b>configure</b> <i>saa owner</i> <i>string</i> <i>test</i> <i>string</i> <i>latency-event</i> <i>keyword</i> <i>threshold-type</i> <i>keyword</i>
Tree	<i>latency-event</i>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**threshold** *number*

Synopsis	Threshold latency value
Context	<b>configure</b> <i>saa owner string test string latency-event keyword threshold-type keyword threshold number</i>
Tree	<b>threshold</b>
Description	This command specifies the threshold latency value. The system generates an SAA threshold event when the latency value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	microseconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**loss-event** [*direction*] *keyword threshold-type keyword*

Synopsis	Enter the <b>loss-event</b> list instance
Context	<b>configure</b> <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	<b>loss-event</b>
Description	Commands in this context configure the loss event thresholds used to evaluate the loss event value at the termination of an SAA test probe. The system generates SAA threshold events as required.
Introduced	16.0.R4
Platforms	All

**[direction]** *keyword*

Synopsis	Direction for OAM ping responses for OAM ping test run
Context	<b>configure</b> <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	<b>loss-event</b>
Options	inbound, outbound, round-trip
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**threshold-type** *keyword*

Synopsis	Threshold type
Context	<b>configure</b> <i>saa owner string test string loss-event keyword threshold-type keyword</i>
Tree	<a href="#">loss-event</a>
Options	rising, falling
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**threshold** *number*

Synopsis	Threshold loss event value
Context	<b>configure</b> <i>saa owner string test string loss-event keyword threshold-type keyword threshold number</i>
Tree	<a href="#">threshold</a>
Description	This command specifies the threshold loss value. The system generates an SAA threshold event when the loss value of the test run crosses the threshold value.
Range	0 to 2147483647
Units	packets
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**probe-history** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	History probe behavior
Context	<b>configure</b> <i>saa owner string test string probe-history keyword</i>
Tree	<a href="#">probe-history</a>
Options	keep, drop, auto
Default	auto
Introduced	16.0.R4
Platforms	All

**type**

Synopsis	Enter the <b>type</b> context
Context	<b>configure</b> <a href="#">saa owner string test string type</a>
Tree	<a href="#">type</a>
Introduced	16.0.R4
Platforms	All

**dns**

Synopsis	Enable the <b>dns</b> context
Context	<b>configure</b> <a href="#">saa owner string test string type dns</a>
Tree	<a href="#">dns</a>
Notes	The following elements are part of a choice: <b>dns</b> , <b>icmp-ping</b> , <b>lsp-ping</b> , or <b>vccv-ping</b> .
Introduced	22.10.R1
Platforms	All

**count number**

Synopsis	Number of messages to send in a sample window
Context	<b>configure</b> <a href="#">saa owner string test string type dns count number</a>
Tree	<a href="#">count</a>
Description	This command specifies the number of messages to send. Each message request must either time out or receive a reply before the next message request is sent.
Range	1 to 100
Units	packets
Default	1
Introduced	22.10.R1
Platforms	All

**interval number**

Synopsis	Minimum time before the next message request is sent
Context	<b>configure</b> <a href="#">saa owner string test string type dns interval number</a>
Tree	<a href="#">interval</a>

Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	All

### **name-server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the DNS name server used for the test
Context	<b>configure</b> <i>saa owner string test string type dns name-server</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">name-server</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **record-type** *keyword*

Synopsis	Record type
Context	<b>configure</b> <i>saa owner string test string type dns record-type keyword</i>
Tree	<a href="#">record-type</a>
Options	ipv4-a-record, ipv6-aaaa-record
Default	ipv4-a-record
Introduced	22.10.R1
Platforms	All

### **router-instance** *string*

Synopsis	Router name or VPRN service name
Context	<b>configure</b> <i>saa owner string test string type dns router-instance string</i>
Tree	<a href="#">router-instance</a>
Default	_Base_and_management
Introduced	22.10.R1
Platforms	All

**source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address on the local system
Context	<b>configure</b> <i>saa owner string test string type dns source-address</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Description	This command configures the IP address on the local system. If unconfigured, the router uses a system selected local IP address.
Introduced	22.10.R1
Platforms	All

**target-address** *string*

Synopsis	DNS name to be resolved to an IP address
Context	<b>configure</b> <i>saa owner string test string type dns target-address string</i>
Tree	<a href="#">target-address</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**timeout** *number*

Synopsis	Maximum time to wait for a reply message
Context	<b>configure</b> <i>saa owner string test string type dns timeout number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the maximum time the router waits for a message response after sending the message request. When the timeout expires, the requesting router assumes the message response is not received. Any response received after the request times out is silently discarded.
Range	1 to 120
Units	seconds
Default	5
Introduced	22.10.R1
Platforms	All

## trap-generation

Synopsis	Enter the <b>trap-generation</b> context
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">dns</a> <a href="#">trap-generation</a>
Tree	<a href="#">trap-generation</a>
Introduced	22.10.R1
Platforms	All

## probe-fail *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">dns</a> <a href="#">trap-generation</a> <a href="#">probe-fail</a> <i>boolean</i>
Tree	<a href="#">probe-fail</a>
Description	When configured to <b>true</b> , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.  This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

## probe-fail-threshold *number*

Synopsis	Consecutive probe failure count
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">dns</a> <a href="#">trap-generation</a> <a href="#">probe-fail-threshold</a> <i>number</i>
Tree	<a href="#">probe-fail-threshold</a>
Description	This command configures the number of consecutive ping probe failures required to generate a trap.  This command has no effect if the <b>probe-fail</b> command is set to <b>false</b> .  This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

**test-complete** *boolean*

Synopsis	Enable generation of test complete notifications
Context	<b>configure</b> <i>saa owner string test string type dns trap-generation test-complete boolean</i>
Tree	<a href="#">test-complete</a>
Default	false
Introduced	22.10.R1
Platforms	All

**test-fail** *boolean*

Synopsis	Enable the generation of test fail notifications
Context	<b>configure</b> <i>saa owner string test string type dns trap-generation test-fail boolean</i>
Tree	<a href="#">test-fail</a>
Description	When configured to <b>true</b> , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the <b>test-fail-threshold</b> setting.
Default	false
Introduced	22.10.R1
Platforms	All

**test-fail-threshold** *number*

Synopsis	Total probe failures for trap generation
Context	<b>configure</b> <i>saa owner string test string type dns trap-generation test-fail-threshold number</i>
Tree	<a href="#">test-fail-threshold</a>
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when <b>test-fail</b> is set to <b>false</b> . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All



**icmp-ping**

Synopsis	Enable the <b>icmp-ping</b> context
Context	<b>configure</b> <i>saa owner string test string type icmp-ping</i>
Tree	<a href="#">icmp-ping</a>
Description	Commands in this context configure an ICMP ping test.
Notes	The following elements are part of a choice: <b>dns</b> , <b>icmp-ping</b> , <b>lsp-ping</b> , or <b>vccv-ping</b> .
Introduced	16.0.R4
Platforms	All

**bypass-routing** *boolean*

Synopsis	Bypass routing table for directly connected interfaces
Context	<b>configure</b> <i>saa owner string test string type icmp-ping bypass-routing boolean</i>
Tree	<a href="#">bypass-routing</a>
Default	false
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop-address</b> .
Introduced	16.0.R4
Platforms	All

**count** *number*

Synopsis	ICMP Echo Request packets to send in a sample window
Context	<b>configure</b> <i>saa owner string test string type icmp-ping count number</i>
Tree	<a href="#">count</a>
Range	1 to 100000
Units	packets
Default	5
Introduced	16.0.R4
Platforms	All

**destination-address** (*ipv4-address-no-zone | ipv6-address-no-zone | string-not-all-spaces*)

Synopsis	Destination IP address or DNS name to send ping request
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Context	<b>configure</b> <i>saa owner string test string type icmp-ping destination-address</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   string-not-all-spaces</i> )
Tree	<a href="#">destination-address</a>
String Length	1 to 128
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **do-not-fragment** *boolean*

Synopsis	Prevent fragmentation of the ICMP Echo Request packet
Context	<b>configure</b> <i>saa owner string test string type icmp-ping do-not-fragment boolean</i>
Tree	<a href="#">do-not-fragment</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **interface** *string*

Synopsis	Interface name
Context	<b>configure</b> <i>saa owner string test string type icmp-ping interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop-address</b> .
Introduced	16.0.R4
Platforms	All

### **interval** (*number | decimal-number*)

Synopsis	Minimum time to expire before message request is sent
Context	<b>configure</b> <i>saa owner string test string type icmp-ping interval</i> ( <i>number   decimal-number</i> )
Tree	<a href="#">interval</a>
Range	1 to 10000
Units	seconds

Default	1
Introduced	16.0.R4
Platforms	All

### **next-hop-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address to reach destination
Context	<b>configure</b> <i>saa owner string test string type icmp-ping next-hop-address</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop-address</a>
Notes	The following elements are part of a choice: <b>bypass-routing</b> , <b>interface</b> , or <b>next-hop-address</b> .
Introduced	16.0.R4
Platforms	All

### **pattern** (*keyword* | *number*)

Synopsis	Pattern to fill the data portion in a ping packet
Context	<b>configure</b> <i>saa owner string test string type icmp-ping pattern</i> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">pattern</a>
Range	0 to 65535
Options	sequential
Default	sequential
Introduced	16.0.R4
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <i>saa owner string test string type icmp-ping qos</i>
Tree	<a href="#">qos</a>
Introduced	16.0.R4
Platforms	All

**fc keyword**

Synopsis	Forwarding class
Context	<b>configure</b> <i>saa owner string test string type icmp-ping qos fc keyword</i>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	nc
Introduced	16.0.R4
Platforms	All

**tos number**

Synopsis	Type of service
Context	<b>configure</b> <i>saa owner string test string type icmp-ping qos tos number</i>
Tree	<b>tos</b>
Range	0 to 255
Default	0
Introduced	16.0.R4
Platforms	All

**router-instance string**

Synopsis	Router name or VPRN service name
Context	<b>configure</b> <i>saa owner string test string type icmp-ping router-instance string</i>
Tree	<b>router-instance</b>
Default	Base
Introduced	16.0.R4
Platforms	All

**size number**

Synopsis	Packet padding size
Context	<b>configure</b> <i>saa owner string test string type icmp-ping size number</i>
Tree	<b>size</b>
Description	This command configures the number of bytes in the combined ICMP Header (8 bytes) and ICMP Payload (variable size) of the ICMP Echo Request packets.

Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R4
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	<b>configure</b> <i>saa owner string test string type icmp-ping source-address</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Description	This command configures the source IP address to be loaded into the IP header of the ICMP Echo Request packet. If unconfigured, the router uses a system-selected local address.
Introduced	16.0.R4
Platforms	All

### **timeout** *number*

Synopsis	Time router waits for a reply after sending last probe
Context	<b>configure</b> <i>saa owner string test string type icmp-ping timeout number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	16.0.R4
Platforms	All

### **trap-generation**

Synopsis	Enter the <b>trap-generation</b> context
Context	<b>configure</b> <i>saa owner string test string type icmp-ping trap-generation</i>
Tree	<a href="#">trap-generation</a>
Introduced	22.10.R1

Platforms All

### **probe-fail** *boolean*

Synopsis Enable the generation of probe fail notifications

Context **configure** *saa owner string test string type icmp-ping trap-generation probe-fail boolean*

Tree [probe-fail](#)

Description When configured to **true**, the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test.  
This command is not applicable to SAA traceroute tests.

Default false

Introduced 22.10.R1

Platforms All

### **probe-fail-threshold** *number*

Synopsis Consecutive probe failure count

Context **configure** *saa owner string test string type icmp-ping trap-generation probe-fail-threshold number*

Tree [probe-fail-threshold](#)

Description This command configures the number of consecutive ping probe failures required to generate a trap.  
This command has no effect if the **probe-fail** command is set to **false**.  
This command is not applicable to SAA traceroute tests.

Range 0 to 15

Default 1

Introduced 22.10.R1

Platforms All

### **test-complete** *boolean*

Synopsis Enable generation of test complete notifications

Context **configure** *saa owner string test string type icmp-ping trap-generation test-complete boolean*

Tree [test-complete](#)

Default false

Introduced	22.10.R1
Platforms	All

**test-fail** *boolean*

Synopsis	Enable the generation of test fail notifications
Context	<b>configure</b> <i>saa owner string test string type icmp-ping trap-generation test-fail boolean</i>
Tree	<a href="#">test-fail</a>
Description	When configured to <b>true</b> , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the <b>test-fail-threshold</b> setting.
Default	false
Introduced	22.10.R1
Platforms	All

**test-fail-threshold** *number*

Synopsis	Total probe failures for trap generation
Context	<b>configure</b> <i>saa owner string test string type icmp-ping trap-generation test-fail-threshold number</i>
Tree	<a href="#">test-fail-threshold</a>
Description	This command configures the number of consecutive test failures required to generate a trap.  This command has no effect when <b>test-fail</b> is set to <b>false</b> .  This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

**ttl** *number*

Synopsis	Time to live in the IP header
Context	<b>configure</b> <i>saa owner string test string type icmp-ping ttl number</i>
Tree	<a href="#">ttl</a>
Range	1 to 128

Default	64
Introduced	16.0.R4
Platforms	All

## **lsp-ping**

Synopsis	Enable the <b>lsp-ping</b> context
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping</a>
Tree	<a href="#">lsp-ping</a>
Description	Commands in this context configure the command options to perform in-band LSP connectivity tests.  LSP ping uses the protocol and data structures defined in RFC 8029, <i>Detecting Multiprotocol Label Switched (MPLS) Data-Plane Failures</i> .
Notes	The following elements are part of a choice: <b>dns</b> , <b>icmp-ping</b> , <b>lsp-ping</b> , or <b>vccv-ping</b> .
Introduced	22.10.R1
Platforms	All

## **interval number**

Synopsis	Minimum time before the next lsp-ping request is sent
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	All

## **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping qos</a>
Tree	<a href="#">qos</a>
Introduced	22.10.R1
Platforms	All



**fc keyword**

Synopsis	Forwarding class
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping qos fc keyword</a>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	22.10.R1
Platforms	All

**profile keyword**

Synopsis	Profile
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping qos profile keyword</a>
Tree	<a href="#">profile</a>
Options	in, out
Default	out
Introduced	22.10.R1
Platforms	All

**send-count number**

Synopsis	Number of request packets to send in a sample window
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping send-count number</a>
Tree	<a href="#">send-count</a>
Range	1 to 100
Units	packets
Default	1
Introduced	22.10.R1
Platforms	All

**size number**

Synopsis	Packet pad size
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping size number</a>

Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	22.10.R1
Platforms	All

### **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">lsp-ping</a> <a href="#">source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	22.10.R1
Platforms	All

### **sub-type**

Synopsis	Enter the <b>sub-type</b> context
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">lsp-ping</a> <a href="#">sub-type</a>
Tree	<a href="#">sub-type</a>
Introduced	22.10.R1
Platforms	All

### **bgp-label**

Synopsis	Enable the <b>bgp-label</b> context
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string</a> <a href="#">test</a> <a href="#">string</a> <a href="#">type</a> <a href="#">lsp-ping</a> <a href="#">sub-type</a> <a href="#">bgp-label</a>
Tree	<a href="#">bgp-label</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All

## path-destination

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string test string type</a> <a href="#">lsp-ping sub-type</a> <a href="#">bgp-label</a> <a href="#">path-destination</a>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

## interface *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string test string type</a> <a href="#">lsp-ping sub-type</a> <a href="#">bgp-label</a> <a href="#">path-destination</a> <a href="#">interface string</a>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string test string type</a> <a href="#">lsp-ping sub-type</a> <a href="#">bgp-label</a> <a href="#">path-destination</a> <a href="#">ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

## next-hop (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <a href="#">saa owner</a> <a href="#">string test string type</a> <a href="#">lsp-ping sub-type</a> <a href="#">bgp-label</a> <a href="#">path-destination</a> <a href="#">next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</a>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1

Platforms All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test

Context **configure** *saa owner string test string type lsp-ping sub-type bgp-label prefix* (*ipv4-prefix* | *ipv6-prefix*)

Tree [prefix](#)

Notes This element is mandatory.

Introduced 22.10.R1

Platforms All

### **ldp**

Synopsis Enable the **ldp** context

Context **configure** *saa owner string test string type lsp-ping sub-type ldp*

Tree [ldp](#)

Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.

Introduced 22.10.R1

Platforms All

### **path-destination**

Synopsis Enter the **path-destination** context

Context **configure** *saa owner string test string type lsp-ping sub-type ldp path-destination*

Tree [path-destination](#)

Introduced 22.10.R1

Platforms All

### **interface** *string*

Synopsis Egress router interface used with the path destination

Context **configure** *saa owner string test string type lsp-ping sub-type ldp path-destination interface string*

Tree [interface](#)

String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	<b>configure</b> <b>saa owner</b> <i>string test string type</i> <a href="#">lsp-ping sub-type ldp path-destination ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <b>saa owner</b> <i>string test string type</i> <a href="#">lsp-ping sub-type ldp path-destination next-hop</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<b>configure</b> <b>saa owner</b> <i>string test string type</i> <a href="#">lsp-ping sub-type ldp prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**rsvp-te**

Synopsis	Enable the <b>rsvp-te</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type rsvp-te</i>
Tree	<a href="#">rsvp-te</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All

**lsp-name string**

Synopsis	Name of the LSP to be tested
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type rsvp-te lsp-name string</i>
Tree	<a href="#">lsp-name</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**path string**

Synopsis	Name of the MPLS path to be tested
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type rsvp-te path string</i>
Tree	<a href="#">path</a>
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

**sr-isis**

Synopsis	Enable the <b>sr-isis</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-isis</i>
Tree	<a href="#">sr-isis</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .

Introduced	22.10.R1
Platforms	All

### **igp-instance** *number*

Synopsis	IGP instance for the SR IS-IS test
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping sub-type sr-isis igp-instance number</a>
Tree	<a href="#">igp-instance</a>
Range	0 to 127
Default	0
Introduced	22.10.R1
Platforms	All

### **path-destination**

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping sub-type sr-isis path-destination</a>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

### **interface** *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <a href="#">saa owner string test string type lsp-ping sub-type sr-isis path-destination interface string</a>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
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Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-isis path-destination ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-isis path-destination next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **prefix** (*ipv4-prefix | ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-isis prefix (ipv4-prefix   ipv6-prefix)</i>
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **sr-ospf**

Synopsis	Enable the <b>sr-ospf</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf</i>
Tree	<a href="#">sr-ospf</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All



**igp-instance** *number*

Synopsis	IGP instance for the SR OSPF test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf igp-instance number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 31
Default	0
Introduced	22.10.R1
Platforms	All

**path-destination**

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination</i>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

**interface** *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf path-destination ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>

Introduced 22.10.R1  
 Platforms All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Egress IP next hop address used with path destination  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf path-destination next-hop* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [next-hop](#)  
 Notes The following elements are part of a choice: **interface** or **next-hop**.  
 Introduced 22.10.R1  
 Platforms All

### **prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination IP prefix for the test  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf prefix* (*ipv4-prefix* | *ipv6-prefix*)  
 Tree [prefix](#)  
 Notes This element is mandatory.  
 Introduced 22.10.R1  
 Platforms All

### **sr-ospf3**

Synopsis Enable the **sr-ospf3** context  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-ospf3*  
 Tree [sr-ospf3](#)  
 Notes The following elements are part of a choice: **bgp-label**, **ldp**, **rsvp-te**, **sr-isis**, **sr-ospf**, **sr-ospf3**, **sr-policy**, or **sr-te**.  
 Introduced 22.10.R1  
 Platforms All

### **igp-instance** *number*

Synopsis IGP instance for the SR OSPFv3 test

Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 igp-instance number</i>
Tree	<a href="#">igp-instance</a>
Range	0 to 31   64 to 95
Default	0
Introduced	22.10.R1
Platforms	All

## path-destination

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination</i>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

## interface *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

## ip-address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

**next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 path-destination next-hop</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

**prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP prefix for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-ospf3 prefix</i> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**sr-policy**

Synopsis	Enable the <b>sr-policy</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy</i>
Tree	<a href="#">sr-policy</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All

**color number**

Synopsis	Segment Routing color for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy color number</i>
Tree	<a href="#">color</a>
Range	0 to 4294967295

Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **endpoint** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Segment Routing endpoint for the test
Context	<b>configure</b> <b>saa owner</b> <i>string test string type lsp-ping sub-type sr-policy endpoint</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">endpoint</a>
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

### **path-destination**

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <b>saa owner</b> <i>string test string type lsp-ping sub-type sr-policy path-destination</i>
Tree	<a href="#">path-destination</a>
Introduced	22.10.R1
Platforms	All

### **interface** *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <b>saa owner</b> <i>string test string type lsp-ping sub-type sr-policy path-destination interface string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the path destination
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Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>
Introduced	22.10.R1
Platforms	All

### **next-hop** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Egress IP next hop address used with path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy path-destination next-hop (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">next-hop</a>
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **segment-list** *number*

Synopsis	Segment Routing segment list for the test
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-policy segment-list number</i>
Tree	<a href="#">segment-list</a>
Range	1 to 32
Introduced	22.10.R1
Platforms	All

### **sr-te**

Synopsis	Enable the <b>sr-te</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te</i>
Tree	<a href="#">sr-te</a>
Notes	The following elements are part of a choice: <b>bgp-label</b> , <b>ldp</b> , <b>rsvp-te</b> , <b>sr-isis</b> , <b>sr-ospf</b> , <b>sr-ospf3</b> , <b>sr-policy</b> , or <b>sr-te</b> .
Introduced	22.10.R1
Platforms	All

**lsp-name** *string*

Synopsis	Name of the LSP to be tested
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te lsp-name string</i>
Tree	<i>lsp-name</i>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.10.R1
Platforms	All

**path** *string*

Synopsis	Name of the MPLS path to be tested
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te path string</i>
Tree	<i>path</i>
String Length	1 to 64
Introduced	22.10.R1
Platforms	All

**path-destination**

Synopsis	Enter the <b>path-destination</b> context
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te path-destination</i>
Tree	<i>path-destination</i>
Introduced	22.10.R1
Platforms	All

**interface** *string*

Synopsis	Egress router interface used with the path destination
Context	<b>configure</b> <i>saa owner string test string type lsp-ping sub-type sr-te path-destination interface string</i>
Tree	<i>interface</i>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>interface</b> or <b>next-hop</b> .

Introduced 22.10.R1  
 Platforms All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the path destination  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-te path-destination ip-address* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [ip-address](#)  
 Introduced 22.10.R1  
 Platforms All

### **next-hop** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Egress IP next hop address used with path destination  
 Context **configure** *saa owner string test string type lsp-ping sub-type sr-te path-destination next-hop* (*ipv4-address-no-zone* | *ipv6-address-no-zone*)  
 Tree [next-hop](#)  
 Notes The following elements are part of a choice: **interface** or **next-hop**.  
 Introduced 22.10.R1  
 Platforms All

### **timeout** *number*

Synopsis Time router waits for a reply to an echo request  
 Context **configure** *saa owner string test string type lsp-ping timeout number*  
 Tree [timeout](#)  
 Range 1 to 10  
 Units seconds  
 Default 5  
 Introduced 22.10.R1  
 Platforms All

### **trap-generation**

Synopsis Enter the **trap-generation** context



Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation</i>
Tree	<i>trap-generation</i>
Introduced	22.10.R1
Platforms	All

### **probe-fail** *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation probe-fail boolean</i>
Tree	<i>probe-fail</i>
Description	When configured to <b>true</b> , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	22.10.R1
Platforms	All

### **probe-fail-threshold** *number*

Synopsis	Consecutive probe failure count
Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation probe-fail-threshold number</i>
Tree	<i>probe-fail-threshold</i>
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the <b>probe-fail</b> command is set to <b>false</b> . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

### **test-complete** *boolean*

Synopsis	Enable generation of test complete notifications
----------	--

Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation test-complete boolean</i>
Tree	<a href="#">test-complete</a>
Default	false
Introduced	22.10.R1
Platforms	All

### **test-fail** *boolean*

Synopsis	Enable the generation of test fail notifications
Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation test-fail boolean</i>
Tree	<a href="#">test-fail</a>
Description	When configured to <b>true</b> , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the <b>test-fail-threshold</b> setting.
Default	false
Introduced	22.10.R1
Platforms	All

### **test-fail-threshold** *number*

Synopsis	Total probe failures for trap generation
Context	<b>configure</b> <i>saa owner string test string type lsp-ping trap-generation test-fail-threshold number</i>
Tree	<a href="#">test-fail-threshold</a>
Description	This command configures the number of consecutive test failures required to generate a trap.  This command has no effect when <b>test-fail</b> is set to <b>false</b> .  This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	22.10.R1
Platforms	All

**tll number**

Synopsis	TTL value for the echo request MPLS label
Context	<b>configure</b> <i>saa owner string test string type lsp-ping tll number</i>
Tree	<a href="#">tll</a>
Range	1 to 255
Default	255
Introduced	22.10.R1
Platforms	All

**vccv-ping**

Synopsis	Enable the <b>vccv-ping</b> context
Context	<b>configure</b> <i>saa owner string test string type vccv-ping</i>
Tree	<a href="#">vccv-ping</a>
Description	<p>Commands in this context configure a Virtual Circuit Connectivity Verification (VCCV) ping test.</p> <p>A VCCV-ping test checks connectivity of a VLL inband. It verifies that the destination (target) PE is the egress for the Layer 2 FEC and provides for a cross-check between the data plane and the control plane. Because it is inband, the VCCV-ping message is sent using the same encapsulation and along the same path as user packets in that VLL. The VCCV-ping test is the equivalent of the LSP-ping test for a VLL service. The VCCV-ping test reuses an LSP-ping message format and can be used to test a VLL configured over both an MPLS and a GRE SDP.</p>
Notes	The following elements are part of a choice: <b>dns</b> , <b>icmp-ping</b> , <b>lsp-ping</b> , or <b>vccv-ping</b> .
Introduced	23.10.R1
Platforms	All

**count number**

Synopsis	Number of echo request packets to send
Context	<b>configure</b> <i>saa owner string test string type vccv-ping count number</i>
Tree	<a href="#">count</a>
Range	1 to 100
Units	packets
Default	1
Introduced	23.10.R1
Platforms	All

### **interval** *number*

Synopsis	Interval between packets sent
Context	<b>configure</b> <i>saa owner string test string type vccv-ping interval number</i>
Tree	<i>interval</i>
Range	1 to 10
Units	seconds
Default	1
Introduced	23.10.R1
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <i>saa owner string test string type vccv-ping qos</i>
Tree	<i>qos</i>
Introduced	23.10.R1
Platforms	All

### **fc** *keyword*

Synopsis	QoS FC for the sent echo request packets
Context	<b>configure</b> <i>saa owner string test string type vccv-ping qos fc keyword</i>
Tree	<i>fc</i>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	be
Introduced	23.10.R1
Platforms	All

### **profile** *keyword*

Synopsis	QoS profile for the sent echo request packets
Context	<b>configure</b> <i>saa owner string test string type vccv-ping qos profile keyword</i>
Tree	<i>profile</i>
Options	in, out

Default	out
Introduced	23.10.R1
Platforms	All

### **size number**

Synopsis	Echo request packet pad size
Context	<b>configure</b> <i>saa owner string test string type vccv-ping size number</i>
Tree	<a href="#">size</a>
Range	1 to 9786
Units	bytes
Default	1
Introduced	23.10.R1
Platforms	All

### **sub-type**

Synopsis	Enter the <b>sub-type</b> context
Context	<b>configure</b> <i>saa owner string test string type vccv-ping sub-type</i>
Tree	<a href="#">sub-type</a>
Description	Commands in this context configure the FEC type for a remote PW segment targeted by a VCCV-ping echo request.
Introduced	23.10.R1
Platforms	All

### **fec-128**

Synopsis	Enable the <b>fec-128</b> context
Context	<b>configure</b> <i>saa owner string test string type vccv-ping sub-type fec-128</i>
Tree	<a href="#">fec-128</a>
Description	Commands in this context configure the FEC-128 sub-type.
Introduced	23.10.R1
Platforms	All

## pseudowire

Synopsis	Enable the <b>pseudowire</b> context
Context	<b>configure</b> <b>saa owner</b> <i>string test string type vccv-ping sub-type fec-128 pseudowire</i>
Tree	<a href="#">pseudowire</a>
Description	Commands in this context configure the PW that is used for performing a VCCV-ping operation.
Introduced	23.10.R1
Platforms	All

## destination-ip-address *string*

Synopsis	PW destination IP address
Context	<b>configure</b> <b>saa owner</b> <i>string test string type vccv-ping sub-type fec-128 pseudowire destination-ip-address string</i>
Tree	<a href="#">destination-ip-address</a>
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## pw-id *number*

Synopsis	PW identifier
Context	<b>configure</b> <b>saa owner</b> <i>string test string type vccv-ping sub-type fec-128 pseudowire pw-id number</i>
Tree	<a href="#">pw-id</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

## source-ip-address *string*

Synopsis	PW source IP address
Context	<b>configure</b> <b>saa owner</b> <i>string test string type vccv-ping sub-type fec-128 pseudowire source-ip-address string</i>
Tree	<a href="#">source-ip-address</a>

Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **reply-mode** *keyword*

Synopsis	In-band or out-of-band reply
Context	<b>configure</b> <b>saa owner</b> <i>string</i> <b>test</b> <i>string</i> <b>type</b> <b>vccv-ping sub-type fec-128</b> <b>reply-mode</b> <i>keyword</i>
Tree	<a href="#">reply-mode</a>
Options	ip-routed, control-channel
Default	control-channel
Introduced	23.10.R1
Platforms	All

### **sdp-bind-id** *string*

Synopsis	SDP bind ID to test
Context	<b>configure</b> <b>saa owner</b> <i>string</i> <b>test</b> <i>string</i> <b>type</b> <b>vccv-ping sub-type fec-128</b> <b>sdp-bind-id</b> <i>string</i>
Tree	<a href="#">sdp-bind-id</a>
String Length	3 to 16
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	All

### **timeout** *number*

Synopsis	Wait time for a reply after sending an echo request
Context	<b>configure</b> <b>saa owner</b> <i>string</i> <b>test</b> <i>string</i> <b>type</b> <b>vccv-ping</b> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	23.10.R1
Platforms	All

**trap-generation**

Synopsis	Enter the <b>trap-generation</b> context
Context	<b>configure</b> <i>saa owner string test string type vccv-ping trap-generation</i>
Tree	<a href="#">trap-generation</a>
Introduced	23.10.R1
Platforms	All

**probe-fail** *boolean*

Synopsis	Enable the generation of probe fail notifications
Context	<b>configure</b> <i>saa owner string test string type vccv-ping trap-generation probe-fail boolean</i>
Tree	<a href="#">probe-fail</a>
Description	When configured to <b>true</b> , the system generates an SNMP trap if the consecutive probe failure threshold is reached during the execution of the SAA ping test. This command is not applicable to SAA traceroute tests.
Default	false
Introduced	23.10.R1
Platforms	All

**probe-fail-threshold** *number*

Synopsis	Consecutive probe failure count
Context	<b>configure</b> <i>saa owner string test string type vccv-ping trap-generation probe-fail-threshold number</i>
Tree	<a href="#">probe-fail-threshold</a>
Description	This command configures the number of consecutive ping probe failures required to generate a trap. This command has no effect if the <b>probe-fail</b> command is set to <b>false</b> . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	23.10.R1
Platforms	All



**test-complete** *boolean*

Synopsis	Enable generation of test complete notifications
Context	<b>configure</b> <i>saa owner string test string type vccv-ping trap-generation test-complete boolean</i>
Tree	<a href="#">test-complete</a>
Default	false
Introduced	23.10.R1
Platforms	All

**test-fail** *boolean*

Synopsis	Enable the generation of test fail notifications
Context	<b>configure</b> <i>saa owner string test string type vccv-ping trap-generation test-fail boolean</i>
Tree	<a href="#">test-fail</a>
Description	When configured to <b>true</b> , the system generates a trap if a test fails. In the case of a ping test, the test is considered to have failed (for trap generation) if the number of failed probes is at least the value of the <b>test-fail-threshold</b> setting.
Default	false
Introduced	23.10.R1
Platforms	All

**test-fail-threshold** *number*

Synopsis	Total probe failures for trap generation
Context	<b>configure</b> <i>saa owner string test string type vccv-ping trap-generation test-fail-threshold number</i>
Tree	<a href="#">test-fail-threshold</a>
Description	This command configures the number of consecutive test failures required to generate a trap. This command has no effect when <b>test-fail</b> is set to <b>false</b> . This command is not applicable to SAA traceroute tests.
Range	0 to 15
Default	1
Introduced	23.10.R1
Platforms	All

**tll number**

Synopsis	TTL value for the echo request MPLS label
Context	<b>configure</b> <i>saa owner string test string type vccv-ping tll number</i>
Tree	<b>tll</b>
Range	1 to 255
Default	1
Introduced	23.10.R1
Platforms	All

## 3.42 satellite commands

```

configure
- satellite
- apply-groups reference
- apply-groups-exclude reference
- ethernet-satellite number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- central-frequency-clock
- apply-groups reference
- apply-groups-exclude reference
- ref1
- admin-state keyword
- quality-level-override keyword
- source-port string
- ref2
- admin-state keyword
- quality-level-override keyword
- source-port string
- client-down-delay number
- console-access keyword
- description string
- dynamic-uplink boolean
- feature keyword
- mac-address string
- port-map reference
- apply-groups reference
- apply-groups-exclude reference
- primary reference
- secondary reference
- port-template string
- ptp-tc boolean
- sat-type keyword
- software-repository reference
- sync-e boolean
- uplink-distribution keyword
- file-transfer
- apply-groups reference
- apply-groups-exclude reference
- ftp boolean
- scp boolean
- port-template string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- port string
- apply-groups reference
- apply-groups-exclude reference
- role keyword
- uplink reference
- sat-type keyword
- port-topology reference
- apply-groups reference
- apply-groups-exclude reference
- far-end-port-id reference

```

### 3.42.1 satellite command descriptions

#### satellite

Synopsis	Enter the <b>satellite</b> context
Context	<b>configure satellite</b>
Tree	<a href="#">satellite</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### ethernet-satellite [[satellite-id](#)] *number*

Synopsis	Enter the <b>ethernet-satellite</b> list instance
Context	<b>configure satellite ethernet-satellite</b> <i>number</i>
Tree	<a href="#">ethernet-satellite</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### [\[satellite-id\]](#) *number*

Synopsis	The unique index identifying this satellite
Context	<b>configure satellite ethernet-satellite</b> <i>number</i>
Tree	<a href="#">ethernet-satellite</a>
Range	1 to 20
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **admin-state** *keyword*

Synopsis	Administrative state of the satellite
Context	<b>configure satellite ethernet-satellite</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### central-frequency-clock

Synopsis	Enter the <b>central-frequency-clock</b> context
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a>
Tree	<a href="#">central-frequency-clock</a>
Description	Commands in this context configure frequency references used in the Ethernet satellite. The <b>configure satellite ethernet-satellite sync-e</b> command must be configured to <b>true</b> before being committed. Otherwise, an error message is generated.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### ref1

Synopsis	Enter the <b>ref1</b> context
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a> <a href="#">ref1</a>
Tree	<a href="#">ref1</a>
Description	Commands in this context configure options for the first timing reference used in the Ethernet satellite. The source ports for ref1 can be either uplinks or client ports.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### admin-state *keyword*

Synopsis	Administrative state of the satellite timing reference
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a> <a href="#">ref1</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**quality-level-override** *keyword*

Synopsis	Quality level of the satellite timing reference
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a> <a href="#">ref1</a> <a href="#">quality-level-override</a> <i>keyword</i>
Tree	<a href="#">quality-level-override</a>
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source-port** *string*

Synopsis	Source port for timing reference within satellite
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a> <a href="#">ref1</a> <a href="#">source-port</a> <i>string</i>
Tree	<a href="#">source-port</a>
Description	This command configures the source port used for the input reference to the frequency clock.  The port can be any port of the Ethernet satellite.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ref2**

Synopsis	Enter the <b>ref2</b> context
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a> <a href="#">ref2</a>
Tree	<a href="#">ref2</a>
Description	Commands in this context configure options for the second timing reference used in the Ethernet satellite.  The source ports for ref2 can be either uplinks or client ports.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the satellite timing reference
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**quality-level-override** *keyword*

Synopsis	Quality level of the satellite timing reference
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <b>quality-level-override</b> <i>keyword</i>
Tree	<a href="#">quality-level-override</a>
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source-port** *string*

Synopsis	Source port for timing reference within satellite
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">ethernet-satellite</a> <i>number</i> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <b>source-port</b> <i>string</i>
Tree	<a href="#">source-port</a>
Description	This command configures the source port used for the input reference to the frequency clock.  The port can be any port of the Ethernet satellite.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**client-down-delay** *number*

Synopsis	Delay between uplink as unavailable and disabling ports
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Context	<b>configure satellite ethernet-satellite</b> <i>number client-down-delay number</i>
Tree	<a href="#">client-down-delay</a>
Range	0 to 1800
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **console-access** *keyword*

Synopsis	Satellite console interface access
Context	<b>configure satellite ethernet-satellite</b> <i>number console-access keyword</i>
Tree	<a href="#">console-access</a>
Options	enable, disable
Default	disable
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure satellite ethernet-satellite</b> <i>number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dynamic-uplink** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable dynamic uplink resilience for Ethernet satellite
Context	<b>configure satellite ethernet-satellite</b> <i>number dynamic-uplink boolean</i>
Tree	<a href="#">dynamic-uplink</a>
Default	false
Introduced	22.5.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **feature** *keyword*

Synopsis Functionality to enable  
 Context **configure** [satellite ethernet-satellite](#) *number feature keyword*  
 Tree [feature](#)  
 Options local-forward, ptp-tc  
 Max. 2  
 Instances  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis MAC address for the satellite chassis  
 Context **configure** [satellite ethernet-satellite](#) *number mac-address string*  
 Tree [mac-address](#)  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-map** [[client-port-id](#)] *reference*

Synopsis Enter the **port-map** list instance  
 Context **configure** [satellite ethernet-satellite](#) *number port-map reference*  
 Tree [port-map](#)  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[client-port-id]** *reference*

Synopsis Satellite client port associated with the port mapping  
 Context **configure** [satellite ethernet-satellite](#) *number port-map reference*  
 Tree [port-map](#)  
 Reference **configure** [port](#) *string*

Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### primary reference

Synopsis	Primary satellite uplink for the associate client port
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">port-map</a> <i>reference</i> <a href="#">primary</a> <i>reference</i>
Tree	<a href="#">primary</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### secondary reference

Synopsis	Secondary satellite uplink for associate client port
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">port-map</a> <i>reference</i> <a href="#">secondary</a> <i>reference</i>
Tree	<a href="#">secondary</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### port-template *string*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Port template name
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">port-template</a> <i>string</i>
Tree	<a href="#">port-template</a>
String Length	1 to 32
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ptp-tc** *boolean*

Synopsis	Enable the IEEE 1588 transparent clock function
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">ptp-tc</a> <i>boolean</i>
Tree	<a href="#">ptp-tc</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sat-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of satellite variant for the associated chassis
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">sat-type</a> <i>keyword</i>
Tree	<a href="#">sat-type</a>
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56, es48-sfpp+6-qsfp28
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**software-repository** *reference*

Synopsis	Software repository bound to the associated satellite
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">software-repository</a> <i>reference</i>
Tree	<a href="#">software-repository</a>
Reference	<b>configure</b> <a href="#">system software-repository</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sync-e** *boolean*

Synopsis	Enable the synchronous Ethernet operation
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <a href="#">sync-e</a> <i>boolean</i>

Tree	<a href="#">sync-e</a>
Description	<p>When configured to <b>true</b>, this command enables the Ethernet satellite for synchronous Ethernet operation so that the transmit timing of the satellite access ports use the frequency of the central clock of the host router.</p> <p>To enable this functionality, both host ports on the router that connect to the U1 and U2 ports of the satellite must be synchronous Ethernet-capable ports.</p> <p>When configured to <b>false</b>, the command disables the Ethernet satellite for synchronous Ethernet operation.</p>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **uplink-distribution** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding complex type for uplink distribution
Context	<b>configure</b> <a href="#">satellite ethernet-satellite</a> <i>number</i> <b>uplink-distribution</b> <i>keyword</i>
Tree	<a href="#">uplink-distribution</a>
Description	<p>This command specifies the forwarding complex used for the satellite uplink association to the ports.</p> <p>With <b>single-complex</b>, all uplinks for the associated satellite must be connected to ports using a single forwarding complex.</p> <p>With <b>dual-complex</b>, all uplinks for the associated satellite must be connected to ports using a double forwarding complex. This option optimizes the resources across the two complexes.</p>
Options	single-complex, dual-complex
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **file-transfer**

Synopsis	Enter the <b>file-transfer</b> context
Context	<b>configure</b> <a href="#">satellite file-transfer</a>
Tree	<a href="#">file-transfer</a>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ftp** *boolean*

Synopsis Use FTP between host and satellite

Context **configure** [satellite file-transfer ftp](#) *boolean*

Tree [ftp](#)

Description When configured to **true**, the file transfer FTP is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.

Default true

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **scp** *boolean*

Synopsis Use FTP between host and satellite

Context **configure** [satellite file-transfer scp](#) *boolean*

Tree [scp](#)

Description When configured to **true**, the file transfer SCP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.

When configured to **false**, the file transfer FTP protocol is used between 7750 SR or 7950 XRS host and the 7210 SAS Ethernet satellite.

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-template** [[template-name](#)] *string*

Synopsis Enter the **port-template** list instance

Context **configure** [satellite port-template](#) *string*

Tree [port-template](#)

Introduced 19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[template-name] string**

Synopsis	Associated port template name
Context	<b>configure satellite port-template string</b>
Tree	<b>port-template</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state keyword**

Synopsis	Administrative state of the port template
Context	<b>configure satellite port-template string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure satellite port-template string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**port [sat-phys-port-id] string**

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure satellite port-template string port string</b>
Tree	<b>port</b>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[sat-phys-port-id]** *string*

Synopsis	Satellite physical port ID
Context	<b>configure</b> <a href="#">satellite port-template</a> <i>string</i> <a href="#">port</a> <i>string</i>
Tree	<a href="#">port</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**role** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Satellite port role
Context	<b>configure</b> <a href="#">satellite port-template</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">role</a> <i>keyword</i>
Tree	<a href="#">role</a>
Options	none, uplink, client
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**uplink** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Uplink association used for associated satellite port
Context	<b>configure</b> <a href="#">satellite port-template</a> <i>string</i> <a href="#">port</a> <i>string</i> <a href="#">uplink</a> <i>reference</i>
Tree	<a href="#">uplink</a>
Reference	<b>configure</b> <a href="#">satellite port-template</a> <i>string</i> <a href="#">port</a> <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sat-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Satellite type for use with the port template
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">port-template</a> <i>string</i> <a href="#">sat-type</a> <i>keyword</i>
Tree	<a href="#">sat-type</a>
Options	es48-1gb-sfp, es24-1gb-sfp, es48-1gb-tx, es24-1gb-tx, es64-10gb-sfpp+4-100gb-cfp4, es24-sass-1gb-sfp, es48-sass-1gb-sfp, es24-sasmxp-1gb-sfp, es64-10gb-sfpp+4-100gb-qsfp28, es24-sfpp+8-sfp28+2-qsfp28, es32-qsfp28+4-qsfpdd, es6-qsfpdd+48-sfp56, es48-sfpp+6-qsfp28
Notes	This element is mandatory.
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**port-topology** [[local-port-id](#)] *reference*

Synopsis	Enter the <b>port-topology</b> list instance
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">port-topology</a> <i>reference</i>
Tree	<a href="#">port-topology</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[local-port-id]** *reference*

Synopsis	Local port identifier
Context	<b>configure</b> <a href="#">satellite</a> <a href="#">port-topology</a> <i>reference</i>
Tree	<a href="#">port-topology</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## far-end-port-id *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Far end port identifier.
Context	<b>configure</b> <a href="#">satellite port-topology reference</a> <a href="#">far-end-port-id reference</a>
Tree	<a href="#">far-end-port-id</a>
Reference	<b>configure</b> <a href="#">port string</a>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### 3.43 service commands

```

configure
- service
- apply-groups reference
- apply-groups-exclude reference
- cpipe string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- customer reference
- description string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- description string
- hold-time-active number
- revert-time (number | keyword)
- sap string
- accounting-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- cem
- packet
- jitter-buffer number
- payload-size number
- report-alarm
- buffer-overflow boolean
- buffer-underrun boolean
- malformed-packets boolean
- packet-loss boolean
- remote-fault boolean
- remote-packet-loss boolean
- remote-rdi boolean
- stray-packets boolean
- rtp-header boolean
- collect-stats boolean
- description string
- dist-cpu-protection reference
- egress
- agg-rate
- adaptation-rule keyword
- burst-limit (number | keyword)
- limit-unused-bandwidth boolean
- rate number
- qos
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-thresh-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- sap-egress

```

configure service cpipe sap egress qos sap-egress overrides

```

- overrides
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
- cir keyword
- pir keyword
- apply-groups reference
- apply-groups-exclude reference
- avg-frame-overhead decimal-number
- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
- low
- percent-reduction-from-mbs (number | keyword)
- hs-class-weight number
- hs-wred-queue
- policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- monitor-queue-depth
- fast-polling boolean
- violation-threshold decimal-number
- parent
- cir-weight number
- weight number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- scheduler-policy
- overrides
- scheduler string
- apply-groups reference
- apply-groups-exclude reference
- parent
- cir-weight number
- weight number
- rate
- cir (number | keyword)
- pir (number | keyword)
- policy-name reference
- virtual-port
- vport-name reference
- endpoint reference
- ingress
- qos
- policer-control-policy
- overrides
- apply-groups reference

```

configure service cpipe sap ingress qos policer-control-policy overrides apply-groups-exclude

```

- apply-groups-exclude reference
- root
  - max-rate (number | keyword)
  - priority-mbs-thresholds
    - min-thresh-separation (number | keyword)
    - priority number
      - apply-groups reference
      - apply-groups-exclude reference
      - mbs-contribution (number | keyword)
  - policy-name reference
- sap-ingress
  - overrides
    - ip-criteria
      - activate-entry-tag number
    - ipv6-criteria
      - activate-entry-tag number
    - policer reference
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - mbs (number | keyword)
      - packet-byte-offset number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - stat-mode keyword
    - queue reference
      - adaptation-rule
        - cir keyword
        - pir keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - cbs (number | keyword)
      - drop-tail
        - low
          - percent-reduction-from-mbs (number | keyword)
      - mbs (number | keyword)
      - monitor-queue-depth
        - fast-polling boolean
      - parent
        - cir-weight number
        - weight number
      - percent-rate
        - cir decimal-number
        - pir decimal-number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
    - queuing-type keyword
- scheduler-policy
  - overrides
    - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)

```

configure service cpipe sap ingress qos scheduler-policy policy-name

```

    - policy-name reference
  - lag
  - multi-service-site reference
- service-id number
- service-mtu number
- spoke-sdp string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bandwidth (number | keyword)
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
  - control-word boolean
  - description string
- egress
  - qos
    - network
      - policy-name reference
      - port-redirect-group
        - group-name reference
        - instance number
    - vc-label number
  - endpoint
    - icb boolean
    - name reference
    - precedence (number | keyword)
- ingress
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
        - policy-name reference
    - vc-label number
  - test boolean
  - vc-switching boolean
  - vc-type keyword
  - vpn-id number
- customer string
  - apply-groups reference
  - apply-groups-exclude reference
  - contact string
  - customer-id number
  - description string
  - multi-service-site string
    - apply-groups reference
    - apply-groups-exclude reference
  - assignment
    - card number
    - fpe reference
    - port string
  - description string
- egress
  - agg-rate
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - policer-control-policy reference
  - scheduler-policy
    - overrides
      - scheduler string
      - apply-groups reference

```

configure service customer multi-service-site egress scheduler-policy overrides scheduler apply-groups-exclude

```

    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
- ingress
  - policer-control-policy reference
  - scheduler-policy
    - overrides
      - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - policy-name reference
  - phone string
- epipe string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bgp number
  - adv-service-mtu number
  - apply-groups reference
  - apply-groups-exclude reference
  - pw-template-binding reference
    - apply-groups reference
    - apply-groups-exclude reference
    - bfd-liveness boolean
    - bfd-template reference
    - endpoint reference
    - import-rt string
  - route-distinguisher (keyword | vpn-route-distinguisher)
  - route-target
    - export string
    - import string
  - vsi-export reference
  - vsi-import reference
- bgp-evpn
  - apply-groups reference
  - apply-groups-exclude reference
  - evi number
  - local-attachment-circuit string
    - apply-groups reference
    - apply-groups-exclude reference
    - bgp number
    - endpoint reference
    - eth-tag number
- mpls number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-bind-tunnel
    - allow-flex-algo-fallback boolean
    - ecmp number
    - enforce-strict-tunnel-tagging boolean
    - resolution keyword
    - resolution-filter

```

configure service epipe bgp-evpn mpls auto-bind-tunnel resolution-filter bgp

- **bgp** *boolean*
- **ldp** *boolean*
- **mpls-fwd-policy** *boolean*
- **rib-api** *boolean*
- **rsvp** *boolean*
- **sr-isis** *boolean*
- **sr-ospf** *boolean*
- **sr-ospf3** *boolean*
- **sr-policy** *boolean*
- **sr-te** *boolean*
- **udp** *boolean*
- **weighted-ecmp** *boolean*
- **control-word** *boolean*
- **default-route-tag** *string*
- **domain-id** *string*
- **dynamic-egress-label-limit** *boolean*
- **ecmp** *number*
- **entropy-label** *boolean*
- **evi-three-byte-auto-rt** *boolean*
- **force-vc-forwarding** *keyword*
- **hash-label** *boolean*
- **mh-mode** *keyword*
- **oper-group** *reference*
- **route-next-hop**
  - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **system-ipv4**
  - **system-ipv6**
- **send-tunnel-encap**
  - **mpls** *boolean*
  - **mpls-over-udp** *boolean*
- **remote-attachment-circuit** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bgp** *number*
- **endpoint** *reference*
- **eth-tag** *number*
- **segment-routing-v6** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-route-tag** *string*
- **domain-id** *string*
- **ecmp** *number*
- **evi-three-byte-auto-rt** *boolean*
- **force-vc-forwarding** *keyword*
- **mh-mode** *keyword*
- **oper-group** *reference*
- **resolution** *keyword*
- **route-next-hop**
  - **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **system-ipv4**
  - **system-ipv6**
- **source-address** *string*
- **srv6**
  - **default-locator** *string*
  - **instance** *reference*
- **vlan** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **default-route-tag** *string*
- **ecmp** *number*
- **evi-three-byte-auto-rt** *boolean*
- **send-tunnel-encap** *boolean*

configure service epipe bgp-evpn vxlan vxlan-instance

- **vxlan-instance** *reference*
- **bgp-mh-site** *string*
- **activation-timer** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **boot-timer** *number*
- **id** *number*
- **min-down-timer** *number*
- **preference** *number*
- **sap** *string*
- **bgp-vpws**
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **local-ve**
- **id** *number*
- **name** *string*
- **remote-ve** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **id** *number*
- **customer** *reference*
- **description** *string*
- **endpoint** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **hold-time-active** *number*
- **revert-time** (*number* | *keyword*)
- **standby-signaling** *keyword*
- **eth-cfm**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **ignore-l2vpn-mtu-mismatch** *boolean*
- **load-balancing**
- **lbl-eth-or-ip-l4-teid** *boolean*
- **per-service-hashing** *boolean*
- **nat-outside** *number*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **oper-group** *reference*
- **pbb**
- **force-qtag-forwarding** *boolean*
- **local-switch-service-state** *keyword*
- **tunnel**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **backbone-dest-mac** *string*
- **backbone-dest-mac-name** *reference*
- **backbone-vpls-service-name** *reference*
- **isid** *number*
- **sap** *string*
- **aarp**
- **id** *reference*
- **type** *keyword*
- **accounting-policy** *reference*
- **admin-state** *keyword*
- **app-profile** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **bandwidth** *number*
- **cflowd** *boolean*



configure service epipe sap collect-stats

- **collect-stats** *boolean*
- **cpu-protection**
  - **eth-cfm-monitoring**
    - **aggregate**
    - **car**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **dist-cpu-protection** *reference*
- **egress**
  - **agg-rate**
    - **adaptation-rule** *keyword*
    - **burst-limit** (*number* | *keyword*)
    - **limit-unused-bandwidth** *boolean*
    - **queue-frame-based-accounting** *boolean*
    - **rate** *number*
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
    - **mac** *reference*
  - **qos**
    - **policer-control-policy**
      - **overrides**
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **root**
        - **max-rate** (*number* | *keyword*)
        - **priority-mbs-thresholds**
          - **min-thresh-separation** (*number* | *keyword*)
          - **priority** *number*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
            - **mbs-contribution** (*number* | *keyword*)
    - **policy-name** *reference*
  - **qinq-mark-top-only** *boolean*
  - **sap-egress**
    - **overrides**
      - **hs-secondary-shaper** *string*
      - **hs-wrr-group** *reference*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **hs-class-weight** *number*
        - **percent-rate** *decimal-number*
        - **rate** (*number* | *keyword*)
      - **policer** *reference*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **cbs** (*number* | *keyword*)
        - **mbs** (*number* | *keyword*)
        - **packet-byte-offset** *number*
        - **percent-rate**
          - **cir** *decimal-number*
          - **pir** *decimal-number*
        - **rate**
          - **cir** (*number* | *keyword*)
          - **pir** (*number* | *keyword*)
        - **stat-mode** *keyword*
      - **queue** *reference*
        - **adaptation-rule**
          - **cir** *keyword*
          - **pir** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **avg-frame-overhead** *decimal-number*

configure service epipe sap egress qos sap-egress overrides queue burst-limit

```

- burst-limit (number | keyword)
- cbs (number | keyword)
- drop-tail
  - low
    - percent-reduction-from-mbs (number | keyword)
- hs-class-weight number
- hs-wred-queue
  - policy reference
- hs-wrr-weight number
- mbs (number | keyword)
- monitor-queue-depth
  - fast-polling boolean
  - violation-threshold decimal-number
- parent
  - cir-weight number
  - weight number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
- overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
  - cir-weight number
  - weight number
  - rate
  - cir (number | keyword)
  - pir (number | keyword)
  - policy-name reference
- virtual-port
  - vport-name reference
- endpoint reference
- eth-cfm
- ais boolean
- apply-groups reference
- apply-groups-exclude reference
- collect-lmm-fc-stats
  - fc keyword
  - fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
- ais
  - client-meg-level number
  - interface-support boolean
  - interval number
  - low-priority-defect keyword
  - priority number
- alarm-notification
  - fng-alarm-time number
  - fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number

```

## configure service epipe sap eth-cfm mep ccm-padding-size

```

- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- snelch-ingress-ctag-levels number
- snelch-ingress-levels number
- ethernet
- llf
- admin-state keyword
- ignore-oper-down boolean
- ingress
- filter
- ip reference
- ipv6 reference
- mac reference
- qos
- match-qinq-dot1p keyword
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-thresh-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- sap-ingress
- fp-redirect-group
- group-name reference
- instance number
- overrides
- ip-criteria
- activate-entry-tag number

```

configure service epipe sap ingress qos sap-ingress overrides ipv6-criteria

- **ipv6-criteria**
  - **activate-entry-tag** *number*
- **policer** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cbs** (*number* | *keyword*)
  - **mbs** (*number* | *keyword*)
  - **packet-byte-offset** *number*
  - **percent-rate**
    - **cir** *decimal-number*
    - **pir** *decimal-number*
  - **rate**
    - **cir** (*number* | *keyword*)
    - **pir** (*number* | *keyword*)
  - **stat-mode** *keyword*
- **queue** *reference*
  - **adaptation-rule**
    - **cir** *keyword*
    - **pir** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cbs** (*number* | *keyword*)
  - **drop-tail**
    - **low**
      - **percent-reduction-from-mbs** (*number* | *keyword*)
  - **mbs** (*number* | *keyword*)
  - **monitor-queue-depth**
    - **fast-polling** *boolean*
  - **parent**
    - **cir-weight** *number*
    - **weight** *number*
  - **percent-rate**
    - **cir** *decimal-number*
    - **pir** *decimal-number*
  - **rate**
    - **cir** (*number* | *keyword*)
    - **pir** (*number* | *keyword*)
- **policy-name** *reference*
- **queuing-type** *keyword*
- **scheduler-policy**
  - **overrides**
    - **scheduler** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **parent**
      - **cir-weight** *number*
      - **weight** *number*
    - **rate**
      - **cir** (*number* | *keyword*)
      - **pir** (*number* | *keyword*)
  - **policy-name** *reference*
- **qtag-manipulation**
  - **c-tag** (*number* | *keyword*)
  - **push-dot1q-vlan** (*number* | *keyword*)
  - **s-tag** *number*
- **l2tpv3-session**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **pseudo-wire**
    - **ethernet**
      - **ethernet-vlan-id** *number*
  - **router**
    - **group** *string*

configure service epipe sap l2tpv3-session router router-instance

```

    - router-instance string
    - vc-id number
  - lag
    - link-map-profile number
    - per-link-hash
      - class number
      - weight number
  - mc-ring
    - apply-groups reference
    - apply-groups-exclude reference
    - ring-node string
  - monitor-oper-group reference
  - multi-service-site reference
  - oper-group reference
  - transit-policy
    - ip reference
    - prefix reference
  - segment-routing-v6 number
    - apply-groups reference
    - apply-groups-exclude reference
    - locator reference
      - apply-groups reference
      - apply-groups-exclude reference
      - function
        - end-dx2
          - value number
    - micro-segment-locator reference
      - apply-groups reference
      - apply-groups-exclude reference
      - function
        - udx2
          - value number
  - service-id number
  - service-mtu number
  - spoke-sdp string
    - aarp
      - id reference
      - type keyword
    - accounting-policy reference
    - admin-state keyword
    - adv-service-mtu number
    - app-profile reference
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth (number | keyword)
    - bfd
      - bfd-liveness
        - encap keyword
      - bfd-template reference
      - failure-action keyword
      - wait-for-up-timer number
    - collect-stats boolean
    - control-word boolean
    - cpu-protection
      - eth-cfm-monitoring
        - aggregate
        - car
      - mac-monitoring
      - policy-id reference
    - description string
    - egress
      - filter
        - ip reference
        - ipv6 reference

```

## configure service epipe spoke-sdp egress filter mac

```

- mac reference
- l2tpv3
- cookie string
- qos
  - network
    - policy-name reference
    - port-redirect-group
      - group-name reference
      - instance number
- vc-label number
- endpoint
- icb boolean
- name reference
- precedence (number | keyword)
- entropy-label
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
  - ais
    - client-meg-level number
    - interface-support boolean
    - interval number
    - low-priority-defect keyword
    - priority number
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - cfm-vlan-tag string
  - csf
    - multiplier decimal-number
  - description string
  - direction keyword
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
  - lbm-svc-act-responder boolean
  - low-priority-defect keyword
  - mac-address string
  - one-way-delay-threshold number
  - primary-vlan boolean
- mip primary-vlan (number | keyword)

```



configure service ies aa-interface sap admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress
  - filter
    - ip reference
  - qos
    - sap-egress
      - policy-name reference
  - virtual-port
    - vport-name reference
- fwd-wholesale
  - pppoe-service reference
- ingress
  - qos
    - sap-ingress
      - overrides
      - policy-name reference
- lag
- aarp-interface string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- ip-mtu number
- spoke-sdp string
  - aarp
    - id reference
    - type keyword
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress
    - filter
      - ip reference
      - vc-label number
  - ingress
    - filter
      - ip reference
      - vc-label number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- customer reference
- description string
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
- igmp-host-tracking
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - expiry-time number
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - direction keyword

```



configure service ies interface cflowd-parameters sampling sample-profile

```

    - sample-profile (keyword | number)
    - type keyword
  - cpu-protection reference
  - description string
  - dynamic-tunnel-redundant-nexthop string
  - hold-time
  - ipv4
    - down
      - init-only boolean
      - seconds number
    - up
      - seconds number
  - ipv6
    - down
      - init-only boolean
      - seconds number
    - up
      - seconds number
  - if-attribute
    - admin-group reference
    - srlg-group reference
  - ingress
    - destination-class-lookup boolean
    - policy-accounting reference
  - ingress-stats boolean
  - ip-mtu number
  - ipsec
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ip-exception reference
    - ipsec-tunnel string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - bfd
      - bfd-designate boolean
      - bfd-liveness
        - dest-ip string
        - interface string
        - service-name string
    - clear-df-bit boolean
    - copy-traffic-class-upon-decapsulation boolean
    - description string
    - encapsulated-ip-mtu number
    - icmp-generation
      - frag-required
        - admin-state keyword
        - interval number
        - message-count number
    - icmp6-generation
      - packet-too-big
        - admin-state keyword
        - interval number
        - message-count number
    - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword

```

configure service ies interface ipsec ipsec-tunnel key-exchange dynamic cert status-verify secondary

```

    - secondary keyword
    - trust-anchor-profile reference
  - id
    - fqdn string
    - ipv4 string
    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
  - ike-policy reference
  - ipsec-transform reference
  - pre-shared-key string
  - manual
    - keys number direction keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - encryption-key string
    - ipsec-transform reference
    - spi number
  - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-sap number
  - private-service string
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - replay-window number
  - security-policy
    - id number
    - strict-match boolean
  - ipv6-exception reference
  - public-sap number
  - tunnel-group reference
- ipv4
  - addresses
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - lease-populate
    - max-leases number
  - option-82
    - action keyword
    - circuit-id
    - ascii-tuple
    - ifindex

```

configure service ies interface ipv4 dhcp option-82 circuit-id none

```

- none
- sap-id
- vlan-ascii-tuple
- remote-id
- ascii-string string
- mac
- none
- vendor-specific-option
- client-mac-address boolean
- pool-name boolean
- sap-id boolean
- service-id boolean
- string string
- system-id boolean
- proxy-server
- admin-state keyword
- emulated-server string
- lease-time
- radius-override boolean
- value number
- python-policy reference
- relay-plain-bootp boolean
- relay-proxy
- release-update-src-ip boolean
- siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- use-arp boolean
- icmp
- mask-reply boolean
- param-problem
- admin-state keyword
- number number
- seconds number
- redirects
- admin-state keyword
- number number
- seconds number
- ttl-expired
- admin-state keyword
- number number
- seconds number
- unreachableables
- admin-state keyword
- number number
- seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
- host-route
- populate keyword
- apply-groups reference
- apply-groups-exclude reference
- route-tag number
- learn-unsolicited boolean
- limit
- log-only boolean
- max-entries number
- threshold number
- local-proxy-arp boolean
- populate boolean
- proactive-refresh boolean

```

configure service ies interface ipv4 neighbor-discovery proxy-arp-policy

```

- proxy-arp-policy reference
- remote-proxy-arp boolean
- retry-timer number
- static-neighbor string
  - apply-groups reference
  - apply-groups-exclude reference
  - mac-address string
- static-neighbor-unnumbered
  - mac-address string
- timeout number
- primary
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - broadcast keyword
  - prefix-length number
  - track-srrp number
- qos-route-lookup keyword
- secondary string
  - apply-groups reference
  - apply-groups-exclude reference
  - broadcast keyword
  - igp-inhibit boolean
  - prefix-length number
  - track-srrp number
- tcp-mss number
- unnumbered
  - ip-address string
  - ip-int-name string
  - system
- urpf-check
  - ignore-default boolean
  - mode keyword
- vrrp number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - backup string
  - bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip string
    - interface-name string
    - service-name string
  - init-delay number
  - mac string
  - master-int-inherit boolean
  - message-interval number
  - monitor-oper-group reference
  - ntp-reply boolean
  - oper-group reference
  - owner boolean
  - passive boolean
  - ping-reply boolean
  - policy reference
  - preempt boolean
  - priority number
  - ssh-reply boolean
  - standby-forwarding boolean
  - telnet-reply boolean
  - traceroute-reply boolean
- ipv6
  - address string

```

configure service ies interface ipv6 address apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- duplicate-address-detection boolean
- eui-64 boolean
- prefix-length number
- primary-preference number
- track-srrp number
- bfd
- admin-state keyword
- echo-receive number
- multiplier number
- receive number
- transmit-interval number
- type keyword
- dhcp6
- apply-groups reference
- apply-groups-exclude reference
- relay
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- lease-populate
- max-nbr-of-leases number
- route-populate
- na boolean
- pd
- exclude boolean
- ta boolean
- link-address string
- neighbor-resolution boolean
- option
- apply-groups reference
- apply-groups-exclude reference
- interface-id
- ascii-tuple
- if-index
- sap-id
- string string
- remote-id boolean
- python-policy reference
- server string
- source-address string
- user-db reference
- server
- apply-groups reference
- apply-groups-exclude reference
- max-nbr-of-leases number
- prefix-delegation
- admin-state keyword
- prefix string
- apply-groups reference
- apply-groups-exclude reference
- client-id
- duid string
- iaid number
- preferred-lifetime (number | keyword)
- valid-lifetime (number | keyword)
- duplicate-address-detection boolean
- forward-ipv4-packets boolean
- icmp6
- packet-too-big
- admin-state keyword
- number number

```

configure service ies interface ipv6 icmp6 packet-too-big seconds

```

- seconds number
- param-problem
- admin-state keyword
- number number
- seconds number
- redirects
- admin-state keyword
- number number
- seconds number
- time-exceeded
- admin-state keyword
- number number
- seconds number
- unreachablees
- admin-state keyword
- number number
- seconds number
- link-local-address
- address string
- duplicate-address-detection boolean
- local-dhcp-server reference
- neighbor-discovery
- host-route
- populate keyword
- apply-groups reference
- apply-groups-exclude reference
- route-tag number
- learn-unsolicited keyword
- limit
- log-only boolean
- max-entries number
- threshold number
- local-proxy-nd boolean
- proactive-refresh keyword
- proxy-nd-policy reference
- reachable-time number
- secure-nd
- admin-state keyword
- allow-unsecured-msgs boolean
- public-key-min-bits number
- security-parameter number
- stale-time number
- static-neighbor string
- apply-groups reference
- apply-groups-exclude reference
- mac-address string
- qos-route-lookup keyword
- tcp-mss number
- urpf-check
- ignore-default boolean
- mode keyword
- vrrp number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- backup string
- bfd-liveness
- apply-groups reference
- apply-groups-exclude reference
- dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
- interface-name string
- service-name string
- init-delay number
- mac string

```

configure service ies interface ipv6 vrrp master-int-inherit

- **master-int-inherit** *boolean*
- **message-interval** *number*
- **monitor-oper-group** *reference*
- **ntp-reply** *boolean*
- **oper-group** *reference*
- **owner** *boolean*
- **passive** *boolean*
- **ping-reply** *boolean*
- **policy** *reference*
- **preempt** *boolean*
- **priority** *number*
- **standby-forwarding** *boolean*
- **telnet-reply** *boolean*
- **traceroute-reply** *boolean*
- **load-balancing**
  - **flow-label-load-balancing** *boolean*
  - **ip-load-balancing** *keyword*
  - **spi-load-balancing** *boolean*
  - **teid-load-balancing** *boolean*
- **loopback** *boolean*
- **mac** *string*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **multicast-network-domain** *reference*
- **ping-template**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **destination-address** *string*
  - **name** *reference*
- **ptp-hw-assist**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **radius-auth-policy** *reference*
- **sap** *string*
  - **aarp**
    - **id** *reference*
    - **type** *keyword*
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **anti-spoof** *keyword*
  - **app-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **calling-station-id** *string*
  - **collect-stats** *boolean*
  - **cpu-protection**
    - **eth-cfm-monitoring**
      - **aggregate**
      - **car**
    - **ip-src-monitoring**
    - **mac-monitoring**
    - **policy-id** *reference*
  - **description** *string*
  - **dist-cpu-protection** *reference*
  - **egress**
    - **agg-rate**
      - **adaptation-rule** *keyword*
      - **burst-limit** (*number* | *keyword*)
      - **limit-unused-bandwidth** *boolean*
      - **queue-frame-based-accounting** *boolean*

configure service ies interface sap egress agg-rate rate

- **rate** *number*
- **filter**
- **ip** *reference*
- **ipv6** *reference*
- **qos**
- **policer-control-policy**
- **overrides**
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **root**
- **max-rate** (*number* | *keyword*)
- **priority-mbs-thresholds**
- **min-thresh-separation** (*number* | *keyword*)
- **priority** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mbs-contribution** (*number* | *keyword*)
- **policy-name** *reference*
- **qinq-mark-top-only** *boolean*
- **sap-egress**
- **overrides**
- **hs-secondary-shaper** *string*
- **hs-wrr-group** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **hs-class-weight** *number*
- **percent-rate** *decimal-number*
- **rate** (*number* | *keyword*)
- **policer** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cbs** (*number* | *keyword*)
- **mbs** (*number* | *keyword*)
- **packet-byte-offset** *number*
- **percent-rate**
- **cir** *decimal-number*
- **pir** *decimal-number*
- **rate**
- **cir** (*number* | *keyword*)
- **pir** (*number* | *keyword*)
- **stat-mode** *keyword*
- **queue** *reference*
- **adaptation-rule**
- **cir** *keyword*
- **pir** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **avg-frame-overhead** *decimal-number*
- **burst-limit** (*number* | *keyword*)
- **cbs** (*number* | *keyword*)
- **drop-tail**
- **low**
- **percent-reduction-from-mbs** (*number* | *keyword*)
- **hs-class-weight** *number*
- **hs-wred-queue**
- **policy** *reference*
- **hs-wrr-weight** *number*
- **mbs** (*number* | *keyword*)
- **monitor-queue-depth**
- **fast-polling** *boolean*
- **violation-threshold** *decimal-number*
- **parent**
- **cir-weight** *number*
- **weight** *number*



configure service ies interface sap egress qos sap-egress overrides queue percent-rate

```

    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
  - scheduler-policy
    - overrides
      - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
  - virtual-port
    - vport-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais boolean
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - csf
    - multiplier decimal-number
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
  - one-way-delay-threshold number
  - squelch-ingress-levels number

```

configure service ies interface sap fwd-wholesale

- **fwd-wholesale**
  - **pppoe-service** *reference*
  - **host-admin-state** *keyword*
  - **host-lockout-policy** *reference*
  - **ingress**
    - **filter**
      - **ip** *reference*
      - **ipv6** *reference*
    - **qos**
      - **match-qinq-dot1p** *keyword*
      - **policer-control-policy**
        - **overrides**
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
        - **root**
          - **max-rate** (*number | keyword*)
          - **priority-mbs-thresholds**
            - **min-thresh-separation** (*number | keyword*)
            - **priority** *number*
              - **apply-groups** *reference*
              - **apply-groups-exclude** *reference*
              - **mbs-contribution** (*number | keyword*)
    - **policy-name** *reference*
  - **sap-ingress**
    - **fp-redirect-group**
      - **group-name** *reference*
      - **instance** *number*
    - **overrides**
      - **ip-criteria**
        - **activate-entry-tag** *number*
      - **ipv6-criteria**
        - **activate-entry-tag** *number*
    - **policer** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **cbs** (*number | keyword*)
      - **mbs** (*number | keyword*)
      - **packet-byte-offset** *number*
      - **percent-rate**
        - **cir** *decimal-number*
        - **pir** *decimal-number*
      - **rate**
        - **cir** (*number | keyword*)
        - **pir** (*number | keyword*)
      - **stat-mode** *keyword*
    - **queue** *reference*
      - **adaptation-rule**
        - **cir** *keyword*
        - **pir** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **cbs** (*number | keyword*)
      - **drop-tail**
        - **low**
          - **percent-reduction-from-mbs** (*number | keyword*)
      - **mbs** (*number | keyword*)
      - **monitor-queue-depth**
        - **fast-polling** *boolean*
      - **parent**
        - **cir-weight** *number*
        - **weight** *number*
      - **percent-rate**
        - **cir** *decimal-number*
        - **pir** *decimal-number*

configure service ies interface sap ingress qos sap-ingress overrides queue rate

```

    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
    - queuing-type keyword
  - scheduler-policy
    - overrides
      - scheduler string
      - apply-groups reference
      - apply-groups-exclude reference
      - parent
        - cir-weight number
        - weight number
      - rate
        - cir (number | keyword)
        - pir (number | keyword)
      - policy-name reference
    - queue-group-redirect-list reference
- ip-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - clear-df-bit boolean
  - delivery-service string
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - dscp keyword
  - encapsulated-ip-mtu number
  - gre-header
    - admin-state keyword
  - key
    - admin-state keyword
    - receive number
    - send number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - number number
      - seconds number
  - ip-mtu number
  - ipsec-transport-mode-profile reference
  - local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - pmtu-discovery-aging number
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - reassembly (number | keyword)
  - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- ipsec-gateway string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cert
    - cert-profile reference
    - status-verify
      - default-result keyword
      - primary keyword

```

configure service ies interface sap ipsec-gateway cert status-verify secondary

```

    - secondary keyword
    - trust-anchor-profile reference
  - client-db
    - fallback boolean
    - name reference
  - default-secure-service
    - interface string
    - service-name string
  - default-tunnel-template reference
  - dhcp-address-assignment
    - dhcpv4
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - gi-address string
      - send-release boolean
      - server
        - address string
        - router-instance string
    - dhcpv6
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - link-address string
      - send-release boolean
      - server
        - address string
        - router-instance string
  - ike-policy reference
  - local
    - address-assignment
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - ipv4
        - dhcp-server string
        - pool string
        - router-instance string
        - secondary-pool string
      - ipv6
        - dhcp-server string
        - pool string
        - router-instance string
    - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - id
    - auto
    - fqdn string
    - ipv4 string
    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
  - max-history-key-records
    - esp number
    - ike number
  - pre-shared-key string
  - radius
    - accounting-policy reference
    - authentication-policy reference
  - ts-list reference
  - lag
    - link-map-profile number
    - per-link-hash
      - class number
      - weight number
  - multi-service-site reference
  - static-host

```

configure service ies interface sap static-host ipv4

```

- ipv4 string mac string
- admin-state keyword
- ancp-string string
- app-profile
-   profile reference
- apply-groups reference
- apply-groups-exclude reference
- int-dest-id string
- sla-profile reference
- sub-profile reference
- subscriber-id
-   string string
-   use-sap-id
- transit-policy
-   ip reference
-   prefix reference
- shcv-policy-ipv4 reference
- spoke-sdp string
- aarp
-   id reference
-   type keyword
- accounting-policy reference
- admin-state keyword
- app-profile reference
- apply-groups reference
- apply-groups-exclude reference
- bfd
-   bfd-liveness
-     encap keyword
-   bfd-template reference
-   failure-action keyword
-   wait-for-up-timer number
- collect-stats boolean
- control-word boolean
- cpu-protection
-   eth-cfm-monitoring
-     aggregate
-     car
-   ip-src-monitoring
-   mac-monitoring
-   policy-id reference
- description string
- egress
-   filter
-     ip reference
-     ipv6 reference
-   qos
-     network
-       policy-name reference
-       port-redirect-group
-         group-name reference
-         instance number
-     vc-label number
- entropy-label
- eth-cfm
-   apply-groups reference
-   apply-groups-exclude reference
-   collect-lmm-fc-stats
-     fc keyword
-     fc-in-profile keyword
-   collect-lmm-stats boolean
-   mep md-admin-name reference ma-admin-name reference mep-id number
-   admin-state keyword
-   ais boolean

```

configure service ies interface spoke-sdp eth-cfm mep alarm-notification

```

- alarm-notification
  - fng-alarm-time number
  - fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- csf
  - multiplier decimal-number
- description string
- eth-test
  - bit-error-threshold number
  - test-pattern
    - crc-tlv boolean
    - pattern keyword
- fault-propagation keyword
- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
  - one-way-delay-threshold number
- squelch-ingress-levels number
- hash-label
  - signal-capability
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
        - policy-name reference
    - vc-label number
- transit-policy
  - ip reference
  - prefix reference
- vc-type keyword
- static-tunnel-redundant-nextthop string
- tos-marking-state keyword
- tunnel boolean
- vas-if-type keyword
- vpls string
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - reclassify-using-qos reference
  - routed-override-filter
    - ip reference
    - ipv6 reference
- evpn
  - arp
    - advertise keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number

```

configure service ies interface vpls evpn arp flood-garp-and-unknown-req

```

    - flood-garp-and-unknown-req boolean
    - learn-dynamic boolean
  - nd
    - advertise keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - route-tag number
      - learn-dynamic boolean
  - ingress
    - routed-override-filter
      - ip reference
      - ipv6 reference
- redundant-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
  - ip-mtu number
  - ipv4
    - primary
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - prefix-length number
      - remote-ip string
  - spoke-sdp string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - control-word boolean
    - description string
    - egress
      - filter
        - ip reference
        - vc-label number
    - ingress
      - filter
        - ip reference
        - vc-label number
  - service-id number
  - subscriber-interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - fwd-service reference
    - fwd-subscriber-interface reference
  - group-interface string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bonding-parameters
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - connection number
      - apply-groups reference

```

configure service ies subscriber-interface group-interface bonding-parameters connection apply-groups-exclude

```

    - apply-groups-exclude reference
    - service string
  - fpe reference
  - multicast
    - connection (number | keyword)
  - brg
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - cflowd-parameters
    - sampling keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - direction keyword
    - sample-profile (keyword | number)
    - type keyword
  - data-trigger
    - accept-ipv6-link-local-address boolean
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - description string
  - dynamic-routes-track-srrp
    - hold-time number
  - gtp-parameters
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - fpe reference
  - gx-policy reference
  - ingress
    - policy-accounting reference
  - ingress-stats boolean
  - ip-mtu number
  - ipoe-linking
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - gratuitous-router-advertisement boolean
    - shared-circuit-id boolean
  - ipoe-session
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - force-auth
      - cid-change boolean
      - rid-change boolean
    - ipoe-session-policy reference
    - min-auth-interval (keyword | number)
    - radius-session-timeout keyword
    - sap-session-limit number
    - session-limit number
    - stateless-redundancy boolean
    - user-db reference
  - ipv4
    - arp-host
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - host-limit number
      - min-auth-interval number

```



configure service ies subscriber-interface group-interface ipv4 arp-host sap-host-limit

```

- sap-host-limit number
- dhcp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- client-applications
- dhcp boolean
- ppp boolean
- description string
- filter reference
- gi-address string
- lease-populate
- l2-header
- mac string
- max-leases number
- match-circuit-id boolean
- offer-selection
- client-mac
- discover-delay number
- mac-address keyword
- discover-delay number
- server string
- apply-groups reference
- apply-groups-exclude reference
- discover-delay number
- option-82
- action keyword
- circuit-id
- ascii-tuple
- ifindex
- none
- sap-id
- vlan-ascii-tuple
- remote-id
- ascii-string string
- mac
- none
- vendor-specific-option
- client-mac-address boolean
- pool-name boolean
- sap-id boolean
- service-id boolean
- string string
- system-id boolean
- proxy-server
- admin-state keyword
- emulated-server string
- lease-time
- radius-override boolean
- value number
- python-policy reference
- relay-proxy
- release-update-src-ip boolean
- siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- user-db reference
- icmp
- mask-reply boolean
- param-problem
- admin-state keyword
- number number

```

configure service ies subscriber-interface group-interface ipv4 icmp param-problem seconds

```

    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
    - use-matching-address boolean
  - unreachable
    - admin-state keyword
    - number number
    - seconds number
  - ignore-df-bit boolean
  - neighbor-discovery
    - local-proxy-arp boolean
    - populate boolean
    - proxy-arp-policy reference
    - remote-proxy-arp boolean
    - timeout number
  - qos-route-lookup keyword
  - urpf-check
    - mode keyword
- ipv6
  - allow-multiple-wan-addresses boolean
  - auto-reply
    - neighbor-solicitation boolean
    - router-solicitation boolean
  - dhcp6
    - allow-client-id-change boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - filter reference
    - option
      - apply-groups reference
      - apply-groups-exclude reference
    - interface-id
      - ascii-tuple
      - if-index
      - sap-id
      - string string
    - remote-id boolean
  - override-slaac boolean
  - pd-managed-route
    - next-hop keyword
  - proxy-server
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - preferred-lifetime (number | keyword)
    - rebind-timer number
    - renew-timer number
    - server-id
      - apply-groups reference
      - apply-groups-exclude reference
      - duid-en-ascii string
      - duid-en-hex string
      - duid-ll
    - valid-lifetime (number | keyword)
  - python-policy reference
  - relay
    - admin-state keyword

```

configure service ies subscriber-interface group-interface ipv6 dhcp6 relay advertise-selection

```

- advertise-selection
  - client-mac
    - mac-address keyword
    - preference-option
      - value number
    - solicit-delay number
  - preference-option
    - value number
  - server string
    - apply-groups reference
    - apply-groups-exclude reference
    - preference-option
      - value number
    - solicit-delay number
  - solicit-delay number
- client-applications
  - dhcp boolean
  - ppp boolean
- description string
- lease-split
  - admin-state keyword
  - valid-lifetime number
- link-address string
- server string
- source-address string
- snooping
  - admin-state keyword
- user-db reference
- user-ident keyword
- ipoe-bridged-mode boolean
- neighbor-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - dad-snooping boolean
  - neighbor-limit number
- qos-route-lookup keyword
- router-advertisements
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
- options
  - current-hop-limit number
  - dns
    - include-rdnss boolean
    - rdnss-lifetime (number | keyword)
  - managed-configuration boolean
  - mtu (number | keyword)
  - other-stateful-configuration boolean
  - reachable-time number
  - retransmit-timer number
  - router-lifetime (number | keyword)
- prefix-options
  - autonomous boolean
  - on-link boolean
  - preferred-lifetime (number | keyword)
  - valid-lifetime (number | keyword)
- router-solicit
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - inactivity-timer (number | keyword)

```

configure service ies subscriber-interface group-interface ipv6 router-solicit min-auth-interval

```

- min-auth-interval number
- user-db reference
- urpf-check
- mode keyword
- local-address-assignment
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- ipv4
- client-applications
- ipoe boolean
- ppp boolean
- default-pool string
- server reference
- ipv6
- client-applications
- ipoe-slaac boolean
- ipoe-wan boolean
- ppp-slaac boolean
- server reference
- mac string
- nasreq-auth-policy reference
- oper-up-while-empty boolean
- pppoe
- admin-state keyword
- anti-spoof keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- dhcp-client
- client-id keyword
- policy reference
- python-policy reference
- sap-session-limit number
- session-limit number
- user-db reference
- radius-auth-policy reference
- redundant-interface reference
- sap string
- accounting-policy reference
- admin-state keyword
- anti-spoof keyword
- app-profile reference
- apply-groups reference
- apply-groups-exclude reference
- calling-station-id string
- collect-stats boolean
- cpu-protection
- eth-cfm-monitoring
- aggregate
- car
- ip-src-monitoring
- mac-monitoring
- policy-id reference
- default-host
- ipv4 reference prefix-length number
- apply-groups reference
- apply-groups-exclude reference
- next-hop string
- ipv6 string prefix-length number
- apply-groups reference
- apply-groups-exclude reference
- next-hop string
- description string

```



configure service ies subscriber-interface group-interface sap igmp-host-tracking

```

- igmp-host-tracking
  - apply-groups reference
  - apply-groups-exclude reference
  - expiry-time number
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - router-alert-check boolean
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - match-qinq-dot1p keyword
    - policer-control-policy
      - policy-name reference
    - sap-ingress
      - policy-name reference
      - queuing-type keyword
    - scheduler-policy
      - policy-name reference
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- static-host
  - ipv4 string mac string
  - admin-state keyword
  - ancp-string string
  - app-profile
    - profile reference
    - scope keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - int-dest-id string
  - managed-route string
    - apply-groups reference
    - apply-groups-exclude reference
  - cpe-check
    - apply-groups reference
    - apply-groups-exclude reference
    - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
    - drop-count number
    - failed-action
      - metric number
      - preference number
      - tag number
      - withdraw boolean
    - interval number
    - log boolean
    - padding-size number
    - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
    - timeout number
  - metric number
  - preference number
  - tag number
- rip-policy reference

```

configure service ies subscriber-interface group-interface sap static-host ipv4 shcv

```

- shcv
- sla-profile reference
- sub-profile reference
- subscriber-id
  - string string
  - use-sap-id
- ipv6 string mac string
- admin-state keyword
- ancp-string string
- app-profile
  - profile reference
  - scope keyword
- apply-groups reference
- apply-groups-exclude reference
- int-dest-id string
- mac-linking string
- managed-route string
  - apply-groups reference
  - apply-groups-exclude reference
- cpe-check
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
    - drop-count number
    - failed-action
      - metric number
      - preference number
      - tag number
      - withdraw boolean
    - interval number
    - log boolean
    - padding-size number
    - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
      - timeout number
      - metric number
      - preference number
      - tag number
- retail-svc-id number
- shcv
- sla-profile reference
- sub-profile reference
- subscriber-id
  - string string
  - use-sap-id
- mac-learning
  - data-triggered boolean
  - single-mac boolean
- sub-sla-mgmt
- admin-state keyword
- defaults
  - app-profile reference
  - int-dest-id
    - string string
    - top-q-tag
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - auto-id
    - sap-id
    - string string
- single-sub-parameters
- non-sub-traffic

```

configure service ies subscriber-interface group-interface sap sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile

```

    - app-profile reference
    - sla-profile reference
    - sub-profile reference
    - subscriber-id string
    - profiled-traffic-only boolean
  - sub-ident-policy reference
  - subscriber-limit (keyword | number)
- sap-parameters
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - sub-sla-mgmt
    - defaults
      - app-profile reference
      - sla-profile reference
      - sub-profile reference
      - subscriber-id
        - auto-id
        - string string
      - sub-ident-policy reference
  - shcv-policy reference
  - shcv-policy-ipv4 reference
  - shcv-policy-ipv6 reference
- srrp number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip string
    - interface-name string
    - service-name string
  - description string
  - gw-mac string
  - keep-alive-interval number
  - message-path reference
  - monitor-oper-group
    - group-name reference
    - priority-step number
  - one-garp-per-sap boolean
  - policy reference
  - preempt boolean
  - priority number
  - send-fib-population-packets keyword
- suppress-aa-sub boolean
- tos-marking-state keyword
- type keyword
- wlan-gw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - purpose
      - xconnect boolean
  - gateway-router string
  - group-encryption
    - encryption-keygroup-inbound reference
    - encryption-keygroup-outbound reference
  - l2-ap
    - access-point string

```



configure service ies subscriber-interface group-interface wlan-gw l2-ap access-point admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- encap-type keyword
- epipe-sap-template reference
- auto-sub-id-fmt keyword
- default-encap-type keyword
- lanext
- max-bd number
- learn-ap-mac
- delay-auth boolean
- mcs-peer
- address reference
- sync-tag string
- mobility
- hold-time number
- inter-tunnel-type boolean
- inter-vlan boolean
- trigger
  - control boolean
  - data boolean
  - iapp boolean
- oper-down-on-group-degrade boolean
- promiscuous-mode boolean
- tcp-mss-adjust number
- tunnel-egress-qos
- admin-state keyword
- agg-rate-limit (number | keyword)
- granularity keyword
- hold-time (number | keyword)
- multi-client-only boolean
- qos reference
- scheduler-policy reference
- tunnel-encaps
- learn-l2tp-cookie (keyword | hex-string)
- vlan-range string
- apply-groups reference
- apply-groups-exclude reference
- authentication
  - hold-time number
  - local
    - coa-policy reference
    - default-ue-state keyword
  - on-control-plane boolean
  - policy reference
  - vlan-mismatch-timeout number
- data-triggered-ue-creation
- admin-state keyword
- arp boolean
- create-proxy-cache-entry
  - mac-format string
  - proxy-server
    - name string
    - router-instance string
- ospf boolean
- dhcp4
- admin-state keyword
- dns string
- l2-aware-ip-address (ipv4-unicast-address | keyword)
- lease-time
  - active number
  - initial number
- nbns string
- dhcp6

```

configure service ies subscriber-interface group-interface wlan-gw vlan-range dhcp6 admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- preferred-lifetime
  - active number
  - initial number
- valid-lifetime
  - active number
  - initial number
- dsm
  - accounting-policy reference
  - accounting-update
    - interval number
  - admin-state keyword
  - application-assurance
    - accounting-statistics boolean
    - profile reference
    - url-parameter string
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - policer reference
  - ingress
    - ip-filter reference
    - policer reference
    - soft-quota-exhausted-filter reference
  - one-time-redirect
    - port number
    - url string
  - volume-quota-direction keyword
- dynamic-service boolean
- extension string
- http-redirect-policy reference
- idle-timeout-action keyword
- l2-service
  - admin-state keyword
  - description string
  - service reference
- nat-policy reference
- retail-service string
- slaac
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- vrgw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - brg
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - lanext
    - access
      - max-mac number
      - multi-access boolean
      - policer reference
    - admin-state keyword
  - apply-groups reference

```

configure service ies subscriber-interface group-interface wlan-gw vlan-range vrgw lanext apply-groups-exclude

- **apply-groups-exclude** *reference*
- **assistive-address-resolution** *boolean*
- **bd-mac-prefix** *string*
- **mac-translation** *boolean*
- **network**
  - **admin-state** *keyword*
  - **max-mac** *number*
  - **policer** *reference*
- **xconnect**
  - **accounting**
    - **mobility-updates** *boolean*
    - **policy** *reference*
    - **update-interval** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **wlan-gw-group** *reference*
- **wpp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **initial**
    - **app-profile** *reference*
    - **sla-profile** *reference*
    - **sub-profile** *reference*
  - **lease-time** *number*
  - **portal**
    - **name** *string*
    - **portal-group** *reference*
    - **router-instance** *string*
  - **restore-to-initial-on-disconnect** *boolean*
  - **triggered-hosts** *boolean*
  - **user-db** *reference*
- **hold-time**
  - **ipv4**
    - **down**
      - **init-only** *boolean*
      - **seconds** *number*
    - **up**
      - **seconds** *number*
  - **ipv6**
    - **down**
      - **init-only** *boolean*
      - **seconds** *number*
    - **up**
      - **seconds** *number*
- **ipoe-linking**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **gratuitous-router-advertisement** *boolean*
- **ipoe-session**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **session-limit** *number*
- **ipv4**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **gateway** *string*
  - **holdup-time** *number*
  - **populate-host-routes** *boolean*
  - **prefix-length** *number*
  - **track-srrp** *number*
- **allow-unmatching-subnets** *boolean*

## configure service ies subscriber-interface ipv4 default-dns

- **default-dns** *string*
- **dhcp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **client-applications**
    - **dhcp** *boolean*
    - **ppp** *boolean*
  - **description** *string*
  - **gi-address** *string*
  - **lease-populate**
    - **max-leases** *number*
  - **option-82**
    - **vendor-specific-option**
      - **client-mac-address** *boolean*
      - **sap-id** *boolean*
      - **service-id** *boolean*
      - **string** *string*
      - **system-id** *boolean*
  - **proxy-server**
    - **admin-state** *keyword*
    - **emulated-server** *string*
    - **lease-time**
      - **radius-override** *boolean*
      - **value** *number*
  - **python-policy** *reference*
  - **relay-proxy**
    - **release-update-src-ip** *boolean*
    - **siaddr-override** *string*
  - **release-include-gi-address** *boolean*
  - **server** *string*
  - **src-ip-addr** *keyword*
  - **virtual-subnet** *boolean*
- **export-host-routes** *boolean*
- **unnumbered**
  - **ip-address** *string*
  - **ip-int-name** *string*
- **ipv6**
  - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **host-type** *keyword*
    - **prefix-length** *number*
  - **allow-multiple-wan-addresses** *boolean*
  - **allow-unmatching-prefixes** *boolean*
  - **default-dns** *string*
  - **delegated-prefix-length** (*number* | *keyword*)
  - **dhcp6**
    - **allow-client-id-change** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **override-slaac** *boolean*
    - **pd-managed-route**
      - **next-hop** *keyword*
  - **proxy-server**
    - **admin-state** *keyword*
    - **client-applications**
      - **dhcp** *boolean*
      - **ppp** *boolean*
    - **preferred-lifetime** (*number* | *keyword*)
    - **rebind-timer** *number*
    - **renew-timer** *number*
    - **server-id**
      - **apply-groups** *reference*

configure service ies subscriber-interface ipv6 dhcp6 proxy-server server-id apply-groups-exclude

```

    - apply-groups-exclude reference
    - duid-en-ascii string
    - duid-en-hex string
    - duid-ll
    - valid-lifetime (number | keyword)
  - python-policy reference
  - relay
    - admin-state keyword
    - client-applications
      - dhcp boolean
      - ppp boolean
    - description string
    - lease-split
      - admin-state keyword
      - valid-lifetime number
    - link-address string
    - server string
    - source-address string
  - ipoe-bridged-mode boolean
  - link-local-address
    - address string
  - prefix string
    - apply-groups reference
    - apply-groups-exclude reference
    - holdup-time number
    - host-type keyword
    - track-srrp number
  - router-advertisements
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - force-mcast keyword
    - max-advertisement-interval number
    - min-advertisement-interval number
    - options
      - current-hop-limit number
      - dns
        - include-rdnss boolean
        - rdnss-lifetime (number | keyword)
      - managed-configuration boolean
      - mtu (number | keyword)
      - other-stateful-configuration boolean
      - reachable-time number
      - retransmit-timer number
      - router-lifetime (number | keyword)
    - prefix-options
      - autonomous boolean
      - on-link boolean
      - preferred-lifetime (number | keyword)
      - valid-lifetime (number | keyword)
  - router-solicit
    - apply-groups reference
    - apply-groups-exclude reference
    - inactivity-timer (number | keyword)
  - local-address-assignment
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - ipv4
      - client-applications
        - ppp boolean
      - default-pool string
      - server reference
    - ipv6

```

configure service ies subscriber-interface local-address-assignment ipv6 client-applications

- **client-applications**
  - **ipoe-slaac** *boolean*
  - **ipoe-wan** *boolean*
  - **ppp-slaac** *boolean*
  - **server** *reference*
- **pppoe**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **session-limit** *number*
- **wan-mode** *keyword*
- **wlan-gw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **pool-manager**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dhcp6-client**
      - **dhcpv4-nat**
        - **admin-state** *keyword*
        - **link-address** *string*
        - **pool-name** *string*
      - **ia-na**
        - **admin-state** *keyword*
        - **link-address** *string*
        - **pool-name** *string*
      - **lease-query**
        - **max-retries** *number*
      - **servers** *string*
      - **slaac**
        - **admin-state** *keyword*
        - **link-address** *string*
        - **pool-name** *string*
      - **source-ip** (*keyword* | *ipv6-address*)
    - **watermarks**
      - **high** *number*
      - **low** *number*
    - **wlan-gw-group** *reference*
  - **redundancy**
    - **admin-state** *keyword*
    - **export** *string*
    - **monitor** *string*
  - **subscriber-mgmt**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **multi-chassis-shunt-id** *number*
    - **up-resiliency**
      - **monitor-oper-group** *reference*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **health-drop** *number*
  - **video-interface** *string*
    - **accounting-policy** *reference*
    - **address** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **channel** *string* **source** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **channel-name** *string*
      - **description** *string*
      - **scte35-action** *keyword*
      - **zone-channel** *string* **zone-source** *string*

configure service ies video-interface channel zone-channel adi-channel-name

```

    - adi-channel-name string
    - apply-groups reference
    - apply-groups-exclude reference
- cpu-protection reference
- description string
- multicast-service number
- output-format keyword
- video-sap
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - apply-groups reference
    - apply-groups-exclude reference
    - filter
      - ip reference
    - qos
      - policy-name reference
  - ingress
    - apply-groups reference
    - apply-groups-exclude reference
    - filter
      - ip reference
    - qos
      - policy-name reference
  - video-group-id reference
- vpn-id number
- ipfix
  - apply-groups reference
  - apply-groups-exclude reference
  - export-policy string
    - apply-groups reference
    - apply-groups-exclude reference
  - collector-router-instance string ip-address string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - mtu number
    - refresh-timeout number
    - source-ip-address string
  - description string
  - template-format keyword
- ipipe string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - ce-address-discovery
  - customer reference
  - description string
  - endpoint string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - hold-time-active number
    - revert-time (number | keyword)
    - standby-signaling keyword
  - sap string
    - accounting-policy reference
    - admin-state keyword
    - app-profile reference
    - apply-groups reference
    - apply-groups-exclude reference
    - bandwidth number
    - ce-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - collect-stats boolean

```

## configure service ipipe sap cpu-protection

- **cpu-protection**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **dist-cpu-protection** *reference*
- **egress**
  - **agg-rate**
    - **adaptation-rule** *keyword*
    - **burst-limit** (*number* | *keyword*)
    - **limit-unused-bandwidth** *boolean*
    - **rate** *number*
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
  - **qos**
    - **policer-control-policy**
      - **overrides**
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **root**
        - **max-rate** (*number* | *keyword*)
        - **priority-mbs-thresholds**
          - **min-thresh-separation** (*number* | *keyword*)
          - **priority** *number*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
            - **mbs-contribution** (*number* | *keyword*)
    - **policy-name** *reference*
  - **qinq-mark-top-only** *boolean*
- **sap-egress**
  - **overrides**
    - **hs-secondary-shaper** *string*
    - **hs-wrr-group** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **hs-class-weight** *number*
      - **percent-rate** *decimal-number*
      - **rate** (*number* | *keyword*)
  - **policer** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cbs** (*number* | *keyword*)
    - **mbs** (*number* | *keyword*)
    - **packet-byte-offset** *number*
    - **percent-rate**
      - **cir** *decimal-number*
      - **pir** *decimal-number*
    - **rate**
      - **cir** (*number* | *keyword*)
      - **pir** (*number* | *keyword*)
    - **stat-mode** *keyword*
- **queue** *reference*
  - **adaptation-rule**
    - **cir** *keyword*
    - **pir** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **avg-frame-overhead** *decimal-number*
  - **burst-limit** (*number* | *keyword*)
  - **cbs** (*number* | *keyword*)
  - **drop-tail**
    - **low**
      - **percent-reduction-from-mbs** (*number* | *keyword*)
  - **hs-class-weight** *number*



configure service ipipe sap egress qos sap-egress overrides queue hs-wred-queue

```

- hs-wred-queue
  - policy reference
  - hs-wrr-weight number
  - mbs (number | keyword)
  - monitor-queue-depth
    - fast-polling boolean
    - violation-threshold decimal-number
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
- policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
- overrides
  - scheduler string
  - apply-groups reference
  - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- virtual-port
  - vport-name reference
- endpoint reference
- ingress
- filter
  - ip reference
  - ipv6 reference
- qos
  - match-qinq-dot1p keyword
  - policer-control-policy
    - overrides
      - apply-groups reference
      - apply-groups-exclude reference
      - root
        - max-rate (number | keyword)
        - priority-mbs-thresholds
          - min-thresh-separation (number | keyword)
          - priority number
            - apply-groups reference
            - apply-groups-exclude reference
            - mbs-contribution (number | keyword)
        - policy-name reference
    - sap-ingress
      - fp-redirect-group
        - group-name reference
        - instance number
      - overrides
        - policer reference
          - apply-groups reference
          - apply-groups-exclude reference
          - cbs (number | keyword)
          - mbs (number | keyword)

```

configure service ipipe sap ingress qos sap-ingress overrides policer packet-byte-offset

```

- packet-byte-offset number
- percent-rate
  - cir decimal-number
  - pir decimal-number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- stat-mode keyword
- queue reference
  - adaptation-rule
    - cir keyword
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cbs (number | keyword)
  - drop-tail
    - low
    - percent-reduction-from-mbs (number | keyword)
  - mbs (number | keyword)
  - monitor-queue-depth
    - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
- policy-name reference
- queuing-type keyword
- scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- mac string
- mac-refresh number
- multi-service-site reference
- transit-policy
  - prefix reference
- use-broadcast-mac boolean
- service-id number
- service-mtu number
- spoke-sdp string
  - aarp
    - id reference
    - type keyword
  - admin-state keyword
  - app-profile reference
  - apply-groups reference

```

configure service ipipe spoke-sdp apply-groups-exclude

- **apply-groups-exclude** *reference*
- **bandwidth** (*number* | *keyword*)
- **bfd**
  - **bfd-liveness**
    - **encap** *keyword*
  - **bfd-template** *reference*
- **ce-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **control-word** *boolean*
- **description** *string*
- **egress**
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
  - **qos**
    - **network**
      - **policy-name** *reference*
      - **port-redirect-group**
        - **group-name** *reference*
        - **instance** *number*
  - **vc-label** *number*
- **endpoint**
  - **name** *reference*
  - **precedence** (*number* | *keyword*)
- **entropy-label**
- **hash-label**
  - **signal-capability**
- **ingress**
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
  - **qos**
    - **network**
      - **fp-redirect-group**
        - **group-name** *reference*
        - **instance** *number*
        - **policy-name** *reference*
  - **vc-label** *number*
- **transit-policy**
  - **prefix** *reference*
- **vc-switching** *boolean*
- **vpn-id** *number*
- **mac-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **mac** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **mask** *string*
- **md-auto-id**
  - **customer-id-range**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **end** *number*
    - **start** *number*
  - **pw-template-id-range**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **end** *number*
    - **start** *number*
  - **service-id-range**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **end** *number*

configure service md-auto-id service-id-range start

- **start** *number*
- **mrp**
  - **policy** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **default-action** *keyword*
    - **description** *string*
    - **entry** *number*
      - **action** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **match**
        - **isid** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **higher-value** *number*
    - **scope** *keyword*
- **nat**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **classifier** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **default**
      - **action**
        - **destination-nat**
          - **ip-address** *string*
        - **forward**
      - **dnat-ip-address** *string*
    - **description** *string*
    - **entry** *number*
      - **action**
        - **destination-nat**
          - **ip-address** *string*
        - **forward**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **match**
        - **dst-port-range**
          - **end** *number*
          - **start** *number*
        - **foreign-ip-address** *string*
        - **protocol** *keyword*
  - **deterministic-script**
    - **location** *string*
  - **firewall-policy** *string*
    - **alg**
      - **ftp** *boolean*
      - **rtsp** *boolean*
      - **sip** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **domain**
      - **name** *string*
      - **router-instance** *string*
    - **filtering** *keyword*
    - **l2-outside**
    - **port-limits**
      - **forwarding** *number*
    - **priority-sessions**
    - **fc**

configure service nat firewall-policy priority-sessions fc af

```

    - af boolean
    - be boolean
    - ef boolean
    - h1 boolean
    - h2 boolean
    - l1 boolean
    - l2 boolean
    - nc boolean
  - session-limits
    - max number
    - reserved number
    - watermarks
      - high number
      - low number
  - tcp
    - mss-adjust number
  - timeouts
    - icmp6-query number
    - sip number
    - tcp
      - established number
      - rst number
      - syn number
      - time-wait number
      - transitory number
    - udp
      - dns number
      - initial number
      - normal number
    - unknown-protocol number
  - udp
    - inbound-refresh boolean
  - unknown-protocols
    - all
    - protocol number
- map-t
  - domain string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dmr-prefix string
  - ip-fragmentation
    - v6-frag-header boolean
  - mapping-rule string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - ea-length number
    - ipv4-prefix string
    - psid-offset number
    - rule-prefix string
  - mtu number
  - tcp-mss-adjust number
- nat-policy string
  - alg
    - ftp boolean
    - pptp boolean
    - rtsp boolean
    - sip boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - block-limit number

```

## configure service nat nat-policy description

- **description** *string*
- **dnat**
  - **classifier** *reference*
- **dnat-only**
  - **nat-group** *reference*
  - **router-instance** *string*
  - **wlan-gw-group** *reference*
- **filtering** *keyword*
- **flow-log-policy**
  - **ipfix** *reference*
  - **syslog** *reference*
- **l2-outside**
- **pool**
  - **name** *string*
  - **router-instance** *string*
- **port-forwarding-range-end** *number*
- **port-limits**
  - **dynamic-ports** *number*
  - **forwarding** *number*
  - **reserved** *number*
  - **watermarks**
    - **high** *number*
    - **low** *number*
- **priority-sessions**
  - **fc**
    - **af** *boolean*
    - **be** *boolean*
    - **ef** *boolean*
    - **h1** *boolean*
    - **h2** *boolean*
    - **l1** *boolean*
    - **l2** *boolean*
    - **nc** *boolean*
- **session-limits**
  - **max** *number*
  - **reserved** *number*
  - **watermarks**
    - **high** *number*
    - **low** *number*
- **tcp**
  - **mss-adjust** *number*
  - **reset-unknown** *boolean*
- **timeouts**
  - **icmp-query** *number*
  - **sip** *number*
  - **subscriber-retention** *number*
- **tcp**
  - **established** *number*
  - **rst** *number*
  - **syn** *number*
  - **time-wait** *number*
  - **transitory** *number*
- **udp**
  - **dns** *number*
  - **initial** *number*
  - **normal** *number*
- **udp**
  - **inbound-refresh** *boolean*
- **pcp-server-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **description** *string*
- **lifetime**
  - **maximum** *number*

configure service nat pcp-server-policy lifetime minimum

- **minimum** *number*
- **max-description-size** *number*
- **opcode**
  - **announce** *boolean*
  - **get** *boolean*
  - **map** *boolean*
- **option**
  - **description** *boolean*
  - **next** *boolean*
  - **port-reservation** *boolean*
  - **port-set** *boolean*
  - **prefer-failure** *boolean*
  - **third-party** *boolean*
- **reuse-external-ip-address** *boolean*
- **version**
  - **maximum** *number*
  - **minimum** *number*
- **prefix-list** *string*
  - **application** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **prefix** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **nat-policy** *reference*
- **syslog**
  - **export-policy** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **collector router-instance** *string ip-address string*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **destination-port** *number*
      - **ipv4-source-address** *string*
    - **description** *string*
    - **facility** *keyword*
    - **include**
      - **destination-ip** *boolean*
      - **foreign-ip** *boolean*
      - **foreign-port** *boolean*
      - **nat-policy-name** *boolean*
      - **sub-id** *boolean*
    - **log-prefix** *string*
    - **max-tx-delay** *number*
    - **mtu** *number*
    - **rate-limit** *number*
    - **severity-level** *keyword*
- **up-nat-policy** *string*
  - **alg**
    - **ftp** *boolean*
    - **pptp** *boolean*
    - **rtsp** *boolean*
    - **sip** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **block-limit** *number*
  - **default-host**
    - **inside-router-instance** *string*
    - **ip-address** *string*
    - **rate-limit** *number*
  - **description** *string*
  - **filtering** *keyword*
  - **flow-log-policy**

configure service nat up-nat-policy flow-log-policy ipfix

```

- ipfix reference
- icmp-echo-reply boolean
- port-block-extension
  - ports number
  - watermarks
    - high number
    - low number
- port-limits
  - dynamic-ports number
  - reserved number
  - watermarks
    - high number
    - low number
- priority-sessions
  - fc
    - af boolean
    - be boolean
    - ef boolean
    - h1 boolean
    - h2 boolean
    - l1 boolean
    - l2 boolean
    - nc boolean
  - session-limits
    - max number
    - reserved number
    - watermarks
      - high number
      - low number
- tcp
  - mss-adjust number
  - reset-unknown boolean
- timeouts
  - icmp-query number
  - sip number
  - subscriber-retention number
  - tcp
    - established number
    - rst number
    - syn number
    - time-wait number
    - transitory number
  - udp
    - dns number
    - initial number
    - normal number
  - udp
    - inbound-refresh boolean
- oper-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip string
    - interface-name string
    - router-instance string
  - hold-time
    - down number
    - up number
- pbb
  - apply-groups reference
  - apply-groups-exclude reference
  - mac string

```



## configure service pbb mac address

```

- address string
- apply-groups reference
- apply-groups-exclude reference
- mac-notification
- apply-groups reference
- apply-groups-exclude reference
- count number
- interval number
- source-bmac
- address string
- evpn-etree-leaf-address string
- proxy-arp-nd
- mac-list
- list string
- apply-groups reference
- apply-groups-exclude reference
- mac string
- pw-template string
- accounting-policy number
- allow-fragmentation boolean
- apply-groups reference
- apply-groups-exclude reference
- auto-gre-sdp boolean
- block-on-peer-fault boolean
- collect-stats boolean
- control-word boolean
- egress
- filter
- ip string
- ipv6 string
- mac string
- mfib-allowed-mda-destinations
- mda string
- qos
- network
- policy-name string
- port-redirect-group
- group-name string
- instance number
- encryption-keygroup
- inbound number
- outbound number
- entropy-label
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list string
- discard-unknown-source boolean
- limit-mac-move keyword
- mac-learning
- aging boolean
- learning boolean
- mac-pinning boolean
- maximum-mac-addresses number
- protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
- signal-capability
- igmp-snooping
- fast-leave boolean
- import-policy string
- maximum-number-groups number
- query-interval number
- query-last-member-interval number
- query-response-interval number

```

configure service pw-template igmp-snooping robust-count

```

- robust-count number
- send-queries boolean
- version keyword
- ingress
  - filter
    - ip string
    - ipv6 string
    - mac string
  - qos
    - network
      - fp-redirect-group
        - group-name string
        - instance number
      - policy-name string
  - l2pt
    - termination
      - protocols
        - cdp boolean
        - dtp boolean
        - pagp boolean
        - stp boolean
        - udld boolean
        - vtp boolean
  - provisioned-sdp keyword
  - pw-template-id number
  - sdp-exclude reference
  - sdp-include reference
  - split-horizon-group
    - description string
    - fdb
      - saps
        - auto-learn-mac-protect boolean
        - discard-unprotected-dest-mac boolean
        - protected-src-mac-violation-action keyword
    - name string
  - stp
    - admin-state keyword
    - auto-edge boolean
    - edge-port boolean
    - link-type keyword
    - path-cost number
    - priority number
    - root-guard boolean
  - vc-type keyword
  - vlan-vc-tag number
- sdp number
  - accounting-policy reference
  - admin-state keyword
  - adv-mtu-override boolean
  - allow-fragmentation boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp-tunnel boolean
  - booking-factor number
  - class-forwarding
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - default-lsp reference
    - enforce-diffserv-lsp-fc boolean
    - fc keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - lsp reference

```

## configure service sdp class-forwarding multicast-lsp

- **multicast-lsp** *reference*
- **collect-stats** *boolean*
- **delivery-type** *keyword*
- **description** *string*
- **far-end**
  - **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **keep-alive**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hello-time** *number*
  - **hold-down-time** *number*
  - **maximum-drop-count** *number*
  - **message-length** *number*
  - **timeout** *number*
- **ldp** *boolean*
- **local-end** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **lsp** *string*
- **metric** *number*
- **mixed-lsp-mode**
  - **revert-time** (*number | keyword*)
- **network-domain** *reference*
- **path-mtu** *number*
- **pbb-etype** *string*
- **pw-port**
  - **binding-port** *string*
- **sdp-group** *reference*
- **signaling** *keyword*
- **source-bmac-lsb**
  - **control-pw-vc-id** *number*
  - **value** *string*
- **sr-isis** *boolean*
- **sr-ospf** *boolean*
- **tunnel-far-end** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **vlan-vc-etype** *string*
- **weighted-ecmp** *boolean*
- **sdp-group**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group-name** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **value** *number*
- **system**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bgp**
    - **evpn**
      - **ad-per-es-route**
        - **extended-evi-range** *boolean*
        - **route-distinguisher-ip-address** *string*
        - **route-target-type** *keyword*
      - **ad-per-evi-routes**
        - **attribute-propagation** *boolean*
        - **bgp-path-selection** *boolean*
        - **d-path-ignore** *boolean*
      - **ethernet-segment** *string*
        - **ac-df-capability** *keyword*
        - **admin-state** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **association**
          - **lag** *reference*
            - **apply-groups** *reference*

configure service system bgp evpn ethernet-segment association lag apply-groups-exclude

```

- apply-groups-exclude reference
- virtual-ranges
  - dot1q
    - q-tag (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - end (number | keyword)
    - qinq
      - s-tag (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - end (number | keyword)
      - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - c-tag-end (number | keyword)
  - network-interconnect-vxlan number
    - apply-groups reference
    - apply-groups-exclude reference
    - virtual-ranges
      - service-id number
        - apply-groups reference
        - apply-groups-exclude reference
        - end number
  - port reference
    - apply-groups reference
    - apply-groups-exclude reference
    - virtual-ranges
      - dot1q
        - q-tag (number | keyword)
          - apply-groups reference
          - apply-groups-exclude reference
          - end (number | keyword)
        - qinq
          - s-tag (number | keyword)
            - apply-groups reference
            - apply-groups-exclude reference
            - end (number | keyword)
          - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
            - apply-groups reference
            - apply-groups-exclude reference
            - c-tag-end (number | keyword)
  - pw-port reference
    - apply-groups reference
    - apply-groups-exclude reference
    - pw-port-headend boolean
    - virtual-ranges
      - dot1q
        - q-tag (number | keyword)
          - apply-groups reference
          - apply-groups-exclude reference
          - end (number | keyword)
        - qinq
          - s-tag (number | keyword)
            - apply-groups reference
            - apply-groups-exclude reference
            - end (number | keyword)
          - s-tag-c-tag (number | keyword) c-tag-start (number | keyword)
            - apply-groups reference
            - apply-groups-exclude reference
            - c-tag-end (number | keyword)
  - sdp reference
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service system bgp evpn ethernet-segment association sdp virtual-ranges

```

    - virtual-ranges
      - vc-id number
        - apply-groups reference
        - apply-groups-exclude reference
        - end number
    - vprn-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
      - apply-groups reference
      - apply-groups-exclude reference
      - virtual-ranges
        - evi number
    - auto-esi keyword
    - df-election
    - es-activation-timer number
    - manual
      - evi number
        - apply-groups reference
        - apply-groups-exclude reference
        - end number
      - isid number
        - apply-groups reference
        - apply-groups-exclude reference
        - end number
      - preference
        - apply-groups reference
        - apply-groups-exclude reference
        - mode keyword
        - value number
    - service-carving-mode keyword
    - esi string
    - multi-homing-mode keyword
    - oper-group reference
    - orig-ip (ipv4-address-no-zone | ipv6-address-no-zone)
    - pbb
      - es-bmac-table-size number
      - source-bmac-lsb string
    - route-next-hop (ipv4-address-no-zone | ipv6-address-no-zone)
    - type keyword
    - etree-leaf-label boolean
    - etree-leaf-label-value (number | keyword)
    - ip-prefix-routes
      - d-path-length-ignore boolean
      - iff-attribute-uniform-propagation boolean
      - iff-bgp-path-selection boolean
    - multicast-leave-sync-propagation number
    - route-distinguisher string
    - bgp-auto-rd-range
      - apply-groups reference
      - apply-groups-exclude reference
      - community-value
        - end number
        - start number
      - ip-address string
    - extended-default-qinq-sap-lookup boolean
    - fdb
      - apply-groups reference
      - apply-groups-exclude reference
      - table-size number
    - gre-eth-bridged
      - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
        - apply-groups reference
        - apply-groups-exclude reference
        - fpe-id reference
    - pw-port-list
      - port string

```

configure service system vpn-gre-source-ip

```

- vpn-gre-source-ip string
- vxlan
  - assisted-replication
    - apply-groups reference
    - apply-groups-exclude reference
    - ip-address string
  - tunnel-termination (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - fpe-id reference
- template
  - epipe-sap-template string
  - apply-groups reference
  - apply-groups-exclude reference
  - egress
    - filter
      - ip reference
      - ipv6 reference
      - mac reference
    - qos
      - policy-name reference
  - ingress
    - filter
      - ip reference
      - ipv6 reference
      - mac reference
    - qos
      - policy-name reference
      - queuing-type keyword
- upnp
  - policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - mapping-limit number
  - port number
  - strict-mode boolean
- vpls string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bgp number
    - adv-service-mtu number
    - apply-groups reference
    - apply-groups-exclude reference
    - pw-template-binding reference
      - apply-groups reference
      - apply-groups-exclude reference
      - bfd-liveness boolean
      - bfd-template reference
      - import-rt string
      - monitor-oper-group reference
      - oper-group reference
      - split-horizon-group string
    - route-distinguisher (keyword | vpn-route-distinguisher)
  - route-target
    - export string
    - import string
  - vsi-export reference
  - vsi-import reference
  - bgp-ad
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vpls bgp-ad vpls-id

```

- vpls-id string
- vsi-id-prefix string
- bgp-evpn
- accept-ivpls-evpn-flush boolean
- apply-groups reference
- apply-groups-exclude reference
- evi number
- ignore-mtu-mismatch boolean
- incl-mcast-orig-ip string
- isid-route-target
  - range number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - route-target string
    - type keyword
- mac-duplication
  - blackhole boolean
  - detect
    - num-moves number
    - trusted-mac-move-factor number
    - window number
  - retry (number | keyword)
  - trusted-mac-time number
- mpls number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-bind-tunnel
    - allow-flex-algo-fallback boolean
    - ecmp number
    - enforce-strict-tunnel-tagging boolean
    - resolution keyword
    - resolution-filter
      - bgp boolean
      - ldp boolean
      - mpls-fwd-policy boolean
      - rib-api boolean
      - rsvp boolean
      - sr-isis boolean
      - sr-ospf boolean
      - sr-ospf3 boolean
      - sr-policy boolean
      - sr-te boolean
      - udp boolean
    - weighted-ecmp boolean
  - control-word boolean
  - default-route-tag string
  - dynamic-egress-label-limit boolean
  - ecmp number
  - entropy-label boolean
  - evi-three-byte-auto-rt boolean
  - fdb
    - protected-src-mac-violation-action keyword
  - force-vc-forwarding keyword
  - hash-label boolean
  - ingress-replication-bum-label boolean
  - mh-mode keyword
  - oper-group reference
  - route-next-hop
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - system-ipv4
    - system-ipv6
  - send-tunnel-encap

```

configure service vpls bgp-evpn mpls send-tunnel-encap mpls

```

    - mpls boolean
    - mpls-over-udp boolean
    - split-horizon-group reference
  - routes
    - incl-mcast
      - advertise-ingress-replication boolean
      - advertise-l2-attributes boolean
    - ip-prefix
      - advertise boolean
      - domain-id string
      - include-direct-interface-host boolean
      - link-bandwidth
        - advertise
          - max-dynamic-weight number
          - weight (number | keyword)
        - weighted-ecmp boolean
    - mac-ip
      - advertise boolean
      - arp-nd-extended-community boolean
      - arp-nd-only-with-fdb-advertisement boolean
      - cfm-mac boolean
      - unknown-mac boolean
    - sel-mcast
      - advertise boolean
  - segment-routing-v6 number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - default-route-tag string
    - ecmp number
    - evi-three-byte-auto-rt boolean
    - fdb
      - protected-src-mac-violation-action keyword
    - force-vc-forwarding keyword
    - mh-mode keyword
    - oper-group reference
    - resolution keyword
    - route-next-hop
      - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
      - system-ipv4
      - system-ipv6
    - source-address string
    - split-horizon-group reference
    - srv6
      - default-locator string
      - instance reference
  - vxlan number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - default-route-tag string
    - ecmp number
    - evi-three-byte-auto-rt boolean
    - mh-mode keyword
    - oper-group reference
    - routes
      - auto-disc
        - advertise boolean
    - send-incl-mcast-ir-on-ndf boolean
    - send-tunnel-encap boolean
    - vxlan-instance reference
  - bgp-mh-site string
    - activation-timer number
    - admin-state keyword

```



## configure service vpls bgp-mh-site apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **boot-timer** *number*
- **failed-threshold** (*number* | *keyword*)
- **id** *number*
- **mesh-sdp-binds**
- **min-down-timer** *number*
- **monitor-oper-group** *reference*
- **sap** *string*
- **shg-name** *string*
- **spoke-sdp** *string*
- **bgp-vpls**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **maximum-ve-id** *number*
  - **ve**
    - **id** *number*
    - **name** *string*
- **capture-sap** *string*
  - **admin-state** *keyword*
  - **allow-dot1q-msaps** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **cpu-protection**
    - **mac-monitoring**
    - **policy-id** *reference*
  - **description** *string*
  - **dhcp**
    - **python-policy** *reference*
    - **user-db** *reference*
  - **dhcp6**
    - **python-policy** *reference*
    - **user-db** *reference*
  - **dist-cpu-protection** *reference*
  - **host-lockout-policy** *reference*
  - **ingress**
    - **filter**
      - **mac** *reference*
  - **ipoe-session**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **ipoe-session-policy** *reference*
    - **user-db** *reference*
  - **msap-defaults**
    - **group-interface** *string*
    - **policy** *reference*
    - **service-name** *string*
  - **nasreq-auth-policy** *reference*
  - **pfcf**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **association** *reference*
    - **l2-access-id-alias** *string*
    - **up-resiliency**
      - **monitor-oper-group** *reference*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **health-drop** *number*
  - **pppoe**
    - **policy** *reference*

configure service vpls capture-sap pppoe python-policy

```

- python-policy reference
- user-db reference
- radius-auth-policy reference
- router-solicit
  - user-db reference
- track-srrp number
- trigger-packet
  - arp boolean
  - data boolean
  - dhcp boolean
  - dhcp6 boolean
  - pppoe boolean
  - rtr-solicit boolean
- customer reference
- description string
- endpoint string
  - apply-groups reference
  - apply-groups-exclude reference
  - block-on-mesh-failure boolean
  - description string
  - fdb
    - auto-learn-mac-protect boolean
    - mac-pinning boolean
    - maximum-mac-addresses number
    - protected-src-mac-violation-action keyword
  - ignore-standby-signaling boolean
- mc-endpoint number
  - apply-groups reference
  - apply-groups-exclude reference
  - mc-ep-peer
    - name string
    - peer-address reference
  - revert-time (number | keyword)
  - suppress-standby-signaling boolean
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - cfm-vlan-tag string
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean
  - low-priority-defect keyword

```

configure service vpls eth-cfm mep mac-address

- **mac-address** *string*
- **one-way-delay-threshold** *number*
- **etree** *boolean*
- **fdb**
  - **discard-unknown** *boolean*
  - **mac-learning**
    - **aging** *boolean*
    - **learning** *boolean*
    - **local-age-time** *number*
    - **remote-age-time** *number*
  - **mac-move**
    - **admin-state** *keyword*
    - **hold-down-time** *number*
    - **move-frequency** *number*
    - **primary-cumulative-factor** *number*
    - **retry-count** (*number* | *keyword*)
    - **sap** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *keyword*
    - **secondary-cumulative-factor** *number*
    - **spoke-sdp** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *keyword*
  - **mac-subnet-length** *number*
  - **selective-learning** *boolean*
  - **static-mac**
    - **mac** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **blackhole**
      - **endpoint** *reference*
      - **mesh-sdp** *reference*
      - **monitor** *keyword*
      - **sap** *reference*
      - **spoke-sdp** *reference*
  - **table**
    - **high-wmark** *number*
    - **low-wmark** *number*
    - **size** *number*
- **gsmp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group** *string*
    - **admin-state** *keyword*
    - **ancp**
      - **dynamic-topology-discovery** *boolean*
      - **oam** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **hold-multiplier** *number*
    - **idle-filter** *boolean*
    - **keepalive** *number*
    - **neighbor** *string*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **local-address** *string*
      - **priority-marking**
        - **dscp** *keyword*

configure service vpls gsmf group neighbor priority-marking prec

```

    - prec number
    - persistency boolean
- igmp-host-tracking
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - expiry-time number
- igmp-snooping
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - evpn-proxy
    - admin-state keyword
  - mvr
    - admin-state keyword
    - description string
    - group-policy string
    - query-interval number
    - query-source-address (keyword | ipv4-address)
    - report-source-address string
    - robust-count number
- ignore-l2vpn-mtu-mismatch boolean
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - hold-time
    - ipv4
      - down
        - init-only boolean
        - seconds number
      - up
        - seconds number
- ipv4
  - neighbor-discovery
    - static-neighbor string
    - apply-groups reference
    - apply-groups-exclude reference
    - mac-address string
    - timeout number
  - primary
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix-length number
  - mac string
- isid-policy
  - entry number
    - advertise-local boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - range
      - end number
      - start number
    - use-def-mcast boolean
- load-balancing
  - lbl-eth-or-ip-l4-teid boolean
  - per-service-hashing boolean
  - spi-load-balancing boolean
  - teid-load-balancing boolean
- m-vpls boolean
- mac-flush
- tldp

```

configure service vpls mac-flush tldp propagate

- **propagate** *boolean*
- **send-on-failure** *boolean*
- **mac-protect**
  - **mac** *string*
- **mcast-ipv6-snooping-scope** *keyword*
- **mcr-default-gtw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip** *string*
  - **mac** *string*
- **mesh-sdp** *string*
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **bfd**
  - **bfd-liveness**
    - **encap** *keyword*
  - **bfd-template** *reference*
- **collect-stats** *boolean*
- **control-word** *boolean*
- **cpu-protection**
  - **eth-cfm-monitoring**
    - **aggregate**
    - **car**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **dhcp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **snoop** *boolean*
- **egress**
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
    - **mac** *reference*
  - **mfib-allowed-mda-destinations**
    - **mda** *string*
  - **qos**
    - **network**
      - **policy-name** *reference*
      - **port-redirect-group**
        - **group-name** *reference*
        - **instance** *number*
  - **vc-label** *number*
- **entropy-label**
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-lmm-fc-stats**
    - **fc** *keyword*
    - **fc-in-profile** *keyword*
  - **collect-lmm-stats** *boolean*
  - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
  - **admin-state** *keyword*
  - **ais**
    - **client-meg-level** *number*
    - **interface-support** *boolean*
    - **interval** *number*
    - **low-priority-defect** *keyword*
    - **priority** *number*
  - **alarm-notification**

configure service vpls mesh-sdp eth-cfm mep alarm-notification fng-alarm-time

```

- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
  - crc-tlv boolean
  - pattern keyword
- fault-propagation keyword
- grace
- eth-ed
  - max-rx-defect-window number
  - priority number
  - rx-eth-ed boolean
  - tx-eth-ed boolean
- eth-vsm-grace
  - rx-eth-vsm-grace boolean
  - tx-eth-vsm-grace boolean
- lbm-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- squelch-ingress-ctag-levels number
- squelch-ingress-levels number
- vmep-filter boolean
- etree-leaf boolean
- etree-root-leaf-tag boolean
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list reference
- mac-pinning boolean
- protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
- signal-capability
- igmp-snooping
- apply-groups reference
- apply-groups-exclude reference
- fast-leave boolean
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
- bandwidth
  - mandatory (number | keyword)
  - total (number | keyword)
- interface-policy reference
- policy reference

```

configure service vpls mesh-sdp igmp-snooping mrouter-port

```

- mrouter-port boolean
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - version keyword
- ingress
- filter
  - ip reference
  - ipv6 reference
  - mac reference
- qos
  - network
    - fp-redirect-group
      - group-name reference
      - instance number
      - policy-name reference
  - vc-label number
- mld-snooping
- apply-groups reference
- apply-groups-exclude reference
- fast-leave boolean
- import-policy reference
- maximum-number-groups number
- mrouter-port boolean
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - version keyword
- mrp
- apply-groups reference
- apply-groups-exclude reference
- join-time number
- leave-all-time number
- leave-time number
- periodic-time number
- periodic-timer boolean
- policy reference
- pbb
- fault-propagation
  - backbone-mac-address string
  - backbone-mac-name reference
- vc-type keyword
- vlan-vc-tag number
- mfib
- table
- high-wmark number

```

configure service vpls mfab table low-wmark

- **low-wmark** *number*
- **size** *number*
- **mld-snooping**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **evpn-proxy**
    - **admin-state** *keyword*
- **mvr**
  - **admin-state** *keyword*
  - **description** *string*
  - **group-policy** *string*
  - **query-interval** *number*
  - **query-source-address** (*keyword* | *ipv6-address*)
  - **report-source-address** *string*
  - **robust-count** *number*
- **mrp**
  - **admin-state** *keyword*
- **mrrp**
  - **admin-state** *keyword*
  - **attribute-table**
    - **high-wmark** *number*
    - **low-wmark** *number*
    - **size** *number*
  - **end-station-only** *boolean*
  - **flood-time** *number*
- **multicast-info-policy** *reference*
- **pbb**
  - **backbone-vpls** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **fdb**
    - **protected-src-mac-violation-action** *keyword*
  - **igmp-snooping**
    - **mrouter-destination** *reference*
  - **isis** *number*
  - **mesh-sdp** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **igmp-snooping**
    - **mrouter-port** *boolean*
  - **mld-snooping**
    - **mrouter-port** *boolean*
- **mld-snooping**
  - **mrouter-destination** *reference*
- **sap** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **igmp-snooping**
    - **mrouter-port** *boolean*
  - **mld-snooping**
    - **mrouter-port** *boolean*
- **spoke-sdp** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **igmp-snooping**
    - **mrouter-port** *boolean*
  - **mld-snooping**
    - **mrouter-port** *boolean*
- **force-qtag-forwarding** *boolean*
- **i-vpls-mac-flush**
  - **bgp-evpn**
    - **send-to-bvpls** *boolean*
- **tldp**



configure service vpls pbb i-vpls-mac-flush tldp propagate-from-bvpls

- **propagate-from-bvpls** *boolean*
- **send-on-bvpls-failure** *boolean*
- **send-to-bvpls**
  - **all-but-mine** *boolean*
  - **all-from-me** *boolean*
- **mac-notification**
  - **admin-state** *keyword*
  - **count** *number*
  - **interval** *number*
  - **renotify** (*number* | *keyword*)
- **source-bmac**
  - **address** *string*
  - **use-es-bmac-lsb** *boolean*
  - **use-mclag-bmac-lsb** *boolean*
- **pbb-type** *keyword*
- **pim-snooping**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group-policy** *string*
  - **hold-time** *number*
  - **ipv4**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **ipv6**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **provider-tunnel**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **inclusive**
    - **admin-state** *keyword*
    - **data-delay-interval** *number*
    - **mldp**
    - **owner** *keyword*
    - **root-and-leaf** *boolean*
    - **rsvp**
      - **lsp-template** *reference*
  - **selective**
    - **admin-state** *keyword*
    - **data-delay-interval** *number*
    - **data-threshold**
      - **group-prefix** (*ipv4-prefix* | *ipv6-prefix*)
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **pe-threshold-add** *number*
        - **pe-threshold-delete** *number*
        - **threshold** *number*
      - **maximum-p2mp-spmsi** *number*
      - **mldp** *boolean*
      - **owner** *keyword*
      - **wildcard-spmsi** *boolean*
  - **proxy-arp**
    - **admin-state** *keyword*
    - **age-time** (*number* | *keyword*)
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **duplicate-detect**
      - **anti-spoof-mac** *string*
      - **hold-down-time** (*number* | *keyword*)
      - **num-moves** *number*
      - **static-blackhole** *boolean*
      - **window** *number*

configure service vpls proxy-arp dynamic-arp

- **dynamic-arp**
  - **ip-address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mac-list** *reference*
  - **resolve-retry-time** *number*
- **dynamic-populate** *boolean*
- **evpn**
  - **flood**
    - **gratuitous-arp** *boolean*
    - **unknown-arp-req** *boolean*
  - **route-tag** *number*
- **process-arp-probes** *boolean*
- **send-refresh** (*number* | *keyword*)
- **static-arp**
  - **ip-address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mac** *string*
- **table-size** *number*
- **proxy-nd**
  - **admin-state** *keyword*
  - **age-time** (*number* | *keyword*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **duplicate-detect**
    - **anti-spoof-mac** *string*
    - **hold-down-time** (*number* | *keyword*)
    - **num-moves** *number*
    - **static-blackhole** *boolean*
    - **window** *number*
- **dynamic-neighbor**
  - **ip-address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mac-list** *reference*
  - **resolve-retry-time** *number*
- **dynamic-populate** *boolean*
- **evpn**
  - **advertise-neighbor-type** *keyword*
  - **flood**
    - **unknown-neighbor-advertise-host** *boolean*
    - **unknown-neighbor-advertise-router** *boolean*
    - **unknown-neighbor-solicitation** *boolean*
  - **route-tag** *number*
- **process-dad-neighbor-solicitations** *boolean*
- **send-refresh** (*number* | *keyword*)
- **static-neighbor**
  - **ip-address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mac** *string*
  - **type** *keyword*
- **table-size** *number*
- **routed-vpls**
  - **evpn-mpls-ecmp** *boolean*
- **multicast**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **evpn-gateway**
    - **admin-state** *keyword*
    - **advertise** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*

configure service vpls routed-vpls multicast evpn-gateway dr-activation-timer

```

    - dr-activation-timer number
    - non-dr-attract-traffic keyword
  - ip-multicast-ecmp boolean
  - ipv4
    - forward-to-ip-interface boolean
    - igmp-snooping
      - mrouter-port boolean
  - ipv6
    - forward-to-ip-interface boolean
    - mld-snooping
      - mrouter-port boolean
  - vxlan-ipv4-tep-ecmp boolean
- sap string
  - accounting-policy reference
  - admin-state keyword
  - anti-spoof keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - arp-host
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - host-limit number
    - min-auth-interval number
  - arp-reply-agent keyword
  - bandwidth number
  - bgp-vpls-mh-veid number
  - bpdu-translation keyword
  - calling-station-id string
  - cflowd boolean
  - collect-stats boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - mac-monitoring
    - policy-id reference
  - description string
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - lease-populate
      - max-leases number
  - option-82
    - action keyword
    - circuit-id
      - ascii-tuple
      - hex-string string
      - none
      - vlan-ascii-tuple
    - remote-id
      - ascii-string string
      - hex-string string
      - mac
      - none
    - vendor-specific-option
      - client-mac-address boolean
      - sap-id boolean
      - service-id boolean
      - string string
      - system-id boolean

```

configure service vpls sap dhcp proxy-server

- **proxy-server**
  - **admin-state** *keyword*
  - **emulated-server** *string*
  - **lease-time**
    - **radius-override** *boolean*
    - **value** *number*
  - **snoop** *boolean*
- **dhcp6**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **ldra**
    - **interface-type** *keyword*
    - **options**
      - **interface-id**
        - **ascii-tuple**
        - **vlan-ascii-tuple**
      - **remote-id**
      - **mac**
      - **string** *string*
  - **dist-cpu-protection** *reference*
- **egress**
  - **agg-rate**
    - **adaptation-rule** *keyword*
    - **burst-limit** (*number* | *keyword*)
    - **limit-unused-bandwidth** *boolean*
    - **queue-frame-based-accounting** *boolean*
    - **rate** *number*
  - **dest-mac-rewrite** *string*
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
    - **mac** *reference*
- **qos**
  - **policer-control-policy**
    - **overrides**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **root**
        - **max-rate** (*number* | *keyword*)
        - **priority-mbs-thresholds**
          - **min-thresh-separation** (*number* | *keyword*)
          - **priority** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **mbs-contribution** (*number* | *keyword*)
    - **policy-name** *reference*
    - **qinq-mark-top-only** *boolean*
  - **sap-egress**
    - **overrides**
      - **hs-secondary-shaper** *string*
      - **hs-wrr-group** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **hs-class-weight** *number*
      - **percent-rate** *decimal-number*
      - **rate** (*number* | *keyword*)
    - **policer** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **cbs** (*number* | *keyword*)
      - **mbs** (*number* | *keyword*)
      - **packet-byte-offset** *number*
      - **percent-rate**

configure service vpls sap egress qos sap-egress overrides policer percent-rate cir

```

    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - stat-mode keyword
- queue reference
  - adaptation-rule
    - cir keyword
    - pir keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - avg-frame-overhead decimal-number
  - burst-limit (number | keyword)
  - cbs (number | keyword)
  - drop-tail
    - low
    - percent-reduction-from-mbs (number | keyword)
  - hs-class-weight number
  - hs-wred-queue
    - policy reference
  - hs-wrr-weight number
  - mbs (number | keyword)
  - monitor-queue-depth
    - fast-polling boolean
    - violation-threshold decimal-number
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
- policy-name reference
- port-redirect-group
  - group-name reference
  - instance number
- scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- virtual-port
  - vport-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais
    - client-meg-level number

```

configure service vpls sap eth-cfm mep ais interface-support

```

- interface-support boolean
- interval number
- low-priority-defect keyword
- priority number
- alarm-notification
- fng-alarm-time number
- fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- cfm-vlan-tag string
- csf
- multiplier decimal-number
- description string
- direction keyword
- eth-test
- bit-error-threshold number
- test-pattern
- crc-tlv boolean
- pattern keyword
- fault-propagation keyword
- grace
- eth-ed
- max-rx-defect-window number
- priority number
- rx-eth-ed boolean
- tx-eth-ed boolean
- eth-vsm-grace
- rx-eth-vsm-grace boolean
- tx-eth-vsm-grace boolean
- lbn-svc-act-responder boolean
- low-priority-defect keyword
- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- snelch-ingress-ctag-levels number
- snelch-ingress-levels number
- vmep-filter boolean
- eth-ring number
- etree-leaf boolean
- etree-root-leaf-tag
- leaf number
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list reference
- discard-unknown-source boolean
- discard-unprotected-dest-mac boolean
- limit-mac-move keyword
- mac-learning
- aging boolean
- learning boolean
- mac-pinning boolean
- maximum-mac-addresses number
- protected-src-mac-violation-action keyword
- host-admin-state keyword
- host-lockout-policy reference
- i-vpls-mac-flush

```

configure service vpls sap i-vpls-mac-flush bgp-evpn

- **bgp-evpn**
    - **send-to-bvpls** *boolean*
  - **igmp-host-tracking**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **expiry-time** *number*
    - **import-policy** *reference*
    - **maximum-number-group-sources** *number*
    - **maximum-number-groups** *number*
    - **maximum-number-sources** *number*
    - **router-alert-check** *boolean*
  - **igmp-snooping**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fast-leave** *boolean*
    - **import-policy** *reference*
    - **maximum-number-group-sources** *number*
    - **maximum-number-groups** *number*
    - **maximum-number-sources** *number*
  - **mcac**
    - **bandwidth**
      - **mandatory** (*number* | *keyword*)
      - **total** (*number* | *keyword*)
    - **interface-policy** *reference*
    - **mc-constraints**
      - **level** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **bandwidth** *number*
      - **number-down** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **level** *number*
    - **use-lag-port-weight** *boolean*
  - **policy** *reference*
- **mrouter-port** *boolean*
- **mvr**
  - **from-vpls** *reference*
  - **to-sap** *string*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **router-alert-check** *boolean*
- **send-queries** *boolean*
- **static**
  - **group** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **source** *string*
    - **starg**
- **version** *keyword*
- **ingress**
  - **filter**
    - **ip** *reference*
    - **ipv6** *reference*
    - **mac** *reference*
  - **qos**
    - **match-qinq-dot1p** *keyword*
    - **policer-control-policy**
      - **overrides**
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **root**

configure service vpls sap ingress qos policer-control-policy overrides root max-rate

```

    - max-rate (number | keyword)
    - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
  - policy-name reference
- sap-ingress
- fp-redirect-group
  - group-name reference
  - instance number
- overrides
  - ip-criteria
    - activate-entry-tag number
  - ipv6-criteria
    - activate-entry-tag number
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
  - parent
    - cir-weight number
    - weight number
  - percent-rate
    - cir decimal-number
    - pir decimal-number
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
- overrides
  - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
  - parent
    - cir-weight number
    - weight number
  - rate
    - cir (number | keyword)

```



configure service vpls sap ingress qos scheduler-policy overrides scheduler rate pir

```

    - pir (number | keyword)
      - policy-name reference
- qtag-manipulation
  - c-tag (number | keyword)
  - push-dot1q-vlan (number | keyword)
  - s-tag number
- l2pt
  - force-boundary
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
    - termination
      - protocols
        - cdp boolean
        - dtp boolean
        - pagp boolean
        - stp boolean
        - udld boolean
        - vtp boolean
- l2tpv3-session
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - pseudo-wire
    - ethernet
    - ethernet-vlan-id number
  - router
    - group string
    - router-instance string
  - vc-id number
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- managed-vlan-list
  - range string
- mc-ring
  - apply-groups reference
  - apply-groups-exclude reference
  - ring-node string
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups number
  - mrouter-port boolean
  - mvr
    - from-vpls reference
    - to-sap string
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static
    - group string
    - apply-groups reference

```

configure service vpls sap mld-snooping static group apply-groups-exclude

- **apply-groups-exclude** *reference*
- **source** *string*
- **starg**
- **version** *keyword*
- **monitor-oper-group** *reference*
- **mrp**
  - **join-time** *number*
  - **leave-all-time** *number*
  - **leave-time** *number*
  - **periodic-time** *number*
  - **periodic-timer** *boolean*
  - **policy** *reference*
- **multi-service-site** *reference*
- **oper-group** *reference*
- **pbb**
  - **fault-propagation**
    - **backbone-mac-address** *string*
    - **backbone-mac-name** *reference*
- **pim-snooping**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **maximum-number-groups** *number*
  - **process-cpm-traffic-on-sap-down** *boolean*
  - **radius-auth-policy** *reference*
  - **shcv-policy-ipv4** *reference*
- **spb**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **level** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **hello-interval** *number*
    - **hello-multiplier** *number*
    - **metric** *number*
  - **lsp-pacing-interval** *number*
  - **retransmit-interval** *number*
  - **split-horizon-group** *reference*
- **static-host**
  - **ipv4** *string* **mac** *string*
    - **admin-state** *keyword*
    - **ancp-string** *string*
    - **app-profile**
      - **profile** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **int-dest-id** *string*
    - **shcv**
    - **sla-profile** *reference*
    - **sub-profile** *reference*
    - **subscriber-id**
      - **string** *string*
      - **use-sap-id**
- **static-isid**
  - **range** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **end** *number*
    - **start** *number*
- **stp**
  - **admin-state** *keyword*
  - **auto-edge** *boolean*
  - **edge-port** *boolean*
  - **link-type** *keyword*

configure service vpls sap stp mst-instance

- **mst-instance** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **mst-path-cost** *number*
- **mst-port-priority** *number*
- **path-cost** *number*
- **port-num** *number*
- **priority** *number*
- **root-guard** *boolean*
- **sub-sla-mgmt**
- **admin-state** *keyword*
- **defaults**
- **app-profile** *reference*
- **int-dest-id**
- **string** *string*
- **top-q-tag**
- **sla-profile** *reference*
- **sub-profile** *reference*
- **subscriber-id**
- **auto-id**
- **sap-id**
- **string** *string*
- **mac-da-hashing** *boolean*
- **single-sub-parameters**
- **non-sub-traffic**
- **app-profile** *reference*
- **sla-profile** *reference*
- **sub-profile** *reference*
- **subscriber-id** *string*
- **profiled-traffic-only** *boolean*
- **sub-ident-policy** *reference*
- **subscriber-limit** (*keyword* | *number*)
- **transit-policy**
- **ip** *reference*
- **prefix** *reference*
- **segment-routing-v6** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **locator** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **function**
- **end-dt2m**
- **value** *number*
- **end-dt2u**
- **value** *number*
- **micro-segment-locator** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **function**
- **udt2m**
- **value** *number*
- **udt2u**
- **value** *number*
- **service-id** *number*
- **service-mtu** *number*
- **shcv-policy-ipv4** *reference*
- **spb**
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **fid** *number*
- **isis-instance** *number*
- **level** *number*

## configure service vpls spb level apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- bridge-priority number
- ect-high-path-fid number
- forwarding-tree
  - topology keyword
- lsp-lifetime number
- lsp-refresh-interval
  - half-lifetime boolean
  - interval number
- overload
  - timeout number
- overload-on-boot
  - timeout number
- timers
  - lsp-wait
    - initial-wait number
    - max-wait number
    - second-wait number
  - spf-wait
    - initial-wait number
    - max-wait number
    - second-wait number
- spbm-control-vpls
  - fid number
  - service-name string
- split-horizon-group string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - fdb
    - saps
      - auto-learn-mac-protect boolean
      - auto-learn-mac-protect-exclude-list reference
      - discard-unprotected-dest-mac boolean
      - protected-src-mac-violation-action keyword
    - residential boolean
- spoke-sdp string
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
    - failure-action keyword
    - wait-for-up-timer number
  - block-on-mesh-failure boolean
  - bpdu-translation keyword
  - collect-stats boolean
  - control-word boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - mac-monitoring
    - policy-id reference
  - description string
  - dhcp
    - apply-groups reference
    - apply-groups-exclude reference
    - description string

```

## configure service vpls spoke-sdp dhcp snoop

- **snoop** *boolean*
- **egress**
- **filter**
  - **ip** *reference*
  - **ipv6** *reference*
  - **mac** *reference*
- **mfib-allowed-mda-destinations**
  - **mda** *string*
- **qos**
  - **network**
    - **policy-name** *reference*
    - **port-redirect-group**
      - **group-name** *reference*
      - **instance** *number*
- **vc-label** *number*
- **endpoint**
  - **name** *reference*
  - **precedence** (*number* | *keyword*)
- **entropy-label**
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-lmm-fc-stats**
    - **fc** *keyword*
    - **fc-in-profile** *keyword*
  - **collect-lmm-stats** *boolean*
  - **mep md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*
    - **admin-state** *keyword*
  - **ais**
    - **client-meg-level** *number*
    - **interface-support** *boolean*
    - **interval** *number*
    - **low-priority-defect** *keyword*
    - **priority** *number*
  - **alarm-notification**
    - **fng-alarm-time** *number*
    - **fng-reset-time** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ccm** *boolean*
  - **ccm-ltm-priority** *number*
  - **ccm-padding-size** *number*
  - **cfm-vlan-tag** *string*
  - **csf**
    - **multiplier** *decimal-number*
  - **description** *string*
  - **direction** *keyword*
  - **eth-test**
    - **bit-error-threshold** *number*
    - **test-pattern**
      - **crc-tlv** *boolean*
      - **pattern** *keyword*
  - **fault-propagation** *keyword*
  - **grace**
    - **eth-ed**
      - **max-rx-defect-window** *number*
      - **priority** *number*
      - **rx-eth-ed** *boolean*
      - **tx-eth-ed** *boolean*
    - **eth-vsm-grace**
      - **rx-eth-vsm-grace** *boolean*
      - **tx-eth-vsm-grace** *boolean*
  - **lbm-svc-act-responder** *boolean*
  - **low-priority-defect** *keyword*

configure service vpls spoke-sdp eth-cfm mep mac-address

```

- mac-address string
- one-way-delay-threshold number
- primary-vlan boolean
- mip primary-vlan (number | keyword)
- apply-groups reference
- apply-groups-exclude reference
- cfm-vlan-tag string
- mac-address string
- squelch-ingress-ctag-levels number
- squelch-ingress-levels number
- vmep-filter boolean
- etree-leaf boolean
- etree-root-leaf-tag boolean
- fdb
- auto-learn-mac-protect boolean
- auto-learn-mac-protect-exclude-list reference
- discard-unknown-source boolean
- limit-mac-move keyword
- mac-learning
- aging boolean
- learning boolean
- mac-pinning boolean
- maximum-mac-addresses number
- protected-src-mac-violation-action keyword
- force-vc-forwarding keyword
- hash-label
- signal-capability
- i-vpls-mac-flush
- bgp-evpn
- send-to-bvpls boolean
- igmp-snooping
- apply-groups reference
- apply-groups-exclude reference
- fast-leave boolean
- import-policy reference
- maximum-number-group-sources number
- maximum-number-groups number
- maximum-number-sources number
- mcac
- bandwidth
- mandatory (number | keyword)
- total (number | keyword)
- interface-policy reference
- policy reference
- mrouter-port boolean
- query-interval number
- query-last-member-interval number
- query-response-interval number
- robust-count number
- router-alert-check boolean
- send-queries boolean
- static
- group string
- apply-groups reference
- apply-groups-exclude reference
- source string
- starg
- version keyword
- ignore-standby-signaling boolean
- ingress
- filter
- ip reference
- ipv6 reference
- mac reference

```

configure service vpls spoke-sdp ingress qos

```

- qos
  - network
    - fp-redirect-group
      - group-name reference
      - instance number
      - policy-name reference
    - vc-label number
- l2pt
  - termination
    - protocols
      - cdp boolean
      - dtp boolean
      - pagp boolean
      - stp boolean
      - udld boolean
      - vtp boolean
- mld-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - fast-leave boolean
  - import-policy reference
  - maximum-number-groups number
  - mrouter-port boolean
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - robust-count number
  - router-alert-check boolean
  - send-queries boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg
  - version keyword
- monitor-oper-group reference
- mrp
  - apply-groups reference
  - apply-groups-exclude reference
  - join-time number
  - leave-all-time number
  - leave-time number
  - periodic-time number
  - periodic-timer boolean
  - policy reference
- oper-group reference
- pbb
  - fault-propagation
    - backbone-mac-address string
    - backbone-mac-name reference
- pim-snooping
  - apply-groups reference
  - apply-groups-exclude reference
  - maximum-number-groups number
- pw-status
  - signaling boolean
- spb
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - level number
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vpls spoke-sdp spb level hello-interval

```

    - hello-interval number
    - hello-multiplier number
    - metric number
  - lsp-pacing-interval number
  - retransmit-interval number
- split-horizon-group reference
- static-isid
  - range number
    - apply-groups reference
    - apply-groups-exclude reference
    - end number
    - start number
- stp
  - admin-state keyword
  - auto-edge boolean
  - edge-port boolean
  - link-type keyword
  - path-cost number
  - port-num number
  - priority number
  - root-guard boolean
- transit-policy
  - prefix reference
- vc-type keyword
- vlan-vc-tag number
- stp
  - admin-state keyword
  - forward-delay number
  - hello-time number
  - hold-count number
  - maximum-age number
  - mode keyword
  - mst-instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - mst-priority number
    - vlan-range string
  - mst-maximum-hops number
  - mst-name string
  - mst-revision number
  - priority number
- temp-flooding number
- tunnel-elmi boolean
- vpn-id number
- vxlan
  - instance number
    - apply-groups reference
    - apply-groups-exclude reference
    - assisted-replication
      - leaf
        - acttime number
      - replicator
    - egress-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
  - fdb
    - discard-unknown-source boolean
    - mac-learning
      - aging boolean
      - learning boolean
    - maximum-mac-addresses number
    - protected-src-mac-violation-action keyword
  - igmp-snooping
    - mrouter-port boolean
  - mld-snooping
    - mrouter-port boolean

```



configure service vpls vxlan instance network

```

- network
  - ingress
    - qos
      - network
        - fp-redirect-group
          - group-name reference
          - instance number
          - policy-name reference
        - rx-discard-on-ndf keyword
        - source-vtep-security boolean
        - vni number
      - source-vtep (ipv4-address-no-zone | ipv6-address-no-zone)
- wlan-gw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - wlan-gw-group reference
- vprn string
- aa-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - ip-mtu number
  - ipv4
    - primary
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - prefix-length number
  - sap string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress
      - filter
        - ip reference
      - qos
        - sap-egress
          - policy-name reference
      - virtual-port
        - vport-name reference
    - fwd-wholesale
      - pppoe-service reference
  - ingress
    - qos
      - sap-ingress
        - overrides
        - policy-name reference
  - lag
- aaa
  - remote-servers
    - radius
      - access-algorithm keyword
      - accounting boolean
      - accounting-port number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authorization boolean
      - interactive-authentication boolean
      - port number

```

configure service vprn aaa remote-servers radius server

- **server** *number*
  - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authenticator** *keyword*
  - **secret** *string*
  - **tls-client-profile** *reference*
  - **server-retry** *number*
  - **server-timeout** *number*
  - **use-default-template** *boolean*
- **tacplus**
  - **accounting**
    - **record-type** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authorization**
    - **request-format**
      - **access-operation-cmd** *keyword*
    - **use-priv-lvl** *boolean*
  - **interactive-authentication** *boolean*
  - **priv-lvl-map**
    - **priv-lvl** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **user-profile-name** *reference*
  - **server** *number*
    - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **port** *number*
    - **secret** *string*
    - **server-timeout** *number*
    - **use-default-template** *boolean*
- **aarp-interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **ip-mtu** *number*
  - **spoke-sdp** *string*
    - **aarp**
      - **id** *reference*
      - **type** *keyword*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **egress**
      - **filter**
        - **ip** *reference*
      - **vc-label** *number*
    - **ingress**
      - **filter**
        - **ip** *reference*
      - **vc-label** *number*
- **admin-state** *keyword*
- **aggregates**
  - **aggregate** (*ipv4-prefix* | *ipv6-prefix*)
    - **aggregator**
      - **address** *string*
      - **as-number** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*

## configure service vpn aggregates aggregate as-set

- **as-set** *boolean*
- **blackhole**
  - **generate-icmp** *boolean*
- **community** *string*
- **description** *string*
- **discard-component-communities** *boolean*
- **indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)
- **local-preference** *number*
- **policy** *reference*
- **summary-only** *boolean*
- **tunnel-group** *number*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **allow-export-bgp-vpn** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **autonomous-system** *number*
- **bgp**
  - **admin-state** *keyword*
  - **advertise-inactive** *boolean*
  - **advertise-ipv6-next-hops**
    - **ipv4** *boolean*
  - **aggregator-id-zero** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **asn-4-byte** *boolean*
  - **attribute-set**
    - **remove** *boolean*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **backup-path**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **label-ipv6** *boolean*
  - **best-path-selection**
    - **always-compare-med**
      - **med-value** *keyword*
      - **strict-as** *boolean*
  - **as-path-ignore**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **label-ipv6** *boolean*
  - **compare-origin-validation-state** *boolean*
  - **d-path-length-ignore** *boolean*
  - **deterministic-med** *boolean*
  - **ebgp-ibgp-equal**
    - **ipv4** *boolean*
    - **ipv6** *boolean*
    - **label-ipv4** *boolean*
    - **label-ipv6** *boolean*
  - **ignore-nh-metric** *boolean*
  - **ignore-router-id**
  - **origin-invalid-unusable** *boolean*
- **bfd-liveness** *boolean*
- **bfd-strict-mode**
  - **advertise**
    - **holdtime** *number*
  - **next-hop-reachability** *boolean*
- **client-reflect** *boolean*
- **cluster**
  - **cluster-id** *string*
- **connect-retry** *number*

configure service vprn bgp convergence

- **convergence**
  - **family** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **max-wait-to-advertise** *number*
  - **min-wait-to-advertise** *number*
- **damp-peer-oscillations**
  - **error-interval** *number*
  - **idle-hold-time**
    - **initial-wait** *number*
    - **max-wait** *number*
    - **second-wait** *number*
- **damping** *boolean*
- **default-label-preference**
  - **ebgp** *number*
  - **ibgp** *number*
- **default-preference**
  - **ebgp** *number*
  - **ibgp** *number*
- **description** *string*
- **domain-id** *string*
- **dynamic-neighbor-limit** *number*
- **ebgp-default-reject-policy**
  - **export** *boolean*
  - **import** *boolean*
- **eibgp-loadbalance** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
  - **update-fault-tolerance** *boolean*
- **export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string* | *string*)
- **extended-nh-encoding**
  - **ipv4** *boolean*
- **family**
  - **flow-ipv4** *boolean*
  - **flow-ipv6** *boolean*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
  - **mcast-ipv4** *boolean*
  - **mcast-ipv6** *boolean*
- **fast-external-failover** *boolean*
- **flowspec**
  - **validate-dest-prefix** *boolean*
  - **validate-redirect-ip** *boolean*
- **graceful-restart**
  - **gr-notification** *boolean*
  - **long-lived**
    - **advertise-stale-to-all-neighbors** *boolean*
    - **advertised-stale-time** *number*
    - **family** *keyword*
      - **advertised-stale-time** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **helper-override-stale-time** *number*
      - **forwarding-bits-set** *keyword*
      - **helper-override-restart-time** *number*
      - **helper-override-stale-time** *number*
      - **without-no-export** *boolean*
    - **restart-time** *number*
    - **stale-routes-time** *number*
- **group** *string*

## configure service vprn bgp group admin-state

- **admin-state** *keyword*
- **advertise-inactive** *boolean*
- **advertise-ipv6-next-hops**
  - **ipv4** *boolean*
- **aggregator-id-zero** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **as-override** *boolean*
- **asn-4-byte** *boolean*
- **authentication-key** *string*
- **authentication-keychain** *reference*
- **bfd-liveness** *boolean*
- **bfd-strict-mode**
  - **advertise**
    - **holdtime** *number*
  - **next-hop-reachability** *boolean*
- **capability-negotiation** *boolean*
- **client-reflect** *boolean*
- **cluster**
  - **cluster-id** *string*
- **connect-retry** *number*
- **damp-peer-oscillations**
  - **error-interval** *number*
  - **idle-hold-time**
    - **initial-wait** *number*
    - **max-wait** *number*
    - **second-wait** *number*
- **damping** *boolean*
- **default-label-preference**
  - **ebgp** *number*
  - **ibgp** *number*
- **default-preference**
  - **ebgp** *number*
  - **ibgp** *number*
- **description** *string*
- **dynamic-neighbor**
  - **interface** *reference*
    - **allowed-peer-as** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **max-sessions** *number*
  - **match**
    - **prefix** (*ipv4-prefix | ipv6-prefix*)
      - **allowed-peer-as** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
- **dynamic-neighbor-limit** *number*
- **ebgp-default-reject-policy**
  - **export** *boolean*
  - **import** *boolean*
- **enforce-first-as** *boolean*
- **error-handling**
  - **update-fault-tolerance** *boolean*
- **evpn-link-bandwidth**
  - **add-to-received-bgp** *number*
- **export**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** (*policy-expr-string | string*)
- **extended-nh-encoding**
  - **ipv4** *boolean*
- **family**
  - **flow-ipv4** *boolean*
  - **flow-ipv6** *boolean*

configure service vprn bgp group family ipv4

```

- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- fast-external-failover boolean
- graceful-restart
- gr-notification boolean
- long-lived
- advertise-stale-to-all-neighbors boolean
- advertised-stale-time number
- family keyword
- advertised-stale-time number
- apply-groups reference
- apply-groups-exclude reference
- helper-override-stale-time number
- forwarding-bits-set keyword
- helper-override-restart-time number
- helper-override-stale-time number
- without-no-export boolean
- restart-time number
- stale-routes-time number
- hold-time
- minimum-hold-time number
- seconds number
- import
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
- accept-from-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- add-to-received-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- aggregate-used-paths
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- send-to-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as
- as-number number
- prepend-global-as boolean
- private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor
- admin-state keyword
- all-stations boolean
- apply-groups reference
- apply-groups-exclude reference

```

configure service vprn bgp group monitor route-monitoring

```

- route-monitoring
  - post-policy boolean
  - pre-policy boolean
- station reference
- multihop number
- multipath-eligible boolean
- next-hop-self boolean
- origin-validation
  - ipv4 boolean
  - ipv6 boolean
  - label-ipv4 boolean
- passive boolean
- path-mtu-discovery boolean
- peer-as number
- peer-ip-tracking boolean
- preference number
- prefix-limit keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - hold-excess number
  - idle-timeout number
  - log-only boolean
  - maximum number
  - post-import boolean
  - threshold number
- remove-private
  - limited boolean
  - replace boolean
  - skip-peer-as boolean
- send-communities
  - extended boolean
  - large boolean
  - standard boolean
- send-default
  - export-policy reference
  - ipv4 boolean
  - ipv6 boolean
- split-horizon boolean
- static-group boolean
- tcp-mss (number | keyword)
- third-party-nexthop boolean
- ttl-security number
- type keyword
- hold-time
  - minimum-hold-time number
  - seconds number
- ibgp-multipath boolean
- import
  - apply-groups reference
  - apply-groups-exclude reference
  - policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- local-as
  - as-number number
  - prepend-global-as boolean
  - private boolean
- local-preference number
- loop-detect keyword
- loop-detect-threshold number
- med-out (number | keyword)
- min-route-advertisement number
- monitor

```

configure service vprn bgp monitor admin-state

- **admin-state** *keyword*
- **all-stations** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **route-monitoring**
  - **post-policy** *boolean*
  - **pre-policy** *boolean*
- **station** *reference*
- **multihop** *number*
- **multipath**
  - **ebgp** *number*
  - **family** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ebgp** *number*
    - **ibgp** *number*
    - **max-paths** *number*
    - **restrict** *keyword*
    - **unequal-cost** *boolean*
  - **ibgp** *number*
  - **max-paths** *number*
  - **restrict** *keyword*
  - **unequal-cost** *boolean*
- **neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
  - **admin-state** *keyword*
  - **advertise-inactive** *boolean*
  - **advertise-ipv6-next-hops**
    - **ipv4** *boolean*
  - **aggregator-id-zero** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **as-override** *boolean*
  - **asn-4-byte** *boolean*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **bfd-liveness** *boolean*
  - **bfd-strict-mode**
    - **advertise**
      - **holdtime** *number*
    - **next-hop-reachability** *boolean*
  - **capability-negotiation** *boolean*
  - **client-reflect** *boolean*
  - **cluster**
    - **cluster-id** *string*
  - **connect-retry** *number*
  - **damp-peer-oscillations**
    - **error-interval** *number*
    - **idle-hold-time**
      - **initial-wait** *number*
      - **max-wait** *number*
      - **second-wait** *number*
  - **damping** *boolean*
  - **default-label-preference**
    - **ebgp** *number*
    - **ibgp** *number*
  - **default-preference**
    - **ebgp** *number*
    - **ibgp** *number*
  - **description** *string*
  - **ebgp-default-reject-policy**
    - **export** *boolean*
    - **import** *boolean*
  - **enforce-first-as** *boolean*
  - **error-handling**



configure service vpn bgp neighbor error-handling update-fault-tolerance

```

- update-fault-tolerance boolean
- evpn-link-bandwidth
- add-to-received-bgp number
- export
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- extended-nh-encoding
- ipv4 boolean
- family
- flow-ipv4 boolean
- flow-ipv6 boolean
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- mcast-ipv4 boolean
- mcast-ipv6 boolean
- fast-external-failover boolean
- graceful-restart
- gr-notification boolean
- long-lived
- advertise-stale-to-all-neighbors boolean
- advertised-stale-time number
- family keyword
- advertised-stale-time number
- apply-groups reference
- apply-groups-exclude reference
- helper-override-stale-time number
- forwarding-bits-set keyword
- helper-override-restart-time number
- helper-override-stale-time number
- without-no-export boolean
- restart-time number
- stale-routes-time number
- group reference
- hold-time
- minimum-hold-time number
- seconds number
- import
- apply-groups reference
- apply-groups-exclude reference
- policy (policy-expr-string | string)
- initial-send-delay-zero boolean
- keepalive number
- label-preference number
- link-bandwidth
- accept-from-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- add-to-received-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- aggregate-used-paths
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- send-to-ebgp
- ipv4 boolean
- ipv6 boolean
- label-ipv4 boolean
- local-address (ipv4-address-no-zone | ipv6-address-no-zone | interface-name)
- local-as

```

configure service vprn bgp neighbor local-as as-number

- **as-number** *number*
- **prepend-global-as** *boolean*
- **private** *boolean*
- **local-preference** *number*
- **loop-detect** *keyword*
- **loop-detect-threshold** *number*
- **med-out** (*number* | *keyword*)
- **min-route-advertisement** *number*
- **monitor**
  - **admin-state** *keyword*
  - **all-stations** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **route-monitoring**
    - **post-policy** *boolean*
    - **pre-policy** *boolean*
  - **station** *reference*
- **multihop** *number*
- **multipath-eligible** *boolean*
- **next-hop-self** *boolean*
- **origin-validation**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
  - **label-ipv4** *boolean*
- **passive** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-as** *number*
- **peer-creation-type** *keyword*
- **peer-ip-tracking** *boolean*
- **preference** *number*
- **prefix-limit** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **hold-excess** *number*
  - **idle-timeout** *number*
  - **log-only** *boolean*
  - **maximum** *number*
  - **post-import** *boolean*
  - **threshold** *number*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** (*number* | *keyword*)
- **third-party-nexthop** *boolean*
- **ttl-security** *number*
- **type** *keyword*
- **next-hop-resolution**
  - **policy** *reference*
  - **use-bgp-routes** *boolean*
  - **use-leaked-routes**
    - **static** *boolean*
- **path-mtu-discovery** *boolean*
- **peer-ip-tracking** *boolean*
- **peer-tracking-policy** *reference*

## configure service vprn bgp preference

- **preference** *number*
- **rapid-withdrawal** *boolean*
- **remove-private**
  - **limited** *boolean*
  - **replace** *boolean*
  - **skip-peer-as** *boolean*
- **rib-management**
- **ipv4**
  - **leak-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
  - **route-table-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy-name** *reference*
- **ipv6**
  - **leak-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
  - **route-table-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy-name** *reference*
- **label-ipv4**
  - **leak-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
  - **route-table-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy-name** *reference*
- **label-ipv6**
  - **leak-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
- **router-id** *string*
- **send-communities**
  - **extended** *boolean*
  - **large** *boolean*
  - **standard** *boolean*
- **send-default**
  - **export-policy** *reference*
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **split-horizon** *boolean*
- **tcp-mss** *number*
- **third-party-nextthop** *boolean*
- **bgp-evpn**
  - **mpls** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **auto-bind-tunnel**
      - **allow-flex-algo-fallback** *boolean*
      - **ecmp** *number*
      - **enforce-strict-tunnel-tagging** *boolean*
      - **resolution** *keyword*
      - **resolution-filter**
        - **bgp** *boolean*
        - **ldp** *boolean*

configure service vprn bgp-evpn mpls auto-bind-tunnel resolution-filter mpls-fwd-policy

```

    - mpls-fwd-policy boolean
    - rib-api boolean
    - rsvp boolean
    - sr-isis boolean
    - sr-ospf boolean
    - sr-ospf3 boolean
    - sr-policy boolean
    - sr-te boolean
    - udp boolean
  - default-route-tag string
  - domain-id string
  - dynamic-egress-label-limit boolean
  - evi number
  - evpn-link-bandwidth
    - advertise
      - max-dynamic-weight number
      - weight (number | keyword)
    - weighted-ecmp boolean
  - route-distinguisher (string | keyword)
  - send-tunnel-encap
    - mpls boolean
    - mpls-over-udp boolean
  - vrf-export
    - apply-groups reference
    - apply-groups-exclude reference
    - policy (policy-expr-string | string)
  - vrf-import
    - apply-groups reference
    - apply-groups-exclude reference
    - policy (policy-expr-string | string)
  - vrf-target
    - community string
    - export-community string
    - import-community string
  - segment-routing-v6 number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - default-route-tag string
  - domain-id string
  - evi number
  - evpn-link-bandwidth
    - advertise
      - max-dynamic-weight number
      - weight (number | keyword)
    - weighted-ecmp boolean
  - resolution keyword
  - route-distinguisher (string | keyword)
  - source-address string
  - srv6
    - default-locator string
    - instance reference
  - vrf-export
    - apply-groups reference
    - apply-groups-exclude reference
    - policy (policy-expr-string | string)
  - vrf-import
    - apply-groups reference
    - apply-groups-exclude reference
    - policy (policy-expr-string | string)
  - vrf-target
    - community string
    - export-community string
    - import-community string

```

configure service vprn bgp-ipvprn

- **bgp-ipvprn**
  - **attribute-set**
    - **export** *boolean*
    - **import** *keyword*
  - **mpls**
    - **admin-state** *keyword*
    - **auto-bind-tunnel**
      - **allow-flex-algo-fallback** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ecmp** *number*
      - **enforce-strict-tunnel-tagging** *boolean*
      - **resolution** *keyword*
      - **resolution-filter**
        - **bgp** *boolean*
        - **gre** *boolean*
        - **ldp** *boolean*
        - **mpls-fwd-policy** *boolean*
        - **rib-api** *boolean*
        - **rsvp** *boolean*
        - **sr-isis** *boolean*
        - **sr-ospf** *boolean*
        - **sr-ospf3** *boolean*
        - **sr-policy** *boolean*
        - **sr-te** *boolean*
        - **udp** *boolean*
      - **weighted-ecmp** *boolean*
    - **domain-id** *string*
    - **dynamic-egress-label-limit** *boolean*
    - **route-distinguisher** (*string* | *keyword*)
    - **vrf-export**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy** (*policy-expr-string* | *string*)
    - **vrf-import**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **policy** (*policy-expr-string* | *string*)
    - **vrf-target**
      - **community** *string*
      - **export-community** *string*
      - **import-community** *string*
  - **segment-routing-v6** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **default-route-tag** *string*
    - **domain-id** *string*
    - **resolution** *keyword*
    - **route-distinguisher** (*string* | *keyword*)
    - **source-address** *string*
    - **srv6**
      - **default-locator** *string*
      - **instance** *reference*
  - **vrf-export**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
  - **vrf-import**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **policy** (*policy-expr-string* | *string*)
  - **vrf-target**
    - **community** *string*

configure service vpn bgp-ipvpn segment-routing-v6 vrf-target export-community

- **export-community** *string*
- **import-community** *string*
- **bgp-shared-queue**
  - **cir** (*number* | *keyword*)
  - **pir** (*number* | *keyword*)
- **bgp-vpn-backup**
  - **ipv4** *boolean*
  - **ipv6** *boolean*
- **carrier-carrier-vpn** *boolean*
- **class-forwarding** *boolean*
- **confederation**
  - **confed-as-num** *number*
  - **members** *number*
- **customer** *reference*
- **d-path-length-ignore** *boolean*
- **description** *string*
- **dhcp-server**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dhcpv4** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **failover**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ignore-mclt-on-takeover** *boolean*
      - **maximum-client-lead-time** *number*
      - **partner-down-delay** *number*
      - **peer** *reference*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **sync-tag** *string*
      - **startup-wait-time** *number*
  - **force-renews** *boolean*
  - **lease-hold**
    - **additional-scenarios**
      - **internal-lease-ipsec** *boolean*
      - **solicited-release** *boolean*
    - **time** *number*
  - **pool** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **failover**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ignore-mclt-on-takeover** *boolean*
      - **maximum-client-lead-time** *number*
      - **partner-down-delay** *number*
      - **peer** *reference*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **sync-tag** *string*
      - **startup-wait-time** *number*
    - **max-lease-time** *number*
    - **min-lease-time** *number*
    - **minimum-free**
      - **absolute** *number*
      - **event-when-depleted** *boolean*
      - **percent** *number*

configure service vprn dhcp-server dhcpv4 pool nak-non-matching-subnet

```

- nak-non-matching-subnet boolean
- offer-time number
- options
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
  - subnet string
    - address-range string end string
    - apply-groups reference
    - apply-groups-exclude reference
    - failover-control-type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - drain boolean
    - exclude-addresses string end string
    - maximum-declined number
    - minimum-free
      - absolute number
      - event-when-depleted boolean
      - percent number
    - options
      - option (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - ascii-string string
        - duration number
        - empty
        - hex-string string
        - ipv4-address string
        - netbios-node-type keyword
  - pool-selection
    - use-gi-address
      - scope keyword
    - use-pool-from-client
      - delimiter string
  - user-db reference
  - user-identification keyword
- dhcpv6 string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-provisioned boolean
  - defaults
    - apply-groups reference
    - apply-groups-exclude reference
    - options
      - option (number | keyword)
        - apply-groups reference
        - apply-groups-exclude reference
        - ascii-string string
        - domain-string string
        - duration number
        - empty
        - hex-string string
        - ipv6-address string
    - preferred-lifetime number
    - rebind-time number
    - renew-time number

```

configure service vprn dhcp-server dhcpv6 defaults valid-lifetime

- **valid-lifetime** *number*
- **description** *string*
- **failover**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ignore-mclt-on-takeover** *boolean*
  - **maximum-client-lead-time** *number*
  - **partner-down-delay** *number*
  - **peer** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sync-tag** *string*
  - **startup-wait-time** *number*
- **ignore-rapid-commit** *boolean*
- **interface-id-mapping** *boolean*
- **lease-hold**
  - **additional-scenarios**
    - **internal-lease-ipsec** *boolean*
    - **solicited-release** *boolean*
  - **time** *number*
- **lease-query** *boolean*
- **pool** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **delegated-prefix**
    - **length** *number*
    - **maximum** *number*
    - **minimum** *number*
  - **description** *string*
  - **exclude-prefix** *string*
  - **failover**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ignore-mclt-on-takeover** *boolean*
    - **maximum-client-lead-time** *number*
    - **partner-down-delay** *number*
    - **peer** *reference*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **sync-tag** *string*
    - **startup-wait-time** *number*
  - **options**
    - **option** (*number* | *keyword*)
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **ascii-string** *string*
      - **domain-string** *string*
      - **duration** *number*
      - **empty**
      - **hex-string** *string*
      - **ipv6-address** *string*
  - **prefix** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **drain** *boolean*
    - **failover-control-type** *keyword*
    - **options**
      - **option** (*number* | *keyword*)
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **ascii-string** *string*
        - **domain-string** *string*



configure service vprn dhcp-server dhcpv6 pool prefix options option duration

```

    - duration number
    - empty
    - hex-string string
    - ipv6-address string
  - preferred-lifetime number
  - prefix-length-threshold number
    - absolute number
    - apply-groups reference
    - apply-groups-exclude reference
    - event-when-depleted boolean
    - percent number
  - prefix-type
    - pd boolean
    - wan-host boolean
  - rebind-time number
  - renew-time number
  - valid-lifetime number
  - prefix-length-threshold number
    - apply-groups reference
    - apply-groups-exclude reference
    - event-when-depleted boolean
    - minimum-free-percent number
  - pool-selection
    - use-link-address
      - scope keyword
    - use-pool-from-client
      - delimiter string
  - server-id
    - apply-groups reference
    - apply-groups-exclude reference
    - duid-enterprise
      - ascii-string string
      - hex-string string
    - duid-link-local
    - user-identification keyword
  - dns
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - default-domain string
    - ipv4-source-address (keyword | ipv4-unicast-address)
    - ipv6-source-address (keyword | ipv6-unicast-address)
    - server (ipv4-address-no-zone | ipv6-address-no-zone)
  - ecmp number
  - ecmp-unequal-cost boolean
  - entropy-label boolean
  - eth-cfm
    - apply-groups reference
    - apply-groups-exclude reference
  - export-inactive-bgp boolean
  - export-inactive-bgp-enhanced boolean
  - fib-priority keyword
  - firewall
    - apply-groups reference
    - apply-groups-exclude reference
    - domain string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
    - dhcpv6-server
      - name string
      - router-instance string
    - nat-group reference
    - prefix string

```

configure service vprn firewall domain prefix apply-groups

```

    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - wlan-gw-group reference
- flowspec
  - apply-groups reference
  - apply-groups-exclude reference
  - filter-cam-type keyword
  - ip-filter-max-size number
  - ipv6-filter-max-size number
- grt-leaking
  - allow-local-management boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - export-grt
    - policy-name (policy-expr-string | string)
  - export-limit number
  - export-v6-limit number
  - grt-lookup boolean
  - import-grt
    - policy-name (policy-expr-string | string)
- gsmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - group string
    - admin-state keyword
    - ancp
      - dynamic-topology-discovery boolean
      - oam boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - hold-multiplier number
    - idle-filter boolean
    - keepalive number
    - neighbor string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - local-address string
      - priority-marking
        - dscp keyword
        - prec number
      - persistency boolean
- gtp
  - s11
    - interface reference
    - apn-policy reference
    - apply-groups reference
    - apply-groups-exclude reference
    - peer-profile-map
      - prefix (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - peer-profile reference
    - upf-data-endpoint
      - apply-groups reference
      - apply-groups-exclude reference
      - fpe reference
      - interface reference
  - uplink
    - apn string

```

configure service vprn gtp uplink apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- pdn-type keyword
- peer-profile-map
  - prefix (ipv4-prefix | ipv6-prefix)
    - apply-groups reference
    - apply-groups-exclude reference
    - peer-profile reference
- hash-label boolean
- igmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - forwarding-group-interface forwarding-service string group-interface-
name reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- group-if-query-source-address string
- group-interface reference
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
  - mcac
    - bandwidth
      - mandatory (number | keyword)
      - total (number | keyword)
    - interface-policy reference
    - policy reference
  - query-interval number
  - query-last-member-interval number
  - query-response-interval number
  - query-source-address string
  - router-alert-check boolean
  - sub-hosts-only boolean
  - subnet-check boolean
  - version keyword
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - import-policy reference

```

configure service vprn igmp interface maximum-number-group-sources

- **maximum-number-group-sources** *number*
- **maximum-number-groups** *number*
- **maximum-number-sources** *number*
- **mcac**
  - **bandwidth**
    - **mandatory** (*number* | *keyword*)
    - **total** (*number* | *keyword*)
  - **interface-policy** *reference*
  - **mc-constraints**
    - **level** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
    - **number-down** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *number*
    - **use-lag-port-weight** *boolean*
  - **policy** *reference*
  - **query-interval** *number*
  - **query-last-member-interval** *number*
  - **query-response-interval** *number*
  - **redundant-mcast** *boolean*
  - **router-alert-check** *boolean*
  - **ssm-translate**
    - **group-range start** *string* **end** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **source** *string*
  - **static**
    - **group** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **source** *string*
      - **starg**
    - **group-range start** *string* **end** *string* **step** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **source** *string*
      - **starg**
  - **subnet-check** *boolean*
  - **version** *keyword*
  - **query-interval** *number*
  - **query-last-member-interval** *number*
  - **query-response-interval** *number*
  - **robust-count** *number*
  - **ssm-translate**
    - **group-range start** *string* **end** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **source** *string*
- **igmp-host-tracking**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **expiry-time** *number*
- **ignore-nh-metric** *boolean*
- **interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **cflowd-parameters**
  - **sampling** *keyword*
    - **apply-groups** *reference*

configure service vpn interface cflowd-parameters sampling apply-groups-exclude

```

- apply-groups-exclude reference
- direction keyword
- sample-profile (keyword | number)
- type keyword
- cpu-protection reference
- description string
- dynamic-tunnel-redundant-nexthop string
- external-reference
- openconfig
-   subinterface number
- hold-time
- ipv4
-   down
-     init-only boolean
-     seconds number
-   up
-     seconds number
- ipv6
-   down
-     init-only boolean
-     seconds number
-   up
-     seconds number
- if-attribute
-   admin-group reference
-   srlg-group reference
- ingress
-   destination-class-lookup boolean
-   policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ipsec
-   admin-state keyword
-   apply-groups reference
-   apply-groups-exclude reference
-   ip-exception reference
-   ipsec-tunnel string
-     admin-state keyword
-     apply-groups reference
-     apply-groups-exclude reference
-   bfd
-     bfd-designate boolean
-     bfd-liveness
-       dest-ip string
-       interface string
-       service-name string
-   clear-df-bit boolean
-   copy-traffic-class-upon-decapsulation boolean
-   description string
-   encapsulated-ip-mtu number
-   icmp-generation
-     frag-required
-       admin-state keyword
-       interval number
-       message-count number
-   icmp6-generation
-     packet-too-big
-       admin-state keyword
-       interval number
-       message-count number
-   ip-mtu number
-   key-exchange
-     dynamic
-       auto-establish boolean

```

configure service vpn interface ipsec ipsec-tunnel key-exchange dynamic cert

```

    - cert
      - cert-profile reference
      - status-verify
        - default-result keyword
        - primary keyword
        - secondary keyword
      - trust-anchor-profile reference
    - id
      - fqdn string
      - ipv4 string
      - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - ike-policy reference
    - ipsec-transform reference
    - pre-shared-key string
  - manual
    - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
  - local-gateway-address-override (ipv4-address-no-zone | ipv6-address-no-
zone)
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-sap number
  - private-service string
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - remote-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - replay-window number
  - security-policy
    - id number
    - strict-match boolean
  - ipv6-exception reference
  - public-sap number
  - tunnel-group reference
- ipv4
  - addresses
    - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - prefix-length number
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - dhcp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - gi-address string
    - lease-populate
      - max-leases number

```

configure service vprn interface ipv4 dhcp option-82

```

- option-82
  - action keyword
  - circuit-id
    - ascii-tuple
    - ifindex
    - none
    - sap-id
    - vlan-ascii-tuple
  - remote-id
    - ascii-string string
    - mac
    - none
  - vendor-specific-option
    - client-mac-address boolean
    - pool-name boolean
    - sap-id boolean
    - service-id boolean
    - string string
    - system-id boolean
- proxy-server
  - admin-state keyword
  - emulated-server string
  - lease-time
    - radius-override boolean
    - value number
- python-policy reference
- relay-plain-bootp boolean
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- use-arp boolean
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
  - unreachablees
    - admin-state keyword
    - number number
    - seconds number
- ip-helper-address string
- local-dhcp-server reference
- neighbor-discovery
  - host-route
    - populate keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
- learn-unsolicited boolean
- limit
  - log-only boolean

```

configure service vprn interface ipv4 neighbor-discovery limit max-entries

```

    - max-entries number
    - threshold number
    - local-proxy-arp boolean
    - populate boolean
    - proactive-refresh boolean
    - proxy-arp-policy reference
    - remote-proxy-arp boolean
    - retry-timer number
    - static-neighbor string
      - apply-groups reference
      - apply-groups-exclude reference
      - mac-address string
    - static-neighbor-unnumbered
      - mac-address string
    - timeout number
  - primary
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - broadcast keyword
    - prefix-length number
    - track-srrp number
  - qos-route-lookup keyword
  - secondary string
    - apply-groups reference
    - apply-groups-exclude reference
    - broadcast keyword
    - igp-inhibit boolean
    - prefix-length number
    - track-srrp number
  - tcp-mss number
  - unnumbered
    - ip-address string
    - ip-int-name string
  - urpf-check
    - ignore-default boolean
    - mode keyword
  - vrrp number
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-key string
    - backup string
    - bfd-liveness
      - apply-groups reference
      - apply-groups-exclude reference
      - dest-ip string
      - interface-name string
      - service-name string
    - init-delay number
    - mac string
    - master-int-inherit boolean
    - message-interval number
    - monitor-oper-group reference
    - ntp-reply boolean
    - oper-group reference
    - owner boolean
    - passive boolean
    - ping-reply boolean
    - policy reference
    - preempt boolean
    - priority number
    - ssh-reply boolean
    - standby-forwarding boolean

```



configure service vprn interface ipv4 vrrp telnet-reply

```

- telnet-reply boolean
- traceroute-reply boolean
- ipv6
- address string
- apply-groups reference
- apply-groups-exclude reference
- duplicate-address-detection boolean
- eui-64 boolean
- prefix-length number
- primary-preference number
- track-srrp number
- bfd
- admin-state keyword
- echo-receive number
- multiplier number
- receive number
- transmit-interval number
- type keyword
- dhcp6
- apply-groups reference
- apply-groups-exclude reference
- relay
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- lease-populate
- max-nbr-of-leases number
- route-populate
- na boolean
- pd
- exclude boolean
- ta boolean
- link-address string
- neighbor-resolution boolean
- option
- apply-groups reference
- apply-groups-exclude reference
- interface-id
- ascii-tuple
- if-index
- sap-id
- string string
- remote-id boolean
- python-policy reference
- server string
- source-address string
- user-db reference
- server
- apply-groups reference
- apply-groups-exclude reference
- max-nbr-of-leases number
- prefix-delegation
- admin-state keyword
- prefix string
- apply-groups reference
- apply-groups-exclude reference
- client-id
- duid string
- iaid number
- preferred-lifetime (number | keyword)
- valid-lifetime (number | keyword)
- duplicate-address-detection boolean
- forward-ipv4-packets boolean

```

configure service vprn interface ipv6 icmp6

```

- icmp6
- packet-too-big
  - admin-state keyword
  - number number
  - seconds number
- param-problem
  - admin-state keyword
  - number number
  - seconds number
- redirects
  - admin-state keyword
  - number number
  - seconds number
- time-exceeded
  - admin-state keyword
  - number number
  - seconds number
- unreachablees
  - admin-state keyword
  - number number
  - seconds number
- link-local-address
  - address string
  - duplicate-address-detection boolean
- local-dhcp-server reference
- neighbor-discovery
  - host-route
    - populate keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
  - learn-unsolicited keyword
- limit
  - log-only boolean
  - max-entries number
  - threshold number
- local-proxy-nd boolean
- proactive-refresh keyword
- proxy-nd-policy reference
- reachable-time number
- secure-nd
  - admin-state keyword
  - allow-unsecured-msgs boolean
  - public-key-min-bits number
  - security-parameter number
- stale-time number
- static-neighbor string
  - apply-groups reference
  - apply-groups-exclude reference
  - mac-address string
- qos-route-lookup keyword
- tcp-mss number
- urpf-check
  - ignore-default boolean
  - mode keyword
- vrrp number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup string
  - bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)

```

configure service vprn interface ipv6 vrrp bfd-liveness interface-name

- **interface-name** *string*
- **service-name** *string*
- **init-delay** *number*
- **mac** *string*
- **master-int-inherit** *boolean*
- **message-interval** *number*
- **monitor-oper-group** *reference*
- **ntp-reply** *boolean*
- **oper-group** *reference*
- **owner** *boolean*
- **passive** *boolean*
- **ping-reply** *boolean*
- **policy** *reference*
- **preempt** *boolean*
- **priority** *number*
- **standby-forwarding** *boolean*
- **telnet-reply** *boolean*
- **traceroute-reply** *boolean*
- **load-balancing**
  - **flow-label-load-balancing** *boolean*
  - **ip-load-balancing** *keyword*
  - **spi-load-balancing** *boolean*
  - **teid-load-balancing** *boolean*
- **loopback** *boolean*
- **mac** *string*
- **mac-accounting** *boolean*
- **monitor-oper-group** *reference*
- **multi-chassis-shunting-profile** *reference*
- **ping-template**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **destination-address** *string*
  - **name** *reference*
- **ptp-hw-assist**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **radius-auth-policy** *reference*
- **sap** *string*
  - **aarp**
    - **id** *reference*
    - **type** *keyword*
  - **accounting-policy** *reference*
  - **admin-state** *keyword*
  - **anti-spoof** *keyword*
  - **app-profile** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth** *number*
  - **calling-station-id** *string*
  - **collect-stats** *boolean*
  - **cpu-protection**
    - **eth-cfm-monitoring**
      - **aggregate**
      - **car**
    - **ip-src-monitoring**
    - **mac-monitoring**
    - **policy-id** *reference*
  - **description** *string*
  - **dist-cpu-protection** *reference*
  - **egress**
    - **agg-rate**
      - **adaptation-rule** *keyword*

configure service vprn interface sap egress agg-rate burst-limit

```

- burst-limit (number | keyword)
- limit-unused-bandwidth boolean
- queue-frame-based-accounting boolean
- rate number
- filter
- ip reference
- ipv6 reference
- qos
- policer-control-policy
  - overrides
    - apply-groups reference
    - apply-groups-exclude reference
    - root
      - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-thresh-separation (number | keyword)
        - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
      - policy-name reference
  - qinq-mark-top-only boolean
- sap-egress
  - overrides
    - hs-secondary-shaper string
    - hs-wrr-group reference
    - apply-groups reference
    - apply-groups-exclude reference
    - hs-class-weight number
    - percent-rate decimal-number
    - rate (number | keyword)
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - adaptation-rule
      - cir keyword
      - pir keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - burst-limit (number | keyword)
    - cbs (number | keyword)
    - drop-tail
      - low
        - percent-reduction-from-mbs (number | keyword)
    - hs-class-weight number
    - hs-wred-queue
      - policy reference
    - hs-wrr-weight number
    - mbs (number | keyword)
    - monitor-queue-depth
      - fast-polling boolean
      - violation-threshold decimal-number

```

configure service vprn interface sap egress qos sap-egress overrides queue parent

```

    - parent
      - cir-weight number
      - weight number
    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - port-redirect-group
    - group-name reference
    - instance number
- scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - queue-group-redirect-list reference
  - virtual-port
    - vport-name reference
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats
    - fc keyword
    - fc-in-profile keyword
  - collect-lmm-stats boolean
  - mep md-admin-name reference ma-admin-name reference mep-id number
  - admin-state keyword
  - ais boolean
  - alarm-notification
    - fng-alarm-time number
    - fng-reset-time number
  - apply-groups reference
  - apply-groups-exclude reference
  - ccm boolean
  - ccm-ltm-priority number
  - ccm-padding-size number
  - csf
    - multiplier decimal-number
  - description string
  - eth-test
    - bit-error-threshold number
    - test-pattern
      - crc-tlv boolean
      - pattern keyword
  - fault-propagation keyword
  - grace
    - eth-ed
      - max-rx-defect-window number
      - priority number
      - rx-eth-ed boolean
      - tx-eth-ed boolean
    - eth-vsm-grace
      - rx-eth-vsm-grace boolean
      - tx-eth-vsm-grace boolean

```

configure service vprn interface sap eth-cfm mep low-priority-defect

```

- low-priority-defect keyword
- one-way-delay-threshold number
- squelch-ingress-levels number
- fwd-wholesale
- pppoe-service reference
- host-admin-state keyword
- host-lockout-policy reference
- ingress
- filter
- ip reference
- ipv6 reference
- qos
- match-qinq-dot1p keyword
- policer-control-policy
- overrides
- apply-groups reference
- apply-groups-exclude reference
- root
- max-rate (number | keyword)
- priority-mbs-thresholds
- min-thresh-separation (number | keyword)
- priority number
- apply-groups reference
- apply-groups-exclude reference
- mbs-contribution (number | keyword)
- policy-name reference
- sap-ingress
- fp-redirect-group
- group-name reference
- instance number
- overrides
- ip-criteria
- activate-entry-tag number
- ipv6-criteria
- activate-entry-tag number
- policer reference
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- mbs (number | keyword)
- packet-byte-offset number
- percent-rate
- cir decimal-number
- pir decimal-number
- rate
- cir (number | keyword)
- pir (number | keyword)
- stat-mode keyword
- queue reference
- adaptation-rule
- cir keyword
- pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs (number | keyword)
- drop-tail
- low
- percent-reduction-from-mbs (number | keyword)
- mbs (number | keyword)
- monitor-queue-depth
- fast-polling boolean
- parent
- cir-weight number
- weight number

```

configure service vprn interface sap ingress qos sap-ingress overrides queue percent-rate

```

    - percent-rate
      - cir decimal-number
      - pir decimal-number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
  - queuing-type keyword
- scheduler-policy
  - overrides
    - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - parent
      - cir-weight number
      - weight number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
  - policy-name reference
- queue-group-redirect-list reference
- ip-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - clear-df-bit boolean
  - delivery-service string
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - dscp keyword
  - encapsulated-ip-mtu number
  - gre-header
    - admin-state keyword
    - key
      - admin-state keyword
      - receive number
      - send number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - number number
      - seconds number
  - ip-mtu number
  - ipsec-transport-mode-profile reference
  - local-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - pmtu-discovery-aging number
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - reassembly (number | keyword)
  - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- ipsec-gateway string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cert
    - cert-profile reference

```

configure service vpn interface sap ipsec-gateway cert status-verify

- **status-verify**
  - **default-result** *keyword*
  - **primary** *keyword*
  - **secondary** *keyword*
  - **trust-anchor-profile** *reference*
- **client-db**
  - **fallback** *boolean*
  - **name** *reference*
- **default-secure-service**
  - **interface** *string*
  - **service-name** *string*
- **default-tunnel-template** *reference*
- **dhcp-address-assignment**
  - **dhcpv4**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **gi-address** *string*
    - **send-release** *boolean*
    - **server**
      - **address** *string*
      - **router-instance** *string*
  - **dhcpv6**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **link-address** *string*
    - **send-release** *boolean*
    - **server**
      - **address** *string*
      - **router-instance** *string*
- **ike-policy** *reference*
- **local**
  - **address-assignment**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ipv4**
      - **dhcp-server** *string*
      - **pool** *string*
      - **router-instance** *string*
      - **secondary-pool** *string*
    - **ipv6**
      - **dhcp-server** *string*
      - **pool** *string*
      - **router-instance** *string*
  - **gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
  - **id**
    - **auto**
    - **fqdn** *string*
    - **ipv4** *string*
    - **ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
- **max-history-key-records**
  - **esp** *number*
  - **ike** *number*
- **pre-shared-key** *string*
- **radius**
  - **accounting-policy** *reference*
  - **authentication-policy** *reference*
- **ts-list** *reference*
- **ipsec-tunnel** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*



configure service vpn interface sap ipsec-tunnel bfd

```

- bfd
  - bfd-designate boolean
  - bfd-liveness
    - dest-ip string
    - interface string
    - service-name string
  - clear-df-bit boolean
  - copy-traffic-class-upon-decapsulation boolean
  - description string
  - dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)
  - encapsulated-ip-mtu number
  - icmp-generation
    - frag-required
      - admin-state keyword
      - interval number
      - message-count number
  - icmp6-generation
    - packet-too-big
      - admin-state keyword
      - interval number
      - message-count number
  - ip-mtu number
  - key-exchange
    - dynamic
      - auto-establish boolean
      - cert
        - cert-profile reference
        - status-verify
          - default-result keyword
          - primary keyword
          - secondary keyword
        - trust-anchor-profile reference
      - id
        - fqdn string
        - ipv4 string
        - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
      - ike-policy reference
      - ipsec-transform reference
      - pre-shared-key string
    - manual
      - keys number direction keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication-key string
      - encryption-key string
      - ipsec-transform reference
      - spi number
  - max-history-key-records
    - esp number
    - ike number
  - pmtu-discovery-aging number
  - private-tcp-mss-adjust number
  - propagate-pmtu-v4 boolean
  - propagate-pmtu-v6 boolean
  - public-tcp-mss-adjust (number | keyword)
  - replay-window number
  - security-policy
    - id reference
    - strict-match boolean
  - tunnel-endpoint
    - delivery-service string
    - local-gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - remote-ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
- lag

```

configure service vprn interface sap lag link-map-profile

```

- link-map-profile number
- per-link-hash
  - class number
  - weight number
- multi-service-site reference
- static-host
  - ipv4 string mac string
  - admin-state keyword
  - ancp-string string
  - app-profile
    - profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - int-dest-id string
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - string string
    - use-sap-id
- transit-policy
  - ip reference
  - prefix reference
- shcv-policy-ipv4 reference
- spoke-sdp string
  - aarp
    - id reference
    - type keyword
  - accounting-policy reference
  - admin-state keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd
    - bfd-liveness
      - encap keyword
    - bfd-template reference
    - failure-action keyword
    - wait-for-up-timer number
- collect-stats boolean
- control-word boolean
- cpu-protection
  - eth-cfm-monitoring
    - aggregate
    - car
  - ip-src-monitoring
  - mac-monitoring
  - policy-id reference
- description string
- egress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - policy-name reference
      - port-redirect-group
        - group-name reference
        - instance number
  - vc-label number
- entropy-label
- eth-cfm
  - apply-groups reference
  - apply-groups-exclude reference
  - collect-lmm-fc-stats

```

configure service vprn interface spoke-sdp eth-cfm collect-lmm-fc-stats fc

```

- fc keyword
- fc-in-profile keyword
- collect-lmm-stats boolean
- mep md-admin-name reference ma-admin-name reference mep-id number
- admin-state keyword
- ais boolean
- alarm-notification
  - fng-alarm-time number
  - fng-reset-time number
- apply-groups reference
- apply-groups-exclude reference
- ccm boolean
- ccm-ltm-priority number
- ccm-padding-size number
- csf
  - multiplier decimal-number
- description string
- eth-test
  - bit-error-threshold number
  - test-pattern
    - crc-tlv boolean
    - pattern keyword
- fault-propagation keyword
- grace
  - eth-ed
    - max-rx-defect-window number
    - priority number
    - rx-eth-ed boolean
    - tx-eth-ed boolean
  - eth-vsm-grace
    - rx-eth-vsm-grace boolean
    - tx-eth-vsm-grace boolean
  - low-priority-defect keyword
  - one-way-delay-threshold number
- squelch-ingress-levels number
- hash-label
- signal-capability
- ingress
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - network
      - fp-redirect-group
        - group-name reference
        - instance number
      - policy-name reference
    - vc-label number
- transit-policy
  - ip reference
  - prefix reference
- vc-type keyword
- static-tunnel-redundant-nexthop string
- tos-marking-state keyword
- tunnel boolean
- vas-if-type keyword
- vpls string
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - reclassify-using-qos reference
  - routed-override-filter
    - ip reference
    - ipv6 reference

```

configure service vpn interface vpls evpn

```

- evpn
- arp
  - advertise keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
  - flood-garp-and-unknown-req boolean
  - learn-dynamic boolean
- nd
  - advertise keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - route-tag number
  - learn-dynamic boolean
- evpn-tunnel
  - allow-bfd boolean
  - ipv6-gateway-address keyword
  - supplementary-broadcast-domain boolean
- ingress
  - routed-override-filter
    - ip reference
    - ipv6 reference
- ip-mirror-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - spoke-sdp string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
  - ingress
    - filter
      - ip reference
    - vc-label number
- ipsec
  - allow-reverse-route-override-type keyword
  - multi-chassis-shunt-interface reference
    - apply-groups reference
    - apply-groups-exclude reference
  - next-hop
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - multi-chassis-shunting-profile string
    - apply-groups reference
    - apply-groups-exclude reference
  - peer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - multi-chassis-shunt-interface reference
  - security-policy number
    - apply-groups reference
    - apply-groups-exclude reference
  - entry number
    - apply-groups reference
    - apply-groups-exclude reference
  - local-ip
    - address string
    - any boolean
  - local-ipv6
    - address string
    - any boolean
  - remote-ip
    - address string

```

configure service vpn ipsec security-policy entry remote-ip any

- **any** *boolean*
- **remote-ipv6**
  - **address** *string*
  - **any** *boolean*
- **ipv6**
  - **neighbor-discovery**
    - **reachable-time** *number*
    - **stale-time** *number*
  - **router-advertisement**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **dns-options**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rdnss-lifetime** (*keyword* | *number*)
      - **server** *string*
  - **interface** *reference*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **current-hop-limit** *number*
    - **dns-options**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **include-rdnss** *boolean*
      - **rdnss-lifetime** (*number* | *keyword*)
      - **server** *string*
    - **managed-configuration** *boolean*
    - **max-advertisement-interval** *number*
    - **min-advertisement-interval** *number*
    - **mtu** *number*
    - **nd-router-preference** *keyword*
    - **other-stateful-configuration** *boolean*
    - **prefix** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **autonomous** *boolean*
      - **on-link** *boolean*
      - **preferred-lifetime** (*keyword* | *number*)
      - **valid-lifetime** (*keyword* | *number*)
    - **reachable-time** *number*
    - **retransmit-time** *number*
    - **router-lifetime** *number*
    - **use-virtual-mac** *boolean*
- **isis** *number*
  - **admin-state** *keyword*
  - **advertise-passive-only** *boolean*
  - **advertise-router-capability** *keyword*
  - **all-l1isis** *string*
  - **all-l2isis** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **area-address** *string*
  - **authentication-check** *boolean*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **csnp-authentication** *boolean*
  - **default-route-tag** *number*
  - **export-limit**
    - **log-percent** *number*
    - **number** *number*
  - **export-policy** *reference*
  - **graceful-restart**

configure service vprn isis graceful-restart helper-mode

```

- helper-mode boolean
- hello-authentication boolean
- hello-padding keyword
- ignore-attached-bit boolean
- ignore-lsp-errors boolean
- ignore-narrow-metric boolean
- iid-tlv boolean
- import-policy reference
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - ipv4
      - include-bfd-tlv boolean
    - ipv6
      - include-bfd-tlv boolean
  - csnp-interval number
  - default-instance boolean
  - hello-authentication boolean
  - hello-authentication-key string
  - hello-authentication-keychain reference
  - hello-authentication-type keyword
  - hello-padding keyword
  - interface-type keyword
  - ipv4-multicast boolean
  - ipv6-unicast boolean
  - level keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - hello-authentication-key string
    - hello-authentication-keychain reference
    - hello-authentication-type keyword
    - hello-interval number
    - hello-multiplier number
    - hello-padding keyword
    - ipv4-multicast-metric number
    - ipv6-unicast-metric number
    - metric number
    - passive boolean
    - priority number
    - sd-offset number
    - sf-offset number
  - level-capability keyword
  - load-balancing-weight number
  - loopfree-alternate
    - exclude boolean
    - policy-map
      - route-nh-template reference
  - lsp-pacing-interval number
  - mesh-group
    - blocked
      - value number
  - passive boolean
  - retransmit-interval number
  - tag number
- ipv4-multicast-routing keyword
- ipv4-routing boolean
- ipv6-routing keyword
- level keyword
  - advertise-router-capability boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string

```

## configure service vprn isis level authentication-keychain

- **authentication-keychain** *reference*
- **authentication-type** *keyword*
- **csnp-authentication** *boolean*
- **default-ipv4-multicast-metric** *number*
- **default-ipv6-unicast-metric** *number*
- **default-metric** *number*
- **external-preference** *number*
- **hello-authentication** *boolean*
- **hello-padding** *keyword*
- **loopfree-alternate-exclude** *boolean*
- **lsp-mtu-size** *number*
- **preference** *number*
- **psnp-authentication** *boolean*
- **wide-metrics-only** *boolean*
- **level-capability** *keyword*
- **link-group** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **level** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ipv4-multicast-metric-offset** *number*
    - **ipv4-unicast-metric-offset** *number*
    - **ipv6-unicast-metric-offset** *number*
    - **member** *reference*
    - **oper-members** *number*
    - **revert-members** *number*
- **loopfree-alternate**
  - **exclude**
    - **prefix-policy** *reference*
- **lsp-lifetime** *number*
- **lsp-minimum-remaining-lifetime** *number*
- **lsp-mtu-size** *number*
- **lsp-refresh**
  - **half-lifetime** *boolean*
  - **interval** *number*
- **mru-mismatch-detection** *boolean*
- **multi-topology**
  - **ipv4-multicast** *boolean*
  - **ipv6-unicast** *boolean*
- **multicast-import**
  - **ipv4** *boolean*
- **overload**
  - **max-metric** *boolean*
- **overload-export-external** *boolean*
- **overload-export-interlevel** *boolean*
- **overload-fib-error-notify-only**
  - **retry** *number*
- **overload-on-boot**
  - **max-metric** *boolean*
  - **timeout** *number*
- **poi-tlv** *boolean*
- **prefix-attributes-tlv** *boolean*
- **prefix-limit**
  - **limit** *number*
  - **log-only** *boolean*
  - **overload-timeout** (*number* | *keyword*)
  - **warning-threshold** *number*
- **psnp-authentication** *boolean*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*

configure service vprn isis rib-priority high tag

```

    - tag number
  - router-id string
  - standard-multi-instance boolean
  - strict-adjacency-check boolean
  - summary-address (ipv4-prefix | ipv6-prefix)
    - apply-groups reference
    - apply-groups-exclude reference
    - level-capability keyword
    - route-tag number
  - suppress-attached-bit boolean
  - system-id string
  - timers
    - lsp-wait
      - lsp-initial-wait number
      - lsp-max-wait number
      - lsp-second-wait number
    - spf-wait
      - spf-initial-wait number
      - spf-max-wait number
      - spf-second-wait number
  - unicast-import
    - ipv4 boolean
    - ipv6 boolean
- l2tp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - avp-hiding keyword
  - challenge boolean
  - destruct-timeout number
  - ethernet-tunnel
    - reconnect-timeout (number | keyword)
  - exclude-avps
    - calling-number boolean
    - initial-rx-lcp-conf-req boolean
  - failover
    - recovery-max-session-lifetime number
    - recovery-method keyword
    - recovery-time number
    - track-srrp reference
      - apply-groups reference
      - apply-groups-exclude reference
      - peer reference
      - sync-tag string
  - group string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - avp-hiding keyword
    - challenge keyword
    - description string
    - destruct-timeout number
    - ethernet-tunnel
      - reconnect-timeout (number | keyword)
    - failover
      - recovery-method keyword
      - recovery-time number
    - hello-interval (number | keyword)
    - idle-timeout (number | keyword)
  - l2tpv3
    - cookie-length (number | keyword)
    - digest-type keyword
    - nonce-length number
    - password string

```



configure service vprn l2tp group l2tpv3 private-tcp-mss-adjust

```

- private-tcp-mss-adjust (number | keyword)
- public-tcp-mss-adjust (number | keyword)
- pw-cap-list
  - ethernet boolean
  - ethernet-vlan boolean
- rem-router-id string
- track-password-change boolean
- lac
  - df-bit keyword
- lns
  - lns-group reference
  - load-balance-method keyword
  - mlppp
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - endpoint
      - ip (ipv4-address | keyword)
      - mac (mac-address | keyword)
    - interleave boolean
    - max-fragment-delay (number | keyword)
    - max-links number
    - reassembly-timeout number
    - short-sequence-numbers boolean
  - ppp
    - authentication keyword
    - authentication-policy string
    - chap-challenge-length
      - end number
      - start number
    - default-group-interface
      - interface string
      - service-name string
    - ipcp-subnet-negotiation boolean
    - keepalive
      - interval number
      - multiplier number
    - lcp-force-ack-accm boolean
    - lcp-ignore-magic-numbers boolean
    - mtu number
    - proxy-authentication boolean
    - proxy-lcp boolean
    - reject-disabled-ncp boolean
    - user-db string
  - local-address string
  - local-name string
  - max-retries-estab number
  - max-retries-not-estab number
  - password string
  - protocol keyword
  - radius-accounting-policy reference
  - receive-window-size number
  - session-assign-method keyword
  - session-limit (number | keyword)
  - tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - auto-establish boolean
    - avp-hiding keyword
    - challenge keyword
    - description string
    - destruct-timeout number
    - failover

```

## configure service vprn l2tp group tunnel failover recovery-method

```

- recovery-method keyword
- recovery-time number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- l2tpv3
- private-tcp-mss-adjust (number | keyword)
- public-tcp-mss-adjust (number | keyword)
- lac
- df-bit keyword
- lns
- lns-group reference
- load-balance-method keyword
- mlppp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- endpoint
- ip (ipv4-address | keyword)
- mac (mac-address | keyword)
- interleave keyword
- max-fragment-delay number
- max-links number
- reassembly-timeout number
- short-sequence-numbers keyword
- ppp
- authentication keyword
- authentication-policy string
- chap-challenge-length
- end number
- start number
- default-group-interface
- interface string
- service-name string
- ipcp-subnet-negotiation keyword
- keepalive
- interval number
- multiplier number
- lcp-force-ack-accm keyword
- lcp-ignore-magic-numbers keyword
- mtu number
- proxy-authentication keyword
- proxy-lcp keyword
- reject-disabled-ncp keyword
- user-db string
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- password string
- peer string
- preference number
- radius-accounting-policy reference
- receive-window-size number
- remote-name string
- session-limit (number | keyword)
- group-session-limit number
- hello-interval (number | keyword)
- idle-timeout (number | keyword)
- ignore-avps
- sequencing-required boolean
- l2tpv3
- cookie-length number
- digest-type keyword
- nonce-length number

```

configure service vprn l2tp l2tpv3 password

```

- password string
- private-tcp-mss-adjust number
- public-tcp-mss-adjust number
- transport-type
  - ip boolean
- lac
  - calling-number-format string
  - cisco-nas-port
    - ethernet string
  - df-bit boolean
- local-address string
- local-name string
- max-retries-estab number
- max-retries-not-estab number
- next-attempt keyword
- password string
- peer-address-change-policy keyword
- radius-accounting-policy reference
- receive-window-size number
- replace-result-code
  - cdn-invalid-dst boolean
  - cdn-permanent-no-facilities boolean
  - cdn-temporary-no-facilities boolean
- rtm-debounce-time (number | keyword)
- session-assign-method keyword
- session-limit number
- tunnel-selection-blacklist
  - add-tunnel-on
    - address-change-timeout boolean
    - cdn-err-code boolean
    - cdn-invalid-dst boolean
    - cdn-permanent-no-facilities boolean
    - cdn-temporary-no-facilities boolean
    - stop-ccn-err-code boolean
    - stop-ccn-other boolean
    - tx-cdn-not-established-in-time boolean
  - max-list-length (number | keyword)
  - max-time number
  - timeout-action keyword
- tunnel-session-limit number
- label-mode keyword
- local-routes-domain-id string
- log
  - apply-groups reference
  - apply-groups-exclude reference
  - filter string
    - apply-groups reference
    - apply-groups-exclude reference
    - default-action keyword
    - description string
    - named-entry string
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - application
        - eq keyword
        - neq keyword
      - event
        - eq number
        - gt number
        - gte number
        - lt number

```

configure service vprn log filter named-entry match event lte

```

    - lte number
    - neq number
  - message
    - eq string
    - neq string
    - regexp boolean
  - severity
    - eq keyword
    - gt keyword
    - gte keyword
    - lt keyword
    - lte keyword
    - neq keyword
  - subject
    - eq string
    - neq string
    - regexp boolean
- log-id string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- destination
  - netconf
    - max-entries number
  - snmp
    - max-entries number
  - syslog reference
- filter reference
- netconf-stream string
- python-policy reference
- source
  - change boolean
  - debug boolean
  - main boolean
  - security boolean
  - time-format keyword
- snmp-trap-group string
- apply-groups reference
- apply-groups-exclude reference
- description string
- trap-target string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - notify-community string
  - port number
  - replay boolean
  - security-level keyword
  - version keyword
- syslog string
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - facility keyword
  - hostname
    - use-system-name
    - use-vprn-name
    - value string
  - log-prefix (keyword | string)
  - port number
  - severity keyword

```

configure service vprn log syslog tls-client-profile

```

    - tls-client-profile reference
  - management
    - allow-ftp boolean
    - allow-grpc boolean
    - allow-netconf boolean
    - allow-ssh boolean
    - allow-telnet boolean
    - allow-telnet6 boolean
    - apply-groups reference
    - apply-groups-exclude reference
  - maximum-ipv4-routes
    - log-only boolean
    - threshold number
    - value number
  - maximum-ipv6-routes
    - log-only boolean
    - threshold number
    - value number
  - mc-maximum-routes
    - log-only boolean
    - threshold number
    - value number
  - mld
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - forwarding-group-interface forwarding-service string group-interface-
name reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - mcac
      - bandwidth
        - mandatory (number | keyword)
        - total (number | keyword)
      - interface-policy reference
      - policy reference
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - query-source-address string
    - router-alert-check boolean
    - sub-hosts-only boolean
    - subnet-check boolean
    - version keyword
    - group-if-query-source-address string
  - group-interface reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - mcac
      - bandwidth
        - mandatory (number | keyword)
        - total (number | keyword)
      - interface-policy reference
      - policy reference

```

configure service vprn mld group-interface query-interval

- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **query-source-address** *string*
- **router-alert-check** *boolean*
- **sub-hosts-only** *boolean*
- **subnet-check** *boolean*
- **version** *keyword*
- **interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **import-policy** *reference*
  - **maximum-number-group-sources** *number*
  - **maximum-number-groups** *number*
  - **maximum-number-sources** *number*
  - **mcac**
    - **bandwidth**
      - **mandatory** (*number* | *keyword*)
      - **total** (*number* | *keyword*)
    - **interface-policy** *reference*
  - **mc-constraints**
    - **level** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bandwidth** *number*
    - **number-down** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **level** *number*
    - **use-lag-port-weight** *boolean*
  - **policy** *reference*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **router-alert-check** *boolean*
- **ssm-translate**
  - **group-range start** *string end* *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **source** *string*
- **static**
  - **group** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **source** *string*
    - **starg**
  - **group-range start** *string end* *string step* *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **source** *string*
    - **starg**
  - **version** *keyword*
- **query-interval** *number*
- **query-last-member-interval** *number*
- **query-response-interval** *number*
- **robust-count** *number*
- **ssm-translate**
  - **group-range start** *string end* *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **source** *string*
- **msdp**
  - **active-source-limit** *number*

## configure service vprn msdp admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **data-encapsulation** *boolean*
- **export-policy** *reference*
- **group** *string*
  - **active-source-limit** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **export-policy** *reference*
  - **import-policy** *reference*
  - **local-address** *string*
  - **mode** *keyword*
  - **peer** *string*
    - **active-source-limit** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authentication-key** *string*
    - **default-peer** *boolean*
    - **export-policy** *reference*
    - **import-policy** *reference*
    - **local-address** *string*
    - **receive-message-rate**
      - **rate** *number*
      - **threshold** *number*
      - **time** *number*
  - **receive-message-rate**
    - **rate** *number*
    - **threshold** *number*
    - **time** *number*
- **import-policy** *reference*
- **local-address** *string*
- **peer** *string*
  - **active-source-limit** *number*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **default-peer** *boolean*
  - **export-policy** *reference*
  - **import-policy** *reference*
  - **local-address** *string*
  - **receive-message-rate**
    - **rate** *number*
    - **threshold** *number*
    - **time** *number*
- **receive-message-rate**
  - **rate** *number*
  - **threshold** *number*
  - **time** *number*
- **rpf-table** *keyword*
- **source** *string*
  - **active-source-limit** *number*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **source-active-cache-lifetime** *number*
- **mss-adjust**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **nat-group** *number*
  - **segment-size** *number*
- **mtrace2**

configure service vpn mtrace2 admin-state

- **admin-state** *keyword*
- **udp-port** *number*
- **multicast-info-policy** *reference*
- **mvpn**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auto-discovery**
    - **source-address** *string*
    - **type** *keyword*
  - **c-mcast-signaling** *keyword*
  - **intersite-shared**
    - **admin-state** *keyword*
    - **kat-type5-advertisement-withdraw** *boolean*
    - **persistent-type5-advertisement** *boolean*
  - **mdt-type** *keyword*
  - **provider-tunnel**
    - **inclusive**
      - **bier**
        - **admin-state** *keyword*
        - **sub-domain** *number*
      - **bsr** *keyword*
      - **mldp**
        - **admin-state** *keyword*
      - **p2mp-sr**
        - **admin-state** *keyword*
        - **bfd-leaf** *boolean*
        - **bfd-root**
          - **multiplier** *number*
          - **transmit-interval** *number*
        - **p2mp-policy** *boolean*
        - **static-policy** *reference*
      - **pim**
        - **admin-state** *keyword*
        - **group-address** *string*
        - **hello-interval** *number*
        - **hello-multiplier** *number*
        - **improved-assert** *boolean*
        - **mode** *keyword*
        - **three-way-hello** *boolean*
        - **tracking-support** *boolean*
      - **rsvp**
        - **admin-state** *keyword*
        - **bfd-leaf** *boolean*
        - **bfd-root**
          - **multiplier** *number*
          - **transmit-interval** *number*
        - **lsp-template** *reference*
      - **umh-rate-monitoring**
        - **revertive-timer** *number*
        - **traffic-rate-delta** *number*
      - **wildcard-spmsi** *boolean*
    - **selective**
      - **asm-mdt** *boolean*
      - **auto-discovery** *boolean*
      - **bier**
        - **admin-state** *keyword*
        - **sub-domain** *number*
      - **data-delay-interval** *number*
      - **data-threshold**
        - **group-prefix** (*ipv4-prefix | ipv6-prefix*)
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **pe-threshold-add** *number*
          - **pe-threshold-delete** *number*



configure service vprn mvpn provider-tunnel selective data-threshold group-prefix threshold

```

        - threshold number
    - join-tlv-packing boolean
    - mldp
      - admin-state keyword
      - maximum-p2mp-spmsi number
    - multistream-spmsi number
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix (ipv4-prefix | ipv6-prefix) source-prefix (ipv4-prefix |
ipv6-prefix)
      - lsp-template reference
      - p2mp-sr
        - p2mp-policy boolean
        - static-policy reference
      - pim
        - group-address string
        - mode keyword
    - p2mp-sr
      - admin-state keyword
      - p2mp-policy boolean
      - static-policy reference
    - pim
      - group-prefix string
      - mode keyword
    - rsvp
      - admin-state keyword
      - lsp-template reference
      - maximum-p2mp-spmsi number
    - umh-rate-monitoring
      - group (ipv4-prefix | ipv6-prefix) source (ipv4-prefix | ipv6-prefix)
        - apply-groups reference
        - apply-groups-exclude reference
        - revertive-timer number
        - traffic-rate-delta number
    - redundant-source-list
      - source-prefix (ipv4-prefix | ipv6-prefix)
    - rpf-select
      - core-mvpn reference
        - apply-groups reference
        - apply-groups-exclude reference
        - group-prefix string
        - apply-groups reference
        - apply-groups-exclude reference
        - starg boolean
    - umh-pe-backup
      - umh-pe string
        - apply-groups reference
        - apply-groups-exclude reference
        - standby string
    - umh-selection keyword
    - vrf-export
      - policy (policy-expr-string | string)
      - unicast boolean
    - vrf-import
      - policy (policy-expr-string | string)
      - unicast boolean
    - vrf-target
      - community string
      - export
        - community string
        - unicast boolean
      - import
        - community string

```

configure service vprn mvprn vrf-target import unicast

```

- unicast boolean
- unicast boolean
- nat
- apply-groups reference
- apply-groups-exclude reference
- inside
- l2-aware
- force-unique-ip-addresses boolean
- subscribers string
- large-scale
- dnat-only
- source-prefix-list reference
- dual-stack-lite
- admin-state keyword
- deterministic
- prefix-map string nat-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- map string to string
- apply-groups reference
- apply-groups-exclude reference
- first-outside-address string
- endpoint string
- apply-groups reference
- apply-groups-exclude reference
- ip-fragmentation keyword
- min-first-fragment-size-rx number
- reassembly boolean
- tunnel-mtu number
- max-subscriber-limit number
- subscriber-prefix-length number
- filters
- downstream
- ipv4 reference
- nat-policy reference
- nat44
- destination-prefix string
- apply-groups reference
- apply-groups-exclude reference
- nat-policy reference
- deterministic
- prefix-map string nat-policy reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- map string to string
- apply-groups reference
- apply-groups-exclude reference
- first-outside-address string
- max-subscriber-limit number
- nat-import reference
- source-prefix string
- apply-groups reference
- apply-groups-exclude reference
- nat-policy reference
- nat64
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- drop-zero-ipv4-checksum boolean
- insert-ipv6-fragment-header boolean
- ip-fragmentation keyword
- ipv6-mtu number

```

configure service vpn nat inside large-scale nat64 prefix

```

- prefix string
- subscriber-prefix-length number
- tos
  - downstream
    - use-ipv4 boolean
  - upstream
    - set-tos (keyword | number)
- redundancy
- peer string
- peer6 string
- steering-route string
- static-port-forwards
- spf-nat-policy reference
- subscriber-identification
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - attribute
    - type keyword
    - vendor keyword
  - description string
  - drop-unidentified-traffic boolean
  - radius-proxy-server
    - router-instance string
    - server string
- traffic-identification
  - source-prefix-only boolean
- map
- map-domain reference
- outside
  - dnat-only
    - route-limit number
  - filters
    - downstream
      - ipv4 reference
      - ipv6 reference
    - upstream
      - ipv4 reference
      - ipv6 reference
- mtu number
- pool string
  - address-pooling keyword
  - address-range string end string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - drain boolean
  - admin-state keyword
  - applications
    - agnostic boolean
    - flexible-port-allocation boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - icmp-echo-reply boolean
  - l2-aware
    - default-host
      - inside-router-instance string
      - ip-address string
      - rate-limit number
    - external-assignment boolean
  - port-block-extension
    - ports number
    - subscriber

```

configure service vprn nat outside pool l2-aware port-block-extension subscriber watermarks

```

    - watermarks
      - high number
      - low number
    - subscriber-limit number
  - watermarks
    - high number
    - low number
- large-scale
- default-host
  - inside-router-instance string
  - ip-address string
  - rate-limit number
- deterministic
  - port-reservation number
  - watermarks
    - high number
    - low number
- flexible-port-allocation
  - free-port-limit
    - icmp number
    - tcp number
    - udp number
- redundancy
  - admin-state keyword
  - export-route string
  - follow
    - name string
    - router-instance string
  - monitor-route string
  - subscriber-limit number
- mode keyword
- nat-group reference
- port-forwarding
  - dynamic-block-reservation boolean
  - range-end number
  - range-start number
- port-reservation
  - port-blocks number
  - ports number
- type keyword
- watermarks
  - high number
  - low number
- wlan-gw-group reference
- network
  - apply-groups reference
  - apply-groups-exclude reference
  - ingress
    - filter
      - ip reference
      - ipv6 reference
    - qos
      - fp-redirect-group reference
      - instance number
      - network-policy reference
      - urpf-check boolean
  - network-interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - cflowd-parameters
    - sampling keyword
      - apply-groups reference
      - apply-groups-exclude reference

```

configure service vprn network-interface cflowd-parameters sampling direction

```

    - direction keyword
    - sample-profile (keyword | number)
    - type keyword
- cpu-protection reference
- description string
- dist-cpu-protection reference
- egress
  - filter
    - ip reference
- hold-time
  - ipv4
    - down
      - init-only boolean
      - seconds number
    - up
      - seconds number
- ingress
  - filter
    - ip reference
- ingress-stats boolean
- ip-mtu number
- ipv4
  - allow-directed-broadcasts boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - icmp
    - mask-reply boolean
    - param-problem
      - admin-state keyword
      - number number
      - seconds number
    - redirects
      - admin-state keyword
      - number number
      - seconds number
    - ttl-expired
      - admin-state keyword
      - number number
      - seconds number
    - unreachables
      - admin-state keyword
      - number number
      - seconds number
  - neighbor-discovery
    - retry-timer number
    - static-neighbor string
      - apply-groups reference
      - apply-groups-exclude reference
      - mac-address string
    - timeout number
  - primary
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - broadcast keyword
    - prefix-length number
  - secondary string
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vprn network-interface ipv4 secondary broadcast

- **broadcast** *keyword*
- **igp-inhibit** *boolean*
- **prefix-length** *number*
- **tcp-mss** *number*
- **urpf-check**
  - **ignore-default** *boolean*
  - **mode** *keyword*
- **lag**
  - **link-map-profile** *number*
  - **per-link-hash**
    - **class** *number*
    - **weight** *number*
- **load-balancing**
  - **flow-label-load-balancing** *boolean*
  - **ip-load-balancing** *keyword*
  - **lsr-load-balancing** *keyword*
  - **spi-load-balancing** *boolean*
  - **teid-load-balancing** *boolean*
- **loopback**
- **mac** *string*
- **port** *string*
- **qos**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **egress-instance** *number*
  - **egress-port-redirect-group** *reference*
  - **ingress-fp-redirect-group** *reference*
  - **ingress-instance** *number*
  - **network-policy** *reference*
  - **tos-marking-state** *keyword*
- **ntp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authenticate** *boolean*
  - **authentication-check** *boolean*
  - **authentication-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **key** *string*
    - **type** *keyword*
  - **authentication-keychain** *reference*
  - **broadcast** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authentication-keychain** *reference*
    - **key-id** *reference*
    - **ttl** *number*
    - **version** *number*
- **ospf** *number*
  - **admin-state** *keyword*
  - **advertise-router-capability** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **area** *string*
    - **advertise-ne-profile** *reference*
    - **advertise-router-capability** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **area-range** *string*
      - **advertise** *boolean*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **blackhole-aggregate** *boolean*

## configure service vprn ospf area export-policy

- **export-policy** *reference*
- **import-policy** *reference*
- **interface** *string*
  - **admin-state** *keyword*
  - **advertise-router-capability** *boolean*
  - **advertise-subnet** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **bfd-liveness**
    - **remain-down-on-failure** *boolean*
    - **strict** *boolean*
    - **strict-mode-holddown** *number*
  - **dead-interval** *number*
  - **hello-interval** *number*
  - **interface-type** *keyword*
  - **load-balancing-weight** *number*
  - **loopfree-alternate**
    - **exclude** *boolean*
    - **policy-map**
      - **route-nh-template** *reference*
  - **lsa-filter-out** *keyword*
  - **message-digest-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **md5** *string*
  - **metric** *number*
  - **mtu** *number*
  - **neighbor** *string*
  - **passive** *boolean*
  - **poll-interval** *number*
  - **priority** *number*
  - **retransmit-interval** *number*
  - **rib-priority** *keyword*
  - **transit-delay** *number*
- **loopfree-alternate-exclude** *boolean*
- **nssa**
  - **area-range** *string*
    - **advertise** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **originate-default-route**
    - **adjacency-check** *boolean*
    - **type-nssa** *boolean*
  - **redistribute-external** *boolean*
  - **summaries** *boolean*
- **sham-link** *string ip-address string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **dead-interval** *number*
  - **hello-interval** *number*
  - **message-digest-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **md5** *string*
  - **metric** *number*
  - **retransmit-interval** *number*
  - **transit-delay** *number*

## configure service vprn ospf area stub

- **stub**
  - **default-metric** *number*
  - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-keychain** *reference*
  - **authentication-type** *keyword*
  - **dead-interval** *number*
  - **hello-interval** *number*
  - **message-digest-key** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **md5** *string*
  - **retransmit-interval** *number*
  - **transit-delay** *number*
- **compatible-rfc1583** *boolean*
- **export-limit**
  - **log-percent** *number*
  - **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
  - **interval** *number*
  - **limit** *number*
- **external-preference** *number*
- **graceful-restart**
  - **helper-mode** *boolean*
  - **strict-lsa-checking** *boolean*
- **ignore-dn-bit** *boolean*
- **import-policy** *reference*
- **loopfree-alternate**
  - **exclude**
    - **prefix-policy** *reference*
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
  - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
  - **log-only** *boolean*
  - **max-lsa-count** *number*
  - **overload-timeout** (*number* | *keyword*)
  - **warning-threshold** *number*
- **super-backbone** *boolean*
- **suppress-dn-bit** *boolean*
- **timers**
  - **incremental-spf-wait** *number*
  - **lsa-accumulate** *number*
  - **lsa-arrival** *number*
  - **lsa-generate**
    - **lsa-initial-wait** *number*
    - **lsa-second-wait** *number*
    - **max-lsa-wait** *number*
  - **redistribute-delay** *number*



configure service vpnr ospf timers spf-wait

```

- spf-wait
  - spf-initial-wait number
  - spf-max-wait number
  - spf-second-wait number
- unicast-import boolean
- vpn-domain
  - id string
  - type keyword
- vpn-tag number
- ospf3 number
  - admin-state keyword
  - advertise-router-capability keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - area string
    - advertise-router-capability boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - area-range (ipv4-prefix | ipv6-prefix)
      - advertise boolean
      - apply-groups reference
      - apply-groups-exclude reference
    - blackhole-aggregate boolean
    - export-policy reference
    - import-policy reference
    - interface string
      - admin-state keyword
      - advertise-router-capability boolean
      - apply-groups reference
      - apply-groups-exclude reference
      - authentication
        - inbound reference
        - outbound reference
      - bfd-liveness
        - remain-down-on-failure boolean
        - strict boolean
        - strict-mode-holddown number
      - dead-interval number
      - hello-interval number
      - interface-type keyword
      - load-balancing-weight number
      - loopfree-alternate
        - exclude boolean
        - policy-map
          - route-nh-template reference
      - lsa-filter-out keyword
      - metric number
      - mtu number
      - neighbor (ipv4-address-no-zone | ipv6-address-no-zone)
      - passive boolean
      - poll-interval number
      - priority number
      - retransmit-interval number
      - rib-priority keyword
      - transit-delay number
  - key-rollover-interval number
  - loopfree-alternate-exclude boolean
  - nssa
    - area-range (ipv4-prefix | ipv6-prefix)
      - advertise boolean
      - apply-groups reference
      - apply-groups-exclude reference
    - originate-default-route
      - adjacency-check boolean

```

configure service vprn ospf3 area nssa originate-default-route type-nssa

- **type-nssa** *boolean*
- **redistribute-external** *boolean*
- **summaries** *boolean*
- **stub**
  - **default-metric** *number*
  - **summaries** *boolean*
- **virtual-link** *string* **transit-area** *reference*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication**
    - **inbound** *reference*
    - **outbound** *reference*
  - **dead-interval** *number*
  - **hello-interval** *number*
  - **retransmit-interval** *number*
  - **transit-delay** *number*
- **export-limit**
  - **log-percent** *number*
  - **number** *number*
- **export-policy** *reference*
- **external-db-overflow**
  - **interval** *number*
  - **limit** *number*
- **external-preference** *number*
- **graceful-restart**
  - **helper-mode** *boolean*
  - **strict-lsa-checking** *boolean*
- **ignore-dn-bit** *boolean*
- **import-policy** *reference*
- **loopfree-alternate**
  - **exclude**
    - **prefix-policy** *reference*
- **multicast-import** *boolean*
- **overload** *boolean*
- **overload-include-ext-1** *boolean*
- **overload-include-ext-2** *boolean*
- **overload-include-stub** *boolean*
- **overload-on-boot**
  - **timeout** *number*
- **preference** *number*
- **reference-bandwidth** *number*
- **rib-priority**
  - **high**
    - **prefix-list** *reference*
- **router-id** *string*
- **rtr-adv-lsa-limit**
  - **log-only** *boolean*
  - **max-lsa-count** *number*
  - **overload-timeout** (*number* | *keyword*)
  - **warning-threshold** *number*
- **suppress-dn-bit** *boolean*
- **timers**
  - **incremental-spf-wait** *number*
  - **lsa-accumulate** *number*
  - **lsa-arrival** *number*
  - **lsa-generate**
    - **lsa-initial-wait** *number*
    - **lsa-second-wait** *number*
    - **max-lsa-wait** *number*
  - **redistribute-delay** *number*
  - **spf-wait**
    - **spf-initial-wait** *number*
    - **spf-max-wait** *number*

configure service vprn ospf3 timers spf-wait spf-second-wait

- **spf-second-wait** *number*
- **unicast-import** *boolean*
- **pcp**
  - **server** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **dual-stack-lite-address** *string*
    - **fwd-inside-router** *string*
    - **interface** *reference*
    - **policy** *reference*
- **pim**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **apply-to** *keyword*
  - **bgp-nh-override** *boolean*
  - **import**
    - **join-policy** *reference*
    - **register-policy** *reference*
  - **interface** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **assert-period** *number*
    - **bfd-liveness**
      - **ipv4** *boolean*
      - **ipv6** *boolean*
    - **bsm-check-rtr-alert** *boolean*
    - **hello-interval** *number*
    - **hello-multiplier** *number*
    - **improved-assert** *boolean*
    - **instant-prune-echo** *boolean*
    - **ipv4**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **monitor-oper-group**
        - **name** *reference*
        - **operation** *keyword*
        - **priority-delta** *number*
      - **multicast** *boolean*
    - **ipv6**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **monitor-oper-group**
        - **name** *reference*
        - **operation** *keyword*
        - **priority-delta** *number*
      - **multicast** *boolean*
    - **max-groups** *number*
    - **mcac**
      - **bandwidth**
        - **mandatory** (*number* | *keyword*)
        - **total** (*number* | *keyword*)
      - **interface-policy** *reference*
      - **mc-constraints**
        - **admin-state** *keyword*
        - **level** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **bandwidth** *number*
          - **number-down** *number*
          - **apply-groups** *reference*

configure service vprn pim interface mcac mc-constraints number-down apply-groups-exclude

```

    - apply-groups-exclude reference
    - level number
    - use-lag-port-weight boolean
  - policy reference
- multicast-senders keyword
- p2mp-ldp-tree-join
  - ipv4 boolean
  - ipv6 boolean
- priority number
- sticky-dr
  - priority number
- three-way-hello boolean
- tracking-support boolean
- ipv4
  - admin-state keyword
  - grt-extranet
    - any
    - group-prefix (ipv4-prefix | ipv6-prefix)
      - apply-groups reference
      - apply-groups-exclude reference
      - starg boolean
  - rpf-table keyword
  - source-address
    - register-message string
  - ssm-assert-compatible-mode boolean
  - ssm-default-range boolean
- ipv6
  - admin-state keyword
  - rpf-table keyword
  - source-address
    - register-message string
  - ssm-default-range boolean
- mc-ecmp-balance boolean
- mc-ecmp-balance-hold number
- mc-ecmp-hashing
  - rebalance boolean
- mtu-over-head number
- non-dr-attract-traffic boolean
- rp
  - bootstrap
    - export reference
    - import reference
  - ipv4
    - anycast string rp-set-peer string
    - auto-rp-discovery boolean
    - bsr-candidate
      - address string
      - admin-state keyword
      - hash-mask-len number
      - priority number
    - candidate boolean
    - mapping-agent boolean
    - rp-candidate
      - address string
      - admin-state keyword
      - group-range string
      - holdtime number
      - priority number
    - static
      - address string
      - apply-groups reference
      - apply-groups-exclude reference
      - group-prefix string
      - override boolean

```

configure service vprn pim rp ipv6

- **ipv6**
  - **anycast** *string* **rp-set-peer** *string*
  - **bsr-candidate**
    - **address** *string*
    - **admin-state** *keyword*
    - **hash-mask-len** *number*
    - **priority** *number*
  - **embedded-rp**
    - **admin-state** *keyword*
    - **group-range** *string*
  - **rp-candidate**
    - **address** *string*
    - **admin-state** *keyword*
    - **group-range** *string*
    - **holdtime** *number*
    - **priority** *number*
  - **static**
    - **address** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **group-prefix** *string*
      - **override** *boolean*
- **spt-switchover** (*ipv4-prefix* | *ipv6-prefix*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **threshold** (*number* | *keyword*)
- **ssm-groups**
  - **group-range** (*ipv4-prefix* | *ipv6-prefix*)
- **radius**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **proxy** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **attribute-matching**
    - **entry** *number*
      - **accounting-server-policy** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication-server-policy** *string*
      - **prefix-string** *string*
      - **suffix-string** *string*
  - **type** *number*
  - **vendor** (*number* | *keyword*)
- **cache**
  - **admin-state** *keyword*
  - **key**
    - **attribute-type** *number*
    - **packet-type** *keyword*
    - **vendor** (*number* | *keyword*)
  - **timeout** *number*
  - **track-accounting**
    - **accounting-off** *boolean*
    - **accounting-on** *boolean*
    - **interim-update** *boolean*
    - **start** *boolean*
    - **stop** *boolean*
  - **track-authentication**
    - **accept** *boolean*
  - **track-delete-hold-time** *number*
- **defaults**
  - **accounting-server-policy** *string*
  - **authentication-server-policy** *string*

## configure service vprn radius proxy description

- **description** *string*
- **interface** *reference*
- **load-balance-key**
  - **attribute-1**
    - **type** *number*
    - **vendor** (*number | keyword*)
  - **attribute-2**
    - **type** *number*
    - **vendor** (*number | keyword*)
  - **attribute-3**
    - **type** *number*
    - **vendor** (*number | keyword*)
  - **attribute-4**
    - **type** *number*
    - **vendor** (*number | keyword*)
  - **attribute-5**
    - **type** *number*
    - **vendor** (*number | keyword*)
- **source-ip-udp**
- **purpose** *keyword*
- **python-policy** *reference*
- **secret** *string*
- **send-accounting-response** *boolean*
- **wlan-gw**
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ipv6-address** *string*
- **wlan-gw-group** *reference*
- **server** *string*
  - **accept-coa** *boolean*
  - **acct-port** *number*
  - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **auth-port** *number*
  - **description** *string*
  - **pending-requests-limit** *number*
  - **python-policy** *reference*
  - **secret** *string*
- **reassembly**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **nat-group** *number*
  - **to-base-network** *boolean*
- **redundant-interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **hold-time**
    - **ipv4**
      - **down**
        - **init-only** *boolean*
        - **seconds** *number*
      - **up**
        - **seconds** *number*
  - **ip-mtu** *number*
  - **ipv4**
    - **primary**
      - **address** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **prefix-length** *number*

configure service vprn redundant-interface ipv4 primary remote-ip

- **remote-ip** *string*
- **spoke-sdp** *string*
- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **control-word** *boolean*
- **description** *string*
- **egress**
  - **filter**
    - **ip** *reference*
  - **vc-label** *number*
- **ingress**
  - **filter**
    - **ip** *reference*
  - **vc-label** *number*
- **rip**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-key** *string*
  - **authentication-type** *keyword*
  - **bfd-liveness** *boolean*
  - **check-zero** *boolean*
  - **description** *string*
  - **export-limit**
    - **log-percent** *number*
    - **number** *number*
  - **export-policy** *reference*
  - **group** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authentication-key** *string*
    - **authentication-type** *keyword*
    - **bfd-liveness** *boolean*
    - **check-zero** *boolean*
    - **description** *string*
    - **export-policy** *reference*
    - **import-policy** *reference*
    - **message-size** *number*
    - **metric-in** *number*
    - **metric-out** *number*
    - **neighbor** *string*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **authentication-key** *string*
      - **authentication-type** *keyword*
      - **bfd-liveness** *boolean*
      - **check-zero** *boolean*
      - **description** *string*
      - **export-policy** *reference*
      - **import-policy** *reference*
      - **message-size** *number*
      - **metric-in** *number*
      - **metric-out** *number*
      - **preference** *number*
      - **receive** *keyword*
      - **send** *keyword*
      - **split-horizon** *boolean*
      - **timers**
        - **flush** *number*
        - **timeout** *number*
        - **update** *number*

configure service vprn rip group neighbor unicast-address

```

- unicast-address string
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- propagate-metric boolean
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number
  - update number
- ripng
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness boolean
- check-zero boolean
- description string
- export-limit
  - log-percent number
  - number number
- export-policy reference
- group string
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness boolean
- check-zero boolean
- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- neighbor reference
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- bfd-liveness boolean
- check-zero boolean
- description string
- export-policy reference
- import-policy reference
- message-size number
- metric-in number
- metric-out number
- preference number
- receive keyword
- send keyword
- split-horizon boolean
- timers
  - flush number
  - timeout number

```



configure service vprn ripng group neighbor timers update

```

    - update number
    - unicast-address string
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - import-policy reference
  - message-size number
  - metric-in number
  - metric-out number
  - preference number
  - receive keyword
  - send keyword
  - split-horizon boolean
  - timers
    - flush number
    - timeout number
    - update number
  - router-id string
  - segment-routing-v6 number
  - apply-groups reference
  - apply-groups-exclude reference
  - locator reference
    - apply-groups reference
    - apply-groups-exclude reference
    - function
      - end-dt4
        - value number
      - end-dt46
        - value number
      - end-dt6
        - value number
  - micro-segment-locator reference
  - apply-groups reference
  - apply-groups-exclude reference
  - function
    - udt4
      - value number
    - udt46
      - value number
    - udt6
      - value number
  - selective-fib boolean
  - service-id number
  - sfm-overload
    - holdoff-time number
  - sgt-qos
  - dot1p
    - application keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dot1p (keyword | number)
  - dscp
    - application keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - dscp (keyword | number)
  - dscp-map keyword
    - apply-groups reference
    - apply-groups-exclude reference

```

configure service vprn sgt-qos dscp dscp-map fc

- **fc** keyword
- **snmp**
  - **access** boolean
  - **community** string
    - **access-permissions** keyword
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **source-access-list** reference
    - **version** keyword
- **source-address**
  - **ipv4** keyword
    - **address** string
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **interface-name** string
  - **ipv6** keyword
    - **address** string
    - **apply-groups** reference
    - **apply-groups-exclude** reference
- **spoke-sdp** string
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **description** string
- **static-routes**
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **hold-down**
    - **initial** number
    - **max-value** number
    - **multiplier** number
  - **route** (ipv4-prefix | ipv6-prefix) **route-type** keyword
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **backup-tag** number
    - **blackhole**
      - **admin-state** keyword
      - **apply-groups** reference
      - **apply-groups-exclude** reference
      - **community** string
      - **description** string
      - **generate-icmp** boolean
      - **metric** number
      - **preference** number
      - **prefix-list**
        - **flag** keyword
        - **name** reference
      - **tag** number
    - **community** string
  - **grt**
    - **admin-state** keyword
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **description** string
    - **metric** number
    - **preference** number
  - **indirect** (ipv4-address-no-zone | ipv6-address-no-zone)
    - **admin-state** keyword
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **community** string
    - **cpe-check** (ipv4-address-no-zone | ipv6-address-no-zone)
      - **apply-groups** reference
      - **apply-groups-exclude** reference
      - **drop-count** number

configure service vprn static-routes route indirect cpe-check interval

```

    - interval number
    - log boolean
    - padding-size number
  - description string
  - destination-class number
  - metric number
  - preference number
  - prefix-list
    - flag keyword
    - name reference
  - qos
    - forwarding-class keyword
    - priority keyword
  - source-class number
  - tag number
- interface string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - drop-count number
    - interval number
    - log boolean
    - padding-size number
    - description string
    - destination-class number
    - load-balancing-weight number
    - metric number
    - preference number
    - prefix-list
      - flag keyword
      - name reference
    - qos
      - forwarding-class keyword
      - priority keyword
    - source-class number
    - tag number
- ipsec-tunnel string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - community string
  - description string
  - destination-class number
  - metric number
  - preference number
  - qos
    - forwarding-class keyword
    - priority keyword
    - source-class number
  - tag number
- next-hop (ipv4-address-with-zone | ipv6-address-with-zone)
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - backup-next-hop
    - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - bfd-liveness boolean
  - community string
  - cpe-check (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference

```

configure service vprn static-routes route next-hop cpe-check apply-groups-exclude

- **apply-groups-exclude** *reference*
- **drop-count** *number*
- **interval** *number*
- **log** *boolean*
- **padding-size** *number*
- **description** *string*
- **destination-class** *number*
- **load-balancing-weight** *number*
- **metric** *number*
- **preference** *number*
- **prefix-list**
  - **flag** *keyword*
  - **name** *reference*
- **qos**
  - **forwarding-class** *keyword*
  - **priority** *keyword*
- **source-class** *number*
- **tag** *number*
- **validate-next-hop** *boolean*
- **tag** *number*
- **subscriber-interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **fwd-service** *reference*
  - **fwd-subscriber-interface** *reference*
- **group-interface** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bonding-parameters**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **connection** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **service** *string*
- **fpe** *reference*
- **multicast**
  - **connection** (*number* | *keyword*)
- **brg**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authenticated-brg-only** *boolean*
  - **default-brg-profile** *reference*
- **cflowd-parameters**
  - **sampling** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **direction** *keyword*
  - **sample-profile** (*keyword* | *number*)
  - **type** *keyword*
- **data-trigger**
  - **accept-ipv6-link-local-address** *boolean*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **description** *string*
- **dynamic-routes-track-srrp**
  - **hold-time** *number*
- **gtp-parameters**

configure service vprn subscriber-interface group-interface gtp-parameters admin-state

```

- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- fpe reference
- gx-policy reference
- ingress
- policy-accounting reference
- ingress-stats boolean
- ip-mtu number
- ipoe-linking
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- gratuitous-router-advertisement boolean
- shared-circuit-id boolean
- ipoe-session
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- description string
- force-auth
- cid-change boolean
- rid-change boolean
- ipoe-session-policy reference
- min-auth-interval (keyword | number)
- radius-session-timeout keyword
- sap-session-limit number
- session-limit number
- stateless-redundancy boolean
- user-db reference
- ipv4
- arp-host
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- host-limit number
- min-auth-interval number
- sap-host-limit number
- bfd
- admin-state keyword
- echo-receive number
- multiplier number
- receive number
- transmit-interval number
- type keyword
- dhcp
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- client-applications
- dhcp boolean
- ppp boolean
- description string
- filter reference
- gi-address string
- lease-populate
- l2-header
- mac string
- max-leases number
- match-circuit-id boolean
- offer-selection
- client-mac
- discover-delay number
- mac-address keyword

```

configure service vprn subscriber-interface group-interface ipv4 dhcp offer-selection discover-delay

```

- discover-delay number
- server string
  - apply-groups reference
  - apply-groups-exclude reference
  - discover-delay number
- option-82
  - action keyword
  - circuit-id
    - ascii-tuple
    - ifindex
    - none
    - sap-id
    - vlan-ascii-tuple
  - remote-id
    - ascii-string string
    - mac
    - none
  - vendor-specific-option
    - client-mac-address boolean
    - pool-name boolean
    - sap-id boolean
    - service-id boolean
    - string string
    - system-id boolean
- proxy-server
  - admin-state keyword
  - emulated-server string
  - lease-time
    - radius-override boolean
    - value number
- python-policy reference
- relay-proxy
  - release-update-src-ip boolean
  - siaddr-override string
- release-include-gi-address boolean
- server string
- src-ip-addr keyword
- trusted boolean
- user-db reference
- icmp
  - mask-reply boolean
  - param-problem
    - admin-state keyword
    - number number
    - seconds number
  - redirects
    - admin-state keyword
    - number number
    - seconds number
  - ttl-expired
    - admin-state keyword
    - number number
    - seconds number
    - use-matching-address boolean
- unreachable
  - admin-state keyword
  - number number
  - seconds number
- ignore-df-bit boolean
- neighbor-discovery
  - local-proxy-arp boolean
  - populate boolean
  - proxy-arp-policy reference
  - remote-proxy-arp boolean

```

configure service vprn subscriber-interface group-interface ipv4 neighbor-discovery timeout

```

- timeout number
- qos-route-lookup keyword
- urpf-check
- mode keyword
- ipv6
- allow-multiple-wan-addresses boolean
- auto-reply
- neighbor-solicitation boolean
- router-solicitation boolean
- bfd
- admin-state keyword
- echo-receive number
- multiplier number
- receive number
- transmit-interval number
- type keyword
- dhcp6
- allow-client-id-change boolean
- apply-groups reference
- apply-groups-exclude reference
- filter reference
- option
- apply-groups reference
- apply-groups-exclude reference
- interface-id
- ascii-tuple
- if-index
- sap-id
- string string
- remote-id boolean
- override-slaac boolean
- pd-managed-route
- next-hop keyword
- proxy-server
- admin-state keyword
- client-applications
- dhcp boolean
- ppp boolean
- preferred-lifetime (number | keyword)
- rebind-timer number
- renew-timer number
- server-id
- apply-groups reference
- apply-groups-exclude reference
- duid-en-ascii string
- duid-en-hex string
- duid-ll
- valid-lifetime (number | keyword)
- python-policy reference
- relay
- admin-state keyword
- advertise-selection
- client-mac
- mac-address keyword
- preference-option
- value number
- solicit-delay number
- preference-option
- value number
- server string
- apply-groups reference
- apply-groups-exclude reference
- preference-option
- value number

```

configure service vprn subscriber-interface group-interface ipv6 dhcp6 relay advertise-selection server solicit-delay

```

    - solicit-delay number
    - solicit-delay number
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - lease-split
    - admin-state keyword
    - valid-lifetime number
  - link-address string
  - server string
  - source-address string
  - snooping
    - admin-state keyword
  - user-db reference
  - user-ident keyword
- ipoe-bridged-mode boolean
- neighbor-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - dad-snooping boolean
  - neighbor-limit number
- qos-route-lookup keyword
- router-advertisements
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number
  - options
    - current-hop-limit number
    - dns
      - include-rdnss boolean
      - rdns-lifetime (number | keyword)
    - managed-configuration boolean
    - mtu (number | keyword)
    - other-stateful-configuration boolean
    - reachable-time number
    - retransmit-timer number
    - router-lifetime (number | keyword)
  - prefix-options
    - autonomous boolean
    - on-link boolean
    - preferred-lifetime (number | keyword)
    - valid-lifetime (number | keyword)
- router-solicit
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - inactivity-timer (number | keyword)
  - min-auth-interval number
  - user-db reference
- urpf-check
  - mode keyword
- local-address-assignment
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- ipv4
  - client-applications
    - ipoe boolean
    - ppp boolean
  - default-pool string

```



configure service vprn subscriber-interface group-interface local-address-assignment ipv4 server

```

- server reference
- ipv6
- client-applications
  - ipoe-slaac boolean
  - ipoe-wan boolean
  - ppp-slaac boolean
  - server reference
- mac string
- nasreq-auth-policy reference
- oper-up-while-empty boolean
- pppoe
  - admin-state keyword
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - dhcp-client
    - client-id keyword
  - policy reference
  - python-policy reference
  - sap-session-limit number
  - session-limit number
  - user-db reference
- radius-auth-policy reference
- redundant-interface reference
- sap string
  - accounting-policy reference
  - admin-state keyword
  - anti-spoof keyword
  - app-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - calling-station-id string
  - collect-stats boolean
  - cpu-protection
    - eth-cfm-monitoring
      - aggregate
      - car
    - ip-src-monitoring
    - mac-monitoring
    - policy-id reference
- default-host
  - ipv4 reference prefix-length number
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop string
  - ipv6 string prefix-length number
    - apply-groups reference
    - apply-groups-exclude reference
    - next-hop string
- description string
- dist-cpu-protection reference
- egress
  - agg-rate
    - adaptation-rule keyword
    - burst-limit (number | keyword)
    - limit-unused-bandwidth boolean
    - queue-frame-based-accounting boolean
    - rate number
  - filter
    - ip reference
    - ipv6 reference
  - qos
    - policer-control-policy

```

configure service vprn subscriber-interface group-interface sap egress qos policer-control-policy policy-name

```

    - policy-name reference
    - qinq-mark-top-only boolean
    - sap-egress
      - policy-name reference
      - scheduler-policy
        - policy-name reference
    - virtual-port
      - vport-name reference
  - eth-cfm
    - apply-groups reference
    - apply-groups-exclude reference
    - collect-lmm-fc-stats
      - fc keyword
      - fc-in-profile keyword
    - collect-lmm-stats boolean
    - mep md-admin-name reference ma-admin-name reference mep-id number
    - admin-state keyword
    - ais boolean
    - alarm-notification
      - fng-alarm-time number
      - fng-reset-time number
    - apply-groups reference
    - apply-groups-exclude reference
    - ccm boolean
    - ccm-ltm-priority number
    - ccm-padding-size number
    - csf
      - multiplier decimal-number
    - description string
    - eth-test
      - bit-error-threshold number
      - test-pattern
        - crc-tlv boolean
        - pattern keyword
    - fault-propagation keyword
    - grace
      - eth-ed
        - max-rx-defect-window number
        - priority number
        - rx-eth-ed boolean
        - tx-eth-ed boolean
      - eth-vsm-grace
        - rx-eth-vsm-grace boolean
        - tx-eth-vsm-grace boolean
      - low-priority-defect keyword
      - one-way-delay-threshold number
    - sqlch-ingress-levels number
  - fwd-wholesale
    - pppoe-service reference
  - host-admin-state keyword
  - host-lockout-policy reference
  - igmp-host-tracking
    - apply-groups reference
    - apply-groups-exclude reference
    - expiry-time number
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - router-alert-check boolean
  - ingress
    - filter
      - ip reference
      - ipv6 reference

```

configure service vprn subscriber-interface group-interface sap ingress qos

```

- qos
  - match-qinq-dot1p keyword
  - policer-control-policy
    - policy-name reference
  - sap-ingress
    - policy-name reference
    - queuing-type keyword
  - scheduler-policy
    - policy-name reference
- lag
  - link-map-profile number
  - per-link-hash
    - class number
    - weight number
- monitor-oper-group reference
- multi-service-site reference
- oper-group reference
- static-host
  - ipv4 string mac string
    - admin-state keyword
    - ancp-string string
    - app-profile
      - profile reference
      - scope keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - int-dest-id string
    - managed-route string
    - apply-groups reference
    - apply-groups-exclude reference
    - cpe-check
      - apply-groups reference
      - apply-groups-exclude reference
      - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
    - drop-count number
    - failed-action
      - metric number
      - preference number
      - tag number
      - withdraw boolean
    - interval number
    - log boolean
    - padding-size number
    - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
      - timeout number
    - metric number
    - preference number
    - tag number
  - rip-policy reference
  - shcv
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - string string
    - use-sap-id
- ipv6 string mac string
  - admin-state keyword
  - ancp-string string
  - app-profile
    - profile reference
    - scope keyword
  - apply-groups reference

```

configure service vprn subscriber-interface group-interface sap static-host ipv6 apply-groups-exclude

```

    - apply-groups-exclude reference
    - int-dest-id string
    - mac-linking string
    - managed-route string
      - apply-groups reference
      - apply-groups-exclude reference
      - cpe-check
        - apply-groups reference
        - apply-groups-exclude reference
        - destination-ip-address (ipv4-address-no-zone | ipv6-address-
no-zone)
          - drop-count number
          - failed-action
            - metric number
            - preference number
            - tag number
            - withdraw boolean
          - interval number
          - log boolean
          - padding-size number
          - source-ip-address (ipv4-address-no-zone | ipv6-address-no-
zone)
            - timeout number
      - metric number
      - preference number
      - tag number
      - retail-svc-id number
      - shcv
      - sla-profile reference
      - sub-profile reference
      - subscriber-id
        - string string
        - use-sap-id
    - mac-learning
      - data-triggered boolean
      - single-mac boolean
    - sub-sla-mgmt
      - admin-state keyword
    - defaults
      - app-profile reference
      - int-dest-id
        - string string
        - top-q-tag
      - sla-profile reference
      - sub-profile reference
      - subscriber-id
        - auto-id
        - sap-id
        - string string
    - single-sub-parameters
      - non-sub-traffic
        - app-profile reference
        - sla-profile reference
        - sub-profile reference
        - subscriber-id string
      - profiled-traffic-only boolean
      - sub-ident-policy reference
      - subscriber-limit (keyword | number)
    - sap-parameters
      - anti-spoof keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - sub-sla-mgmt

```

configure service vprn subscriber-interface group-interface sap-parameters sub-sla-mgmt defaults

```

- defaults
  - app-profile reference
  - sla-profile reference
  - sub-profile reference
  - subscriber-id
    - auto-id
    - string string
  - sub-ident-policy reference
- shcv-policy reference
- shcv-policy-ipv4 reference
- shcv-policy-ipv6 reference
- srrp number
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - bfd-liveness
    - apply-groups reference
    - apply-groups-exclude reference
    - dest-ip string
    - interface-name string
    - service-name string
  - description string
  - gw-mac string
  - keep-alive-interval number
  - message-path reference
  - monitor-oper-group
    - group-name reference
    - priority-step number
  - one-garp-per-sap boolean
  - policy reference
  - preempt boolean
  - priority number
  - send-fib-population-packets keyword
- suppress-aa-sub boolean
- tos-marking-state keyword
- type keyword
- wlan-gw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - gateway-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - apply-groups reference
    - apply-groups-exclude reference
    - purpose
      - xconnect boolean
  - gateway-router string
  - group-encryption
    - encryption-keygroup-inbound reference
    - encryption-keygroup-outbound reference
- l2-ap
  - access-point string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - encap-type keyword
    - epipe-sap-template reference
  - auto-sub-id-fmt keyword
  - default-encap-type keyword
- lanext
  - max-bd number
- learn-ap-mac
  - delay-auth boolean
- mcs-peer
  - address reference

```

configure service vprn subscriber-interface group-interface wlan-gw mcs-peer sync-tag

```

- sync-tag string
- mobility
- hold-time number
- inter-tunnel-type boolean
- inter-vlan boolean
- trigger
  - control boolean
  - data boolean
  - iapp boolean
- oper-down-on-group-degrade boolean
- promiscuous-mode boolean
- tcp-mss-adjust number
- tunnel-egress-qos
  - admin-state keyword
  - agg-rate-limit (number | keyword)
  - granularity keyword
  - hold-time (number | keyword)
  - multi-client-only boolean
  - qos reference
  - scheduler-policy reference
- tunnel-encaps
  - learn-l2tp-cookie (keyword | hex-string)
- vlan-range string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication
    - hold-time number
    - local
      - coa-policy reference
      - default-ue-state keyword
    - on-control-plane boolean
    - policy reference
    - vlan-mismatch-timeout number
  - data-triggered-ue-creation
    - admin-state keyword
    - arp boolean
    - create-proxy-cache-entry
      - mac-format string
      - proxy-server
        - name string
        - router-instance string
    - ospf boolean
- dhcp4
  - admin-state keyword
  - dns string
  - l2-aware-ip-address (ipv4-unicast-address | keyword)
  - lease-time
    - active number
    - initial number
  - nbns string
- dhcp6
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- dsm
  - accounting-policy reference
  - accounting-update
    - interval number

```

configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm admin-state

```

- admin-state keyword
- application-assurance
  - accounting-statistics boolean
  - profile reference
  - url-parameter string
- apply-groups reference
- apply-groups-exclude reference
- egress
  - policer reference
- ingress
  - ip-filter reference
  - policer reference
  - soft-quota-exhausted-filter reference
- one-time-redirect
  - port number
  - url string
- volume-quota-direction keyword
- dynamic-service boolean
- extension string
- http-redirect-policy reference
- idle-timeout-action keyword
- l2-service
  - admin-state keyword
  - description string
  - service reference
- nat-policy reference
- retail-service string
- slaac
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - preferred-lifetime
    - active number
    - initial number
  - valid-lifetime
    - active number
    - initial number
- vrgw
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - brg
    - authenticated-brg-only boolean
    - default-brg-profile reference
  - lanext
    - access
      - max-mac number
      - multi-access boolean
      - policer reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - assistive-address-resolution boolean
    - bd-mac-prefix string
    - mac-translation boolean
    - network
      - admin-state keyword
      - max-mac number
      - policer reference
  - xconnect
    - accounting
      - mobility-updates boolean
      - policy reference
      - update-interval number

```

configure service vprn subscriber-interface group-interface wlan-gw vlan-range xconnect admin-state

```

    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - wlan-gw-group reference
- wpp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - initial
    - app-profile reference
    - sla-profile reference
    - sub-profile reference
  - lease-time number
  - portal
    - name string
    - portal-group reference
    - router-instance string
  - restore-to-initial-on-disconnect boolean
  - triggered-hosts boolean
  - user-db reference
- hold-time
- ipv4
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipv6
  - down
    - init-only boolean
    - seconds number
  - up
    - seconds number
- ipoe-linking
  - apply-groups reference
  - apply-groups-exclude reference
  - gratuitous-router-advertisement boolean
- ipoe-session
  - apply-groups reference
  - apply-groups-exclude reference
  - session-limit number
- ipv4
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - gateway string
  - holdup-time number
  - populate-host-routes boolean
  - prefix-length number
  - track-srrp number
  - allow-unmatching-subnets boolean
- arp-host
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - host-limit number
- bfd
  - admin-state keyword
  - echo-receive number
  - multiplier number
  - receive number
  - transmit-interval number
  - type keyword
- default-dns string

```



configure service vprn subscriber-interface ipv4 dhcp

```

- dhcp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - gi-address string
  - lease-populate
    - max-leases number
  - offer-selection
    - client-mac
      - discover-delay number
      - mac-address keyword
    - discover-delay number
    - server string
      - apply-groups reference
      - apply-groups-exclude reference
      - discover-delay number
  - option-82
    - vendor-specific-option
      - client-mac-address boolean
      - sap-id boolean
      - service-id boolean
      - string string
      - system-id boolean
  - proxy-server
    - admin-state keyword
    - emulated-server string
    - lease-time
      - radius-override boolean
      - value number
  - python-policy reference
  - relay-proxy
    - release-update-src-ip boolean
    - siaddr-override string
    - release-include-gi-address boolean
  - server string
  - src-ip-addr keyword
  - virtual-subnet boolean
  - export-host-routes boolean
  - unnumbered
    - ip-address string
    - ip-int-name string
- ipv6
  - address string
  - apply-groups reference
  - apply-groups-exclude reference
  - host-type keyword
  - prefix-length number
  - allow-multiple-wan-addresses boolean
  - allow-unmatching-prefixes boolean
  - bfd
    - admin-state keyword
    - echo-receive number
    - multiplier number
    - receive number
    - transmit-interval number
    - type keyword
  - default-dns string
  - delegated-prefix-length (number | keyword)
  - dhcp6
    - allow-client-id-change boolean

```

configure service vprn subscriber-interface ipv6 dhcp6 apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- override-slaac boolean
- pd-managed-route
  - next-hop keyword
- proxy-server
  - admin-state keyword
  - client-applications
    - dhcp boolean
    - ppp boolean
  - preferred-lifetime (number | keyword)
  - rebind-timer number
  - renew-timer number
  - server-id
    - apply-groups reference
    - apply-groups-exclude reference
    - duid-en-ascii string
    - duid-en-hex string
    - duid-ll
  - valid-lifetime (number | keyword)
- python-policy reference
- relay
  - admin-state keyword
  - advertise-selection
    - client-mac
      - mac-address keyword
      - preference-option
        - value number
      - solicit-delay number
    - preference-option
      - value number
    - server string
      - apply-groups reference
      - apply-groups-exclude reference
      - preference-option
        - value number
      - solicit-delay number
    - solicit-delay number
  - client-applications
    - dhcp boolean
    - ppp boolean
  - description string
  - lease-split
    - admin-state keyword
    - valid-lifetime number
  - link-address string
  - server string
  - source-address string
- ipoe-bridged-mode boolean
- link-local-address
  - address string
- prefix string
  - apply-groups reference
  - apply-groups-exclude reference
  - holdup-time number
  - host-type keyword
  - track-srrp number
- router-advertisements
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - force-mcast keyword
  - max-advertisement-interval number
  - min-advertisement-interval number

```

configure service vprn subscriber-interface ipv6 router-advertisements options

```

- options
  - current-hop-limit number
  - dns
    - include-rdnss boolean
    - rdns-lifetime (number | keyword)
  - managed-configuration boolean
  - mtu (number | keyword)
  - other-stateful-configuration boolean
  - reachable-time number
  - retransmit-timer number
  - router-lifetime (number | keyword)
- prefix-options
  - autonomous boolean
  - on-link boolean
  - preferred-lifetime (number | keyword)
  - valid-lifetime (number | keyword)
- router-solicit
  - apply-groups reference
  - apply-groups-exclude reference
  - inactivity-timer (number | keyword)
- local-address-assignment
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- ipv4
  - client-applications
    - ppp boolean
  - default-pool string
  - server reference
- ipv6
  - client-applications
    - ipoe-slaac boolean
    - ipoe-wan boolean
    - ppp-slaac boolean
  - server reference
- pppoe
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - session-limit number
- private-retail-subnets boolean
- wan-mode keyword
- wlan-gw
  - apply-groups reference
  - apply-groups-exclude reference
  - pool-manager
    - apply-groups reference
    - apply-groups-exclude reference
  - dhcp6-client
    - dhcpv4-nat
      - admin-state keyword
      - link-address string
      - pool-name string
    - ia-na
      - admin-state keyword
      - link-address string
      - pool-name string
    - lease-query
      - max-retries number
  - servers string
  - slaac
    - admin-state keyword
    - link-address string
    - pool-name string

```

configure service vprn subscriber-interface wlan-gw pool-manager dhcp6-client source-ip

- **source-ip** (keyword | ipv6-address)
- **watermarks**
  - **high** number
  - **low** number
- **wlan-gw-group** reference
- **redundancy**
  - **admin-state** keyword
  - **export** string
  - **monitor** string
- **subscriber-mgmt**
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **dhcpv4**
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **routed-subnet-transparent-forward** boolean
  - **multi-chassis-shunt-id** number
  - **up-resiliency**
    - **monitor-oper-group** reference
      - **apply-groups** reference
      - **apply-groups-exclude** reference
      - **health-drop** number
- **ttl-propagate**
  - **local** keyword
  - **transit** keyword
- **twamp-light**
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **reflector**
    - **admin-state** keyword
    - **allow-ipv6-udp-checksum-zero** boolean
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **description** string
    - **prefix** (ipv4-prefix | ipv6-prefix)
      - **apply-groups** reference
      - **apply-groups-exclude** reference
      - **description** string
    - **type** keyword
    - **udp-port** number
- **video-interface** string
  - **accounting-policy** reference
  - **address** string
  - **admin-state** keyword
  - **apply-groups** reference
  - **apply-groups-exclude** reference
  - **channel** string **source** string
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **channel-name** string
    - **description** string
    - **scte35-action** keyword
    - **zone-channel** string **zone-source** string
      - **adi-channel-name** string
      - **apply-groups** reference
      - **apply-groups-exclude** reference
  - **cpu-protection** reference
  - **description** string
  - **multicast-service** number
  - **output-format** keyword
  - **video-sap**
    - **apply-groups** reference
    - **apply-groups-exclude** reference
    - **egress**

configure service vprn video-interface video-sap egress apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **filter**
  - **ip** *reference*
- **qos**
  - **policy-name** *reference*
- **ingress**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **filter**
    - **ip** *reference*
  - **qos**
    - **policy-name** *reference*
- **video-group-id** *reference*
- **vprn-type** *keyword*
- **vxlan**
  - **tunnel-termination** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **fpe-id** *reference*
- **weighted-ecmp** *keyword*
- **wlan-gw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **distributed-subscriber-mgmt**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ipv6-tcp-mss-adjust** *number*
  - **mobility-triggered-accounting**
    - **admin-state** *keyword*
    - **hold-down** *number*
    - **include-counters** *boolean*
  - **xconnect**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **tunnel-source-ip** *string*
    - **wlan-gw-group** *reference*
- **wpp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **portal** *string*
    - **ack-auth-retry-count** *number*
    - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ntf-logout-retry-count** *number*
    - **port-format** *keyword*
    - **retry-interval** *number*
    - **secret** *string*
    - **version** *number*

### 3.43.1 service command descriptions

#### service

Synopsis	Enter the <b>service</b> context
Context	<b>configure service</b>
Tree	<a href="#">service</a>
Introduced	16.0.R1
Platforms	All

#### **cpipe** [[service-name](#)] *string*

Synopsis	Enter the <b>cpipe</b> list instance
Context	<b>configure service cpipe string</b>
Tree	<a href="#">cpipe</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **[service-name]** *string*

Synopsis	Administrative service name
Context	<b>configure service cpipe string</b>
Tree	<a href="#">cpipe</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

#### **admin-state** *keyword*

Synopsis	Administrative state of the service
Context	<b>configure service cpipe string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **customer** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">customer</a> <a href="#">reference</a>
Tree	<a href="#">customer</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <a href="#">string</a>
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **endpoint** [[name](#)] *string*

Synopsis	Enter the <b>endpoint</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">endpoint</a> <a href="#">string</a>
Tree	<a href="#">endpoint</a>
Max. Instances	2
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[name]** *string*

Synopsis	Service endpoint name
Context	<b>configure</b> <i>service cpipe string endpoint string</i>
Tree	<i>endpoint</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>service cpipe string endpoint string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**hold-time-active** *number*

Synopsis	Time before entering standby when MC-LAG SAP goes down
Context	<b>configure</b> <i>service cpipe string endpoint string hold-time-active number</i>
Tree	<i>hold-time-active</i>
Range	1 to 60
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**revert-time** (*number* | *keyword*)

Synopsis	Time to wait before reverting to primary spoke SDP
Context	<b>configure</b> <i>service cpipe string endpoint string revert-time (number   keyword)</i>
Tree	<i>revert-time</i>
Range	1 to 600



Units	seconds
Options	never, immediate
Default	immediate
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sap** [**sap-id**] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">service cpipe string sap string</a>
Tree	<a href="#">sap</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">service cpipe string sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">service cpipe string sap string accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cem**

Synopsis	Enter the <b>cem</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>cem</b>
Tree	<a href="#">cem</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**packet**

Synopsis	Enter the <b>packet</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>cem</b> <b>packet</b>
Tree	<a href="#">packet</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**jitter-buffer** *number*

Synopsis	Jitter buffer size
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <b>cem</b> <b>packet</b> <b>jitter-buffer</b> <i>number</i>
Tree	<a href="#">jitter-buffer</a>
Range	1 to 250
Units	milliseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**payload-size** *number*

Synopsis	Size of payload packets transmitted to PSN by CEM SAP
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem packet</a> <a href="#">payload-size</a> <i>number</i>
Tree	<a href="#">payload-size</a>
Range	2 to 1514
Units	bytes
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**report-alarm**

Synopsis	Enter the <b>report-alarm</b> context
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">report-alarm</a>
Tree	<a href="#">report-alarm</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**buffer-overflow** *boolean*

Synopsis	Report alarm for buffer overrun
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">buffer-overflow</a> <i>boolean</i>
Tree	<a href="#">buffer-overflow</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**buffer-underrun** *boolean*

Synopsis	Report alarm for buffer underrun
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">buffer-underrun</a> <i>boolean</i>
Tree	<a href="#">buffer-underrun</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**malformed-packets** *boolean*

Synopsis	Report alarm for malformed packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">malformed-packets</a> <i>boolean</i>
Tree	<a href="#">malformed-packets</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**packet-loss** *boolean*

Synopsis	Report remote peer is currently in packet loss status
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">packet-loss</a> <i>boolean</i>
Tree	<a href="#">packet-loss</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**remote-fault** *boolean*

Synopsis	Report remote TDM interface is currently not in service
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">remote-fault</a> <i>boolean</i>
Tree	<a href="#">remote-fault</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**remote-packet-loss** *boolean*

Synopsis	Report remote peer is currently in packet loss status
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">remote-packet-loss</a> <i>boolean</i>
Tree	<a href="#">remote-packet-loss</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**remote-rdi** *boolean*

Synopsis	Report remote TDM interface is currently in RDI status
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">remote-rdi</a> <i>boolean</i>
Tree	<a href="#">remote-rdi</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**stray-packets** *boolean*

Synopsis	Report alarm for stray packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">report-alarm</a> <a href="#">stray-packets</a> <i>boolean</i>
Tree	<a href="#">stray-packets</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rtp-header** *boolean*

Synopsis	Use RTP header for transmitted packets to the PSN
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cem</a> <a href="#">rtp-header</a> <i>boolean</i>
Tree	<a href="#">rtp-header</a>
Description	When configured to <b>true</b> , the router uses the RTP header when packets are transmitted to the packet service network (PSN) by the CEM SAP. This mode must be enabled for differential-timed E1s.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

**collect-stats** *boolean*

Synopsis	Collect accounting statistics
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 160  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dist-cpu-protection** *reference*

Synopsis Distributed CPU protection policy for SAP  
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [dist-cpu-protection](#) *reference*  
 Tree [dist-cpu-protection](#)  
 Reference **configure** [system](#) [security](#) [dist-cpu-protection](#) *policy* *string*  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **egress**

Synopsis Enter the **egress** context  
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#)  
 Tree [egress](#)  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **agg-rate**

Synopsis Enter the **agg-rate** context  
 Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [egress](#) [agg-rate](#)  
 Tree [agg-rate](#)  
 Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **adaptation-rule** *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used

Context **configure** [service cpipe](#) *string* [sap](#) *string* [egress agg-rate adaptation-rule](#) *keyword*

Tree [adaptation-rule](#)

Options max, min, closest

Default closest

Introduced 22.10.R1

Platforms 7750 SR-1, 7750 SR-s

### **burst-limit** (*number* | *keyword*)

Synopsis Shaping burst size when an aggregate shaper is used

Context **configure** [service cpipe](#) *string* [sap](#) *string* [egress agg-rate burst-limit](#) (*number* | *keyword*)

Tree [burst-limit](#)

Range 1 to 14000000

Units bytes

Options auto

Default auto

Introduced 22.10.R1

Platforms 7750 SR-1, 7750 SR-s

### **limit-unused-bandwidth** *boolean*

Synopsis Enable aggregate rate overrun protection

Context **configure** [service cpipe](#) *string* [sap](#) *string* [egress agg-rate limit-unused-bandwidth](#) *boolean*

Tree [limit-unused-bandwidth](#)

Default false

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rate number

Synopsis	Enforced aggregate rate for all queues
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">rate</a> <i>number</i>
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## policer-control-policy

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS



**root**

Synopsis	Enter the <b>root</b> context
Context	<b>configure service cpipe string sap string egress qos policer-control-policy overrides root</b>
Tree	<b>root</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure service cpipe string sap string egress qos policer-control-policy overrides root max-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-rate</b>
Range	1 to 6400000000
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority-mbs-thresholds**

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure service cpipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds</b>
Tree	<b>priority-mbs-thresholds</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure service cpipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>min-thresh-separation</b>
Range	0 to 16777216
Units	bytes
Options	auto

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service cpipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority number</a>
Tree	<a href="#">priority</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service cpipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority number</a>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	<b>configure</b> <a href="#">service cpipe string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds priority number mbs-contribution (number   keyword)</a>
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a>
Tree	<a href="#">sap-egress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**[policer-id] reference**

Synopsis	Policer unique ID
Context	<b>configure service cpipe string sap string egress qos sap-egress overrides policer reference</b>
Tree	<a href="#">policer</a>
Reference	<b>configure qos sap-egress string policer number</b>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**cbs (number | keyword)**

Synopsis	CBS
Context	<b>configure service cpipe string sap string egress qos sap-egress overrides policer reference cbs (number   keyword)</b>
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**mbs (number | keyword)**

Synopsis	MBS
Context	<b>configure service cpipe string sap string egress qos sap-egress overrides policer reference mbs (number   keyword)</b>
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">packet-byte-offset</a> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a>
Tree	<a href="#">queue</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>adaptation-rule</b>

Tree	<a href="#">adaptation-rule</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**avg-frame-overhead decimal-number**

Synopsis	Average packet-to-frame encapsulation overhead
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">avg-frame-overhead</a> <a href="#">decimal-number</a>
Tree	<a href="#">avg-frame-overhead</a>
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**burst-limit** (*number* | *keyword*)

Synopsis	Explicit shaping burst size for the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">burst-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">drop-tail</a>
Tree	<a href="#">drop-tail</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**low**

Synopsis	Enter the <b>low</b> context
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Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a>
Tree	<a href="#">low</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **hs-class-weight** *number*

Synopsis	Class weight override for the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">hs-class-weight</a> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis	Enter the <b>hs-wred-queue</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">hs-wred-queue</a>
Tree	<a href="#">hs-wred-queue</a>
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

**policy reference**

Synopsis	Slope policy applied to the HSQ queue group queue
Context	<b>configure</b> <a href="#">service cpipe string sap string egress qos sap-egress overrides queue reference</a> <a href="#">hs-wred-queue policy reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">qos slope-policy string</a>
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

**hs-wrr-weight number**

Synopsis	WRR weight to parent with the queue into the scheduler
Context	<b>configure</b> <a href="#">service cpipe string sap string egress qos sap-egress overrides queue reference</a> <a href="#">hs-wrr-weight number</a>
Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Default	1
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

**mbs (number | keyword)**

Synopsis	MBS
Context	<b>configure</b> <a href="#">service cpipe string sap string egress qos sap-egress overrides queue reference</a> <a href="#">mbs (number   keyword)</a>
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
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Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a>
Tree	<a href="#">monitor-queue-depth</a>
Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <a href="#">fast-polling</a> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **violation-threshold** *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <a href="#">violation-threshold</a> <i>decimal-number</i>
Tree	<a href="#">violation-threshold</a>
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a>
Tree	<a href="#">parent</a>

Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir-weight** *number*

Synopsis CIR parameter that overrides parent for queue group  
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
[reference](#) [parent](#) **cir-weight** *number*  
 Tree [cir-weight](#)  
 Range 0 to 100  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group  
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
[reference](#) [parent](#) **weight** *number*  
 Tree [weight](#)  
 Range 0 to 100  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **percent-rate**

Synopsis Enter the **percent-rate** context  
 Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
[reference](#) [percent-rate](#)  
 Tree [percent-rate](#)  
 Notes The following elements are part of a choice: **percent-rate** or **rate**.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir** *decimal-number*

Synopsis CIR percent rate

Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <a href="#">decimal-number</a>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <a href="#">decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue reference rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **policy-name** *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **overrides**

Synopsis	Enter the <b>overrides</b> context
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Context	<b>configure service cpipe</b> <i>string sap string egress qos scheduler-policy overrides</i>
Tree	<b>overrides</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **scheduler** [**scheduler-name**] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure service cpipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string</i>
Tree	<b>scheduler</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure service cpipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string</i>
Tree	<b>scheduler</b>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**weight** *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>rate</b>
Tree	<a href="#">rate</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir** (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## virtual-port

Synopsis	Enter the <b>virtual-port</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">virtual-port</a>
Tree	<a href="#">virtual-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## vport-name *reference*

Synopsis	Virtual port assigned to the SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">vport-name</a> <i>reference</i>
Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## endpoint *reference*

Synopsis	Endpoint name
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">endpoint</a> <i>reference</i>
Tree	<a href="#">endpoint</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## policer-control-policy

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## root

Synopsis	Enter the <b>root</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a>
Tree	<a href="#">root</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
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Context	<b>configure service cpipe</b> <i>string sap string ingress qos policer-control-policy overrides root max-rate</i> ( <i>number   keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 6400000000
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure service cpipe</b> <i>string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds</i>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### min-thresh-separation (*number | keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure service cpipe</b> <i>string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation</i> ( <i>number   keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### priority [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure service cpipe</b> <i>string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds priority</i> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[priority-level]** *number*

Synopsis Priority level

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*

Tree [priority](#)

Range 1 to 8

Notes This element is part of a list key.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mbs-contribution** (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space allowed

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number* [mbs-contribution](#) (*number* | *keyword*)

Tree [mbs-contribution](#)

Range 0 to 16777216

Units bytes

Options auto

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **policy-name** *reference*

Synopsis Policer control policy name

Context **configure** [service](#) [cpipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [policer-control-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [policer-control-policy](#) *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## sap-ingress

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure service cpipe string sap string ingress qos sap-ingress</b>
Tree	<a href="#">sap-ingress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure service cpipe string sap string ingress qos sap-ingress overrides</b>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ip-criteria

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure service cpipe string sap string ingress qos sap-ingress overrides ip-criteria</b>
Tree	<a href="#">ip-criteria</a>
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	<b>configure service cpipe string sap string ingress qos sap-ingress overrides ip-criteria activate-entry-tag <i>number</i></b>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ipv6-criteria**

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure service cpipe string sap string ingress qos sap-ingress overrides ipv6-criteria</b>
Tree	<a href="#">ipv6-criteria</a>
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**activate-entry-tag number**

Synopsis	Tag ID activated for IPv6 criteria
Context	<b>configure service cpipe string sap string ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag number</b>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policer [policer-id] reference**

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure service cpipe string sap string ingress qos sap-ingress overrides policer reference</b>
Tree	<a href="#">policer</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**[policer-id] reference**

Synopsis	Policer unique ID
Context	<b>configure service cpipe string sap string ingress qos sap-ingress overrides policer reference</b>
Tree	<a href="#">policer</a>
Reference	<b>configure qos sap-ingress string policer number</b>
Notes	This element is part of a list key.
Introduced	20.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cbs** (*number* | *keyword*)

Synopsis CBS

Context **configure** [service cpipe](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides policer](#)  
reference [cbs](#) (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mbs** (*number* | *keyword*)

Synopsis MBS

Context **configure** [service cpipe](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides policer](#)  
reference [mbs](#) (*number* | *keyword*)

Tree [mbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **packet-byte-offset** *number*

Synopsis Packet size modification for policing information

Context **configure** [service cpipe](#) *string* [sap](#) *string* [ingress qos sap-ingress overrides policer](#)  
reference [packet-byte-offset](#) *number*

Tree [packet-byte-offset](#)

Range -32 to 31

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## cir *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## pir *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS

### **queue** [\[queue-id\]](#) *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">string</a> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cbs (number | keyword)**

Synopsis	CBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">cbs</a> <a href="#">(number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a>

Tree	<a href="#">drop-tail</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <b>low</b>
Tree	<a href="#">low</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <b>low</b> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mbs (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## monitor-queue-depth

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a>
Tree	<a href="#">monitor-queue-depth</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <a href="#">fast-polling</a> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a>
Tree	<a href="#">parent</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
[reference](#) [parent](#) **weight** *number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
[reference](#) [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir** *decimal-number*

Synopsis CIR percent rate

Context **configure** [service](#) [cpipe](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
[reference](#) [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pir** *decimal-number*

Synopsis PIR percent rate



Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <a href="#">decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000

Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **policy-name** *reference*

Synopsis	Policy ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <b>policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <b>queuing-type</b> <i>keyword</i>
Tree	<a href="#">queuing-type</a>
Options	shared, multipoint-shared
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <b>scheduler-policy</b>
Tree	<a href="#">scheduler-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <b>overrides</b>

Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (<b>#</b>, <b>\$</b>, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**weight** *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>rate</b>
Tree	<a href="#">rate</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cir** (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lag

Synopsis	Enter the <b>lag</b> context
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string sap string lag</i>
Tree	<a href="#">lag</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## multi-service-site *reference*

Synopsis	Multi service site name
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string sap string multi-service-site reference</i>
Tree	<a href="#">multi-service-site</a>
Reference	<b>configure</b> <a href="#">service customer</a> <i>string multi-service-site string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## service-id *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string service-id number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## service-mtu *number*

Synopsis	MTU size
Context	<b>configure</b> <a href="#">service cpipe</a> <i>string service-mtu number</i>
Tree	<a href="#">service-mtu</a>
Range	1 to 9194
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **spoke-sdp** [**sdp-bind-id**] *string*

Synopsis Enter the **spoke-sdp** list instance  
Context **configure service cpipe string spoke-sdp string**  
Tree **spoke-sdp**  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[sdp-bind-id]** *string*

Synopsis SDP binding ID  
Context **configure service cpipe string spoke-sdp string**  
Tree **spoke-sdp**  
String Length 3 to 16  
Notes This element is part of a list key.  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the SDP binding to the service  
Context **configure service cpipe string spoke-sdp string admin-state keyword**  
Tree **admin-state**  
Options enable, disable  
Default enable  
Introduced 20.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bandwidth** (*number* | *keyword*)

Synopsis Bandwidth that is reserved for this SDP binding  
Context **configure service cpipe string spoke-sdp string bandwidth (number | keyword)**  
Tree **bandwidth**

---

Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## bfd

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## bfd-liveness

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">bfd</a> <a href="#">bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## encap *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <a href="#">encap</a> <i>keyword</i>
Tree	<a href="#">encap</a>
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**bfd-template** *reference*

Synopsis	BFD template associated with the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**control-word** *boolean*

Synopsis	Use control word as part of packet encapsulation
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">control-word</a> <i>boolean</i>
Tree	<a href="#">control-word</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## qos

Synopsis Enter the **qos** context

Context **configure** [service cpipe](#) *string* [spoke-sdp](#) *string* [egress qos](#)

Tree [qos](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## network

Synopsis Enter the **network** context

Context **configure** [service cpipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#)

Tree [network](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## policy-name *reference*

Synopsis Network policy ID

Context **configure** [service cpipe](#) *string* [spoke-sdp](#) *string* [egress qos network policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos network](#) *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## port-redirect-group

Synopsis Enter the **port-redirect-group** context

Context **configure** [service cpipe](#) *string* [spoke-sdp](#) *string* [egress qos network port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**group-name** *reference*

Synopsis	Name of the egress port queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**instance** *number*

Synopsis	Queue-group instance ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**endpoint**

Synopsis	Enter the <b>endpoint</b> context
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Context	<b>configure service cpipe string spoke-sdp string endpoint</b>
Tree	<a href="#">endpoint</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **icb boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind the SDP as the Inter-Chassis Backup (ICB) type
Context	<b>configure service cpipe string spoke-sdp string endpoint icb boolean</b>
Tree	<a href="#">icb</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **name reference**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Endpoint name to which SDP bind is attached
Context	<b>configure service cpipe string spoke-sdp string endpoint name reference</b>
Tree	<a href="#">name</a>
Reference	<b>configure service cpipe string endpoint string</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **precedence (number | keyword)**

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	<b>configure service cpipe string spoke-sdp string endpoint precedence (number   keyword)</b>
Tree	<a href="#">precedence</a>

Range	1 to 4
Options	primary
Default	4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service cpipe</a> <a href="#">string spoke-sdp</a> <a href="#">string ingress</a>
Tree	<a href="#">ingress</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service cpipe</a> <a href="#">string spoke-sdp</a> <a href="#">string ingress qos</a>
Tree	<a href="#">qos</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service cpipe</a> <a href="#">string spoke-sdp</a> <a href="#">string ingress qos network</a>
Tree	<a href="#">network</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fp-redirect-group

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure</b> <a href="#">service cpipe</a> <a href="#">string spoke-sdp</a> <a href="#">string ingress qos network fp-redirect-group</a>
Tree	<a href="#">fp-redirect-group</a>

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Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **group-name** *reference*

Synopsis	Name of the forwarding plane queue group template
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">ingress queue-group</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **instance** *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">fp-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **policy-name** *reference*

Synopsis	Network policy ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">cpipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos network</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	<b>configure</b> <i>service cpipe string spoke-sdp string ingress vc-label number</i>
Tree	<i>vc-label</i>
Range	1 to 1048575
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate as a test service
Context	<b>configure</b> <i>service cpipe string test boolean</i>
Tree	<i>test</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vc-switching** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	<b>configure</b> <i>service cpipe string vc-switching boolean</i>
Tree	<i>vc-switching</i>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vc-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Circuit emulation service type signalled to the peer
Context	<b>configure</b> <i>service cpipe string vc-type keyword</i>
Tree	<i>vc-type</i>
Options	satop-e1, satop-t1, cesopsn, cesopsn-cas
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**vpn-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	<b>configure</b> <i>service cpipe string vpn-id number</i>
Tree	<i>vpn-id</i>
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**customer** [*customer-name*] *string*

Synopsis	Enter the <b>customer</b> list instance
Context	<b>configure</b> <i>service customer string</i>
Tree	<i>customer</i>
Introduced	16.0.R1
Platforms	All

**[customer-name]** *string*

Synopsis	Customer name for a service
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Context	<b>configure service customer string</b>
Tree	<b>customer</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **contact string**

Synopsis	Service customer contact information
Context	<b>configure service customer string contact string</b>
Tree	<b>contact</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **customer-id number**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Customer ID
Context	<b>configure service customer string customer-id number</b>
Tree	<b>customer-id</b>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

### **description string**

Synopsis	Text description
Context	<b>configure service customer string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1

Platforms All

### **multi-service-site** [[multi-service-site-name](#)] *string*

Synopsis Enter the **multi-service-site** list instance  
Context **configure service customer** *string* [multi-service-site](#) *string*  
Tree [multi-service-site](#)  
Introduced 16.0.R1  
Platforms All

### **[multi-service-site-name]** *string*

Synopsis Customer site name  
Context **configure service customer** *string* [multi-service-site](#) *string*  
Tree [multi-service-site](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **assignment**

Synopsis Enter the **assignment** context  
Context **configure service customer** *string* [multi-service-site](#) *string* **assignment**  
Tree [assignment](#)  
Introduced 16.0.R1  
Platforms All

### **card** *number*

Synopsis Multi-service-site assignment to the card slot  
Context **configure service customer** *string* [multi-service-site](#) *string* **assignment** [card](#) *number*  
Tree [card](#)  
Range 1 to 20  
Notes The following elements are part of a choice: **card**, **fpe**, or **port**.

Introduced	16.0.R1
Platforms	All

### **fpe reference**

Synopsis	Multi-service-site assignment to the FPE object
Context	<b>configure service customer string multi-service-site string assignment fpe reference</b>
Tree	<b>fpe</b>
Description	<p>When configured to <b>true</b>, this command identifies the MSS assignment to an FPE object to allow the creation of a scheduling hierarchy used to control bandwidth over a set of PW SAPs belonging to multiple PW ports. These PW ports must be associated with the same FPE to which MSS is assigned.</p> <p>When configured to <b>false</b>, this command has no effect and returns no warnings or messages.</p>
Reference	<b>configure fwd-path-ext fpe number</b>
Notes	The following elements are part of a choice: <b>card</b> , <b>fpe</b> , or <b>port</b> .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port string**

Synopsis	Multi-service-site assignment to the port
Context	<b>configure service customer string multi-service-site string assignment port string</b>
Tree	<b>port</b>
Notes	The following elements are part of a choice: <b>card</b> , <b>fpe</b> , or <b>port</b> .
Introduced	16.0.R1
Platforms	All

### **description string**

Synopsis	Text description
Context	<b>configure service customer string multi-service-site string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure service customer string multi-service-site string egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	All

## agg-rate

Synopsis	Enter the <b>agg-rate</b> context
Context	<b>configure service customer string multi-service-site string egress agg-rate</b>
Tree	<b>agg-rate</b>
Introduced	16.0.R1
Platforms	All

## limit-unused-bandwidth *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	<b>configure service customer string multi-service-site string egress agg-rate limit-unused-bandwidth boolean</b>
Tree	<b>limit-unused-bandwidth</b>
Default	false
Introduced	16.0.R1
Platforms	All

## queue-frame-based-accounting *boolean*

Synopsis	Enable frame based accounting for policers and queues
Context	<b>configure service customer string multi-service-site string egress agg-rate queue-frame-based-accounting boolean</b>
Tree	<b>queue-frame-based-accounting</b>
Default	false
Introduced	16.0.R1
Platforms	All

**rate number**

Synopsis	Rate limit
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">rate</a> <i>number</i>
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

**policer-control-policy reference**

Synopsis	Policer control policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">policer-control-policy</a> <i>reference</i>
Tree	<a href="#">policer-control-policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1

Platforms All

### **scheduler** [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance

Context **configure service customer** *string* **multi-service-site** *string* **egress scheduler-policy overrides scheduler** *string*

Tree [scheduler](#)

Introduced 16.0.R1

Platforms All

### **[scheduler-name]** *string*

Synopsis Scheduler name

Context **configure service customer** *string* **multi-service-site** *string* **egress scheduler-policy overrides scheduler** *string*

Tree [scheduler](#)

Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (**#**, **\$**, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context will not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context does not change.

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **parent**

Synopsis Enter the **parent** context

Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR for the scheduler
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR for the scheduler
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">egress</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
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Context	<b>configure service customer</b> <i>string</i> multi-service-site <i>string</i> ingress
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

### **policer-control-policy** *reference*

Synopsis	Policer control policy
Context	<b>configure service customer</b> <i>string</i> multi-service-site <i>string</i> ingress <b>policer-control-policy</b> <i>reference</i>
Tree	<a href="#">policer-control-policy</a>
Reference	<b>configure qos</b> <b>policer-control-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure service customer</b> <i>string</i> multi-service-site <i>string</i> ingress <b>scheduler-policy</b>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

### **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure service customer</b> <i>string</i> multi-service-site <i>string</i> ingress <b>scheduler-policy</b> <b>overrides</b>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

### **scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
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Context	<b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress scheduler-policy overrides scheduler</b> <i>string</i>
Tree	<b>scheduler</b>
Introduced	16.0.R1
Platforms	All

### **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress scheduler-policy overrides scheduler</b> <i>string</i>
Tree	<b>scheduler</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress scheduler-policy overrides scheduler</b> <i>string</i> <b>parent</b>
Tree	<b>parent</b>
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i> <b>ingress scheduler-policy overrides scheduler</b> <i>string</i> <b>parent cir-weight</b> <i>number</i>
Tree	<b>cir-weight</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	All

**cir (number | keyword)**

Synopsis	CIR for the scheduler
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir (number | keyword)**

Synopsis	PIR for the scheduler
Context	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>

Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i> <a href="#">ingress scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **phone** *string*

Synopsis	Service customer telephone number information
Context	<b>configure</b> <a href="#">service customer</a> <i>string</i> <a href="#">phone</a> <i>string</i>
Tree	<a href="#">phone</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **epipe** [[service-name](#)] *string*

Synopsis	Enter the <b>epipe</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i>
Tree	<a href="#">epipe</a>
Introduced	16.0.R1
Platforms	All

**[service-name]** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i>
Tree	<a href="#">epipe</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the service
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**bgp** [[bgp-instance](#)] *number*

Synopsis	Enter the <b>bgp</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>bgp</b> <i>number</i>
Tree	<a href="#">bgp</a>
Introduced	16.0.R1
Platforms	All

**[bgp-instance]** *number*

Synopsis	BGP instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <b>bgp</b> <i>number</i>
Tree	<a href="#">bgp</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **adv-service-mtu** *number*

Synopsis Advertised service MTU value

Context **configure service epipe** *string* **bgp** *number* **adv-service-mtu** *number*

Tree [adv-service-mtu](#)

Description This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.

Range 0 to 9782

Introduced 22.2.R1

Platforms All

### **pw-template-binding** [[pw-template-name](#)] *reference*

Synopsis Enter the **pw-template-binding** list instance

Context **configure service epipe** *string* **bgp** *number* **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Max. Instances 100

Introduced 16.0.R1

Platforms All

### **[pw-template-name]** *reference*

Synopsis Policy name

Context **configure service epipe** *string* **bgp** *number* **pw-template-binding** *reference*

Tree [pw-template-binding](#)

Reference **configure service pw-template** *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp</a> <i>number</i> <a href="#">pw-template-binding</a> <i>reference</i> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template name for PW-Template binding
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp</a> <i>number</i> <a href="#">pw-template-binding</a> <i>reference</i> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**endpoint** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name associated with the BGP PW template
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp</a> <i>number</i> <a href="#">pw-template-binding</a> <i>reference</i> <a href="#">endpoint</a> <i>reference</i>
Tree	<a href="#">endpoint</a>
Description	This command specifies the endpoint name associated with the BGP PW template. When an endpoint is associated to the PW template binding of a BGP VPWS service, EVPN MPLS can also be configured and associated to the same endpoint in the same Epipe service.
Reference	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

**import-rt string**

Synopsis	Import route-target communities
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">number</a> <a href="#">pw-template-binding</a> <a href="#">reference</a> <b>import-rt</b> <a href="#">string</a>
Tree	<a href="#">import-rt</a>
String Length	10 to 28
Max. Instances	5
Introduced	16.0.R1
Platforms	All

**route-distinguisher** (*keyword* | *vpn-route-distinguisher*)

Synopsis	RD component for NLRI for L2VPN and EVPN families
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">number</a> <b>route-distinguisher</b> ( <i>keyword</i>   <i>vpn-route-distinguisher</i> )
Tree	<a href="#">route-distinguisher</a>
Options	auto-rd
Introduced	16.0.R1
Platforms	All

**route-target**

Synopsis	Enter the <b>route-target</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">number</a> <b>route-target</b>
Tree	<a href="#">route-target</a>
Introduced	16.0.R1
Platforms	All

**export string**

Synopsis	Extended community name for default import policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">number</a> <a href="#">route-target</a> <b>export</b> <a href="#">string</a>
Tree	<a href="#">export</a>
String Length	10 to 28



Introduced 16.0.R1  
Platforms All

### **import** *string*

Synopsis Extended community name for default import policy  
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [route-target](#) [import](#) *string*  
Tree [import](#)  
String Length 10 to 28  
Introduced 16.0.R1  
Platforms All

### **vsi-export** *reference*

Synopsis VSI export policies  
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [vsi-export](#) *reference*  
Tree [vsi-export](#)  
Reference **configure** [policy-options](#) [policy-statement](#) *string*  
Max. Instances 5  
Notes This element is ordered by the user.  
Introduced 19.10.R1  
Platforms All

### **vsi-import** *reference*

Synopsis VSI import policies  
Context **configure** [service](#) [epipe](#) *string* [bgp](#) *number* [vsi-import](#) *reference*  
Tree [vsi-import](#)  
Reference **configure** [policy-options](#) [policy-statement](#) *string*  
Max. Instances 5  
Notes This element is ordered by the user.  
Introduced 19.10.R1  
Platforms All

**bgp-evpn**

Synopsis	Enable the <b>bgp-evpn</b> context
Context	<b>configure</b> <i>service epipe string</i> <b>bgp-evpn</b>
Tree	<b>bgp-evpn</b>
Introduced	16.0.R1
Platforms	All

**evi number**

Synopsis	EVPN ID
Context	<b>configure</b> <i>service epipe string</i> <b>bgp-evpn evi number</b>
Tree	<b>evi</b>
Description	<p>This command configures an EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.</p> <p>The following options are supported:</p> <p>If this EVPN identifier is not specified, the value is zero and no route distinguisher or route target is automatically derived from it. If the specified EVPN identifier is lower than 65535 and no other route distinguisher or route target is configured in the service, the following applies:</p> <ul style="list-style-type: none"> <li>the route distinguisher is derived from &lt;system_ip&gt;:evi</li> <li>the route target is derived from &lt;autonomous-system&gt;:evi</li> </ul> <p>If the specified EVPN identifier is higher than 65535 and no other route distinguisher or route target is configured in the service, the following applies.</p> <ul style="list-style-type: none"> <li>The route distinguisher cannot be automatically derived. An error is generated if enabling EVPN is attempted without a route distinguisher. A manual or an <b>auto-rd</b> route distinguisher must be configured.</li> <li>The route target can only be automatically derived if the <b>evi-three-byte-auto-rt</b> command is configured. If configured, the route target is automatically derived in accordance with the rules described in RFC8365.</li> </ul>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**local-attachment-circuit** [*name*] *string*

Synopsis	Enter the <b>local-attachment-circuit</b> list instance
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Context	<b>configure service epipe string</b> <i>bgp-evpn local-attachment-circuit string</i>
Tree	<i>local-attachment-circuit</i>
Max. Instances	2
Introduced	20.10.R1
Platforms	All

**[name]** *string*

Synopsis	Attachment circuit name
Context	<b>configure service epipe string</b> <i>bgp-evpn local-attachment-circuit string</i>
Tree	<i>local-attachment-circuit</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**bgp** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	BGP instance ID
Context	<b>configure service epipe string</b> <i>bgp-evpn local-attachment-circuit string</i> <b>bgp</b> <i>number</i>
Tree	<i>bgp</i>
Range	1 to 2
Default	1
Introduced	23.10.R1
Platforms	All

**endpoint** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name
Context	<b>configure service epipe string</b> <a href="#">bgp-evpn local-attachment-circuit string endpoint reference</a>
Tree	<a href="#">endpoint</a>
Reference	<b>configure service epipe string endpoint string</b>
Introduced	20.10.R1
Platforms	All

### **eth-tag** *number*

Synopsis	Ethernet tag of the attachment circuit
Context	<b>configure service epipe string</b> <a href="#">bgp-evpn local-attachment-circuit string eth-tag number</a>
Tree	<a href="#">eth-tag</a>
Description	<p>This command configures the Ethernet tag value of the attachment circuit.</p> <p>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.</p> <p>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.</p>
Range	1 to 16777215
Introduced	20.10.R1
Platforms	All

### **mpls** [[bgp-instance](#)] *number*

Synopsis	Enter the <b>mpls</b> list instance
Context	<b>configure service epipe string</b> <a href="#">bgp-evpn mpls number</a>
Tree	<a href="#">mpls</a>
Introduced	16.0.R1
Platforms	All

### **[bgp-instance]** *number*

Synopsis	BGP instance
Context	<b>configure service epipe string</b> <a href="#">bgp-evpn mpls number</a>
Tree	<a href="#">mpls</a>

Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BGP EVPN MPLS
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **auto-bind-tunnel**

Synopsis	Enter the <b>auto-bind-tunnel</b> context
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>auto-bind-tunnel</b>
Tree	<a href="#">auto-bind-tunnel</a>
Introduced	16.0.R1
Platforms	All

### **allow-flex-algo-fallback** *boolean*

Synopsis	Enable flexible algorithm fallback
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>auto-bind-tunnel</b> <b>allow-flex-algo-fallback</b> <i>boolean</i>
Tree	<a href="#">allow-flex-algo-fallback</a>
Description	<p>When configured to <b>true</b>, a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.</p> <p>When configured to <b>false</b>, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.</p>
Default	false

Introduced 20.10.R1  
Platforms All

### **ecmp** *number*

Synopsis Maximum ECMP routes information  
Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) [auto-bind-tunnel](#) **ecmp** *number*  
Tree [ecmp](#)  
Range 1 to 32  
Default 1  
Introduced 19.10.R1  
Platforms All

### **enforce-strict-tunnel-tagging** *boolean*

Synopsis Enable/disable enforcement of strict tunnel tagging  
Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) [auto-bind-tunnel](#) **enforce-strict-tunnel-tagging** *boolean*  
Tree [enforce-strict-tunnel-tagging](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **resolution** *keyword*

Synopsis Resolution method for tunnel selection  
Context **configure** [service](#) [epipe](#) [string](#) [bgp-evpn](#) [mpls](#) [number](#) [auto-bind-tunnel](#) **resolution** *keyword*  
Tree [resolution](#)  
Options none, filter, any  
Default none  
Introduced 16.0.R1  
Platforms All

**resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a>
Tree	<a href="#">resolution-filter</a>
Introduced	16.0.R1
Platforms	All

**bgp boolean**

Synopsis	Use BGP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">bgp</a> <a href="#">boolean</a>
Tree	<a href="#">bgp</a>
Description	When configured to <b>true</b> , BGP searches the BGP LSP for the address of the BGP next hop.  When configured to <b>false</b> , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	false
Introduced	16.0.R1
Platforms	All

**ldp boolean**

Synopsis	Use LDP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">ldp</a> <a href="#">boolean</a>
Tree	<a href="#">ldp</a>
Description	When configured to <b>true</b> , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.  When configured to <b>false</b> , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

**mpls-fwd-policy** *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">mpls-fwd-policy</a> <i>boolean</i>
Tree	<a href="#">mpls-fwd-policy</a>
Description	When configured to <b>true</b> , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.  When configured to <b>false</b> , the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

**rib-api** *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rib-api</a> <i>boolean</i>
Tree	<a href="#">rib-api</a>
Description	When configured to <b>true</b> , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.  When configured to <b>false</b> , the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

**rsvp** *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rsvp</a> <i>boolean</i>
Tree	<a href="#">rsvp</a>
Description	When configured to <b>true</b> , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.



When configured to **false**, the RSVP LSP is not used for next-hop resolution.

Default	false
Introduced	16.0.R1
Platforms	All

### **sr-isis** *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>auto-bind-tunnel</b> <b>resolution-filter</b> <b>sr-isis</b> <i>boolean</i>
Tree	<b>sr-isis</b>
Description	When configured to <b>true</b> , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.  The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.  When configured to <b>false</b> , IS-IS tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf** *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>auto-bind-tunnel</b> <b>resolution-filter</b> <b>sr-ospf</b> <i>boolean</i>
Tree	<b>sr-ospf</b>
Description	When configured to <b>true</b> , BGP uses an OSPF tunnel type to determine the address of the BGP next hop.  The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.  When configured to <b>false</b> , OSPF tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

**sr-ospf3 boolean**

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	<b>configure service epipe string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-ospf3 boolean</b>
Tree	<a href="#">sr-ospf3</a>
Description	<p>When configured to <b>true</b>, BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.</p> <p>When configured to <b>false</b>, OSPF3 tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	19.10.R1
Platforms	All

**sr-policy boolean**

Synopsis	Use SR policies for next-hop resolution
Context	<b>configure service epipe string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-policy boolean</b>
Tree	<a href="#">sr-policy</a>
Description	<p>When configured to <b>true</b>, this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.</p> <p>When configured to <b>false</b>, SR policies are not used for next-hop resolution.</p>
Default	false
Introduced	19.5.R1
Platforms	All

**sr-te boolean**

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure service epipe string bgp-evpn mpls number auto-bind-tunnel resolution-filter sr-te boolean</b>
Tree	<a href="#">sr-te</a>
Description	When configured to <b>true</b> , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.

When configured to **false**, SR-TE tunneling is not used for next-hop resolution.

Default	false
Introduced	16.0.R1
Platforms	All

### **udp** *boolean*

Synopsis Use MPLS over UDP tunneling for next-hop resolution

Context **configure** [service](#) [epipe](#) *string* [bgp-evpn](#) [mpls](#) *number* [auto-bind-tunnel](#) [resolution-filter](#) **udp** *boolean*

Tree [udp](#)

Description When configured to **true**, BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.

When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.

Default	false
Introduced	16.0.R1
Platforms	All

### **weighted-ecmp** *boolean*

Synopsis Allow weighted load balancing

Context **configure** [service](#) [epipe](#) *string* [bgp-evpn](#) [mpls](#) *number* [auto-bind-tunnel](#) [weighted-ecmp](#) *boolean*

Tree [weighted-ecmp](#)

Description When configured to **true**, this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.

When configured to **false**, this command disables weighted ECMP for next-hop tunnel selection.

Default	false
Introduced	22.7.R1
Platforms	All

**control-word** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable support for control word
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>mpls</i> <i>number</i> <i>control-word</i> <i>boolean</i>
Tree	<i>control-word</i>
Description	When configured to <b>true</b> , the router enables the transmission and reception of the control word for all EVPN-MPLS destinations at the same time.
Default	false
Introduced	16.0.R1
Platforms	All

**default-route-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>mpls</i> <i>number</i> <i>default-route-tag</i> <i>string</i>
Tree	<i>default-route-tag</i>
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	16.0.R4

Platforms All

### domain-id *string*

Synopsis	Domain ID of received BGP route before readvertisement
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>domain-id</b> <i>string</i>
Tree	<b>domain-id</b>
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <pre>Seg Len=1 / 65000:1:128</pre> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <pre>Seg Len=2 / 65000:2:70 / 65000:1:128</pre> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p> <p>The command is also supported in Epipe services with two instances. As in the case of multi-instance VPRN services, the configured domain ID in an Epipe instance is prepended to the AD per EVI route redistributed to the other instance.</p>
Introduced	23.10.R1
Platforms	All

### dynamic-egress-label-limit *boolean*

Synopsis	Enables dynamic egress label limit
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>mpls</b> <i>number</i> <b>dynamic-egress-label-limit</b> <i>boolean</i>
Tree	<b>dynamic-egress-label-limit</b>
Description	When configured to <b>true</b> , this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.

For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.

For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

Default	false
Introduced	22.2.R1
Platforms	All

### **ecmp number**

Synopsis	Maximum ECMP routes information
Context	<b>configure service epipe string bgp-evpn mpls number ecmp number</b>
Tree	<b>ecmp</b>
Range	1 to 32
Default	1
Introduced	16.0.R1
Platforms	All

### **entropy-label boolean**

Synopsis	Enable use of entropy-labels
Context	<b>configure service epipe string bgp-evpn mpls number entropy-label boolean</b>
Tree	<b>entropy-label</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
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Context	<b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>evi-three-byte-auto-rt</b> <i>boolean</i>
Tree	<b>evi-three-byte-auto-rt</b>
Description	When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: <ul style="list-style-type: none"> <li>• Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken</li> <li>• A=0 (for auto-derivation)</li> <li>• Type=4 (EVI-based route-target)</li> <li>• D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance</li> <li>• Service ID=3-octet EVI</li> </ul> When configured to <b>false</b> , route target derivation is not allowed.
Default	false
Introduced	21.10.R1
Platforms	All

### **force-vc-forwarding** *keyword*

Synopsis	VC forwarding action
Context	<b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>force-vc-forwarding</b> <i>keyword</i>
Tree	<b>force-vc-forwarding</b>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

### **hash-label** *boolean*

Synopsis	Push hash label
Context	<b>configure service epipe</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>hash-label</b> <i>boolean</i>
Tree	<b>hash-label</b>
Description	When configured to <b>true</b> , the router pushes the hash label based on the following: <ul style="list-style-type: none"> <li>• If <b>advertise-l2-attributes</b> (in the <b>configure service vpls bgp-evpn routes incl-mcast</b> context) is set to <b>false</b>, the hash label is pushed to a unicast EVPN destination.</li> <li>• If <b>advertise-l2-attributes</b> is set to <b>true</b>, the F bit is set to 1 in the Layer 2 Attributes Extended Community of the EVPN IMET route for the service. The hash label is</li> </ul>

pushed only if the remote PE signaled support for hash label (received F bit is set to 1).

When configured to **false**, the hash label is not pushed.

The hash label is never used for BUM packets.

Default	false
Introduced	23.10.R1
Platforms	All

### **mh-mode** *keyword*

Synopsis	Multihoming mode
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>mh-mode</b> <i>keyword</i>
Tree	<a href="#">mh-mode</a>
Description	This command configures each BGP-EVPN instance in a multi-instance Epipe service to behave as network or access.  You can only configure one network instance for the service. If the service has a provider tunnel enabled, it requires a network instance.
Options	access, network
Default	network
Introduced	23.10.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group identifier
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>oper-group</b> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <b>oper-group</b> <i>string</i>
Introduced	19.5.R1
Platforms	All

### **route-next-hop**

Synopsis	Enter the <b>route-next-hop</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>route-next-hop</b>
Tree	<a href="#">route-next-hop</a>



Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	19.10.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>mpls</i> <i>number</i> <i>route-next-hop</i> <b>ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	19.10.R1
Platforms	All

### **system-ipv4**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>mpls</i> <i>number</i> <i>route-next-hop</i> <b>system-ipv4</b>
Tree	<a href="#">system-ipv4</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	19.10.R1
Platforms	All

### **system-ipv6**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
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Context	<b>configure service epipe</b> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">route-next-hop</a> <a href="#">system-ipv6</a>
Tree	<a href="#">system-ipv6</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	19.10.R1
Platforms	All

## send-tunnel-encap

Synopsis	Enter the <b>send-tunnel-encap</b> context
Context	<b>configure service epipe</b> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">send-tunnel-encap</a>
Tree	<a href="#">send-tunnel-encap</a>
Introduced	16.0.R1
Platforms	All

## **mpls** *boolean*



### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	<b>configure service epipe</b> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">send-tunnel-encap</a> <a href="#">mpls</a> <i>boolean</i>
Tree	<a href="#">mpls</a>
Default	true
Introduced	16.0.R1
Platforms	All

## **mpls-over-udp** *boolean*



### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	<b>configure service epipe</b> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">send-tunnel-encap</a> <a href="#">mpls-over-udp</a> <i>boolean</i>
Tree	<a href="#">mpls-over-udp</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **remote-attachment-circuit** [*name*] *string*

Synopsis	Enter the <b>remote-attachment-circuit</b> list instance
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>remote-attachment-circuit</i> <i>string</i>
Tree	<i>remote-attachment-circuit</i>
Max. Instances	2
Introduced	20.10.R1
Platforms	All

### **[name]** *string*

Synopsis	Attachment circuit name
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>remote-attachment-circuit</i> <i>string</i>
Tree	<i>remote-att</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **bgp** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	BGP instance ID
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>bgp-evpn</i> <i>remote-attachment-circuit</i> <i>string</i> <i>bgp</i> <i>number</i>
Tree	<i>bgp</i>
Range	1 to 2
Default	1
Introduced	23.10.R1

Platforms All

## endpoint *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">remote-attachment-circuit</a> <i>string</i> <a href="#">endpoint</a> <i>reference</i>
Tree	<a href="#">endpoint</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

## eth-tag *number*

Synopsis	Ethernet tag of the attachment circuit
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">remote-attachment-circuit</a> <i>string</i> <a href="#">eth-tag</a> <i>number</i>
Tree	<a href="#">eth-tag</a>
Description	<p>This command configures the Ethernet tag value of the attachment circuit.</p> <p>When configured in the local attachment circuit context, the tag value is used in the advertised AD per-EVI route sent for the attachment circuit.</p> <p>When configured in the remote attachment circuit context, the value is compared with the Ethernet tag value of the imported D per-EVI routes for the service. When there is a match, the system creates an EVPN destination for the Epipe.</p>
Range	1 to 16777215
Introduced	20.10.R1
Platforms	All

## segment-routing-v6 [[bgp-instance](#)] *number*

Synopsis	Enter the <b>segment-routing-v6</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>

Description	Commands in this context configure the SRv6 instance that is used in the service.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[bgp-instance] number**

Synopsis	BGP instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state keyword**

Synopsis	Administrative state of segment routing over IPv6
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **default-route-tag string**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>default-route-tag</b> <i>string</i>
Tree	<a href="#">default-route-tag</a>

Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag X</b> and <b>proxy-arp evpn-route-tag Y</b>, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the <b>default-route-tag</b>, then EVPN keeps tag A when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### domain-id string

Synopsis	Domain ID of received BGP route before readvertisement
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>domain-id</b> <i>string</i>
Tree	<b>domain-id</b>
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <p style="margin-left: 20px;">Seg Len=1 / 65000:1:128</p> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <p style="margin-left: 20px;">Seg Len=2 / 65000:2:70 / 65000:1:128</p> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p>

The command is also supported in Epipe services with two instances. As in the case of multi-instance VPRN services, the configured domain ID in an Epipe instance is prepended to the AD per EVI route redistributed to the other instance.

Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **ecmp number**

Synopsis	Maximum ECMP value configured on the service
Context	<b>configure service epipe string bgp-evpn segment-routing-v6 number ecmp number</b>
Tree	<a href="#">ecmp</a>
Range	1 to 32
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	<b>configure service epipe string bgp-evpn segment-routing-v6 number evi-three-byte-auto-rt boolean</b>
Tree	<a href="#">evi-three-byte-auto-rt</a>
Description	When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).

Where:

- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **force-vc-forwarding** *keyword*

Synopsis	Datapath forwarding to force vlan-vc-type
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>force-vc-forwarding</b> <i>keyword</i>
Tree	<a href="#">force-vc-forwarding</a>
Description	This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations.  This command may be used in conjunction with the <b>sap ingress vlan-translation</b> command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **mh-mode** *keyword*

Synopsis	Multi-homing mode
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>mh-mode</b> <i>keyword</i>
Tree	<a href="#">mh-mode</a>
Options	access, network
Default	network
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **oper-group** *reference*

Synopsis	Operational group
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>oper-group</b> <i>reference</i>
Tree	<a href="#">oper-group</a>



Description	<p>This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group.</p> <p>When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service.</p> <p>The operational group is down when it is applied on a BGP EVPN instance as well as:</p> <ul style="list-style-type: none"> <li>• the service is administratively disabled</li> <li>• the BGP EVPN MPLS and VXLAN is administratively disabled</li> <li>• all the EVPN destinations in the instance are removed</li> </ul> <p>When configured on an ES, the state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. Monitor the ES operational group on the LAG associated with the ES, along with single-active multihoming, so that the NDF state can be signaled to the CE by LAG standby signaling.</p>
Reference	<b>configure</b> <a href="#">service oper-group</a> <i>string</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **resolution** *keyword*

Synopsis	Resolution options for routes
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">resolution</a> <i>keyword</i>
Tree	<a href="#">resolution</a>
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **route-next-hop**

Synopsis	Enter the <b>route-next-hop</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">route-next-hop</a>
Tree	<a href="#">route-next-hop</a>
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IP address of the next-hop for the service EVPN route

Context **configure service epipe** *string* **bgp-evpn segment-routing-v6 number route-next-hop ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [ip-address](#)

Notes The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## system-ipv4



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis System IPv4 address for service EVPN route next hop

Context **configure service epipe** *string* **bgp-evpn segment-routing-v6 number route-next-hop system-ipv4**

Tree [system-ipv4](#)

Notes The following elements are part of a choice: **ip-address**, **system-ipv4**, or **system-ipv6**.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## system-ipv6



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis System IPv6 address for service EVPN route next hop

Context	<b>configure service epipe string</b> <a href="#">bgp-evpn segment-routing-v6 number route-next-hop system-ipv6</a>
Tree	<a href="#">system-ipv6</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### source-address *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	<b>configure service epipe string</b> <a href="#">bgp-evpn segment-routing-v6 number source-address string</a>
Tree	<a href="#">source-address</a>
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### srv6

Synopsis	Enter the <b>srv6</b> context
Context	<b>configure service epipe string</b> <a href="#">bgp-evpn segment-routing-v6 number srv6</a>
Tree	<a href="#">srv6</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**default-locator** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	<b>configure</b> <i>service epipe string</i> <i>bgp-evpn segment-routing-v6 number srv6 default-locator string</i>
Tree	<i>default-locator</i>
Description	This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**instance** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing SRv6 instance
Context	<b>configure</b> <i>service epipe string</i> <i>bgp-evpn segment-routing-v6 number srv6 instance reference</i>
Tree	<i>instance</i>
Reference	<b>configure</b> <i>service epipe string</i> <i>segment-routing-v6 number</i>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**vxlan** [*bgp-instance*] *number*

Synopsis	Enter the <b>vxlan</b> list instance
Context	<b>configure</b> <i>service epipe string</i> <i>bgp-evpn vxlan number</i>
Tree	<i>vxlan</i>
Introduced	16.0.R1
Platforms	All

**[bgp-instance] number**

Synopsis	BGP instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn vxlan</a> <i>number</i>
Tree	<a href="#">vxlan</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of BGP EVPN VXLAN
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn vxlan</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**default-route-tag string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn vxlan</a> <i>number</i> <a href="#">default-route-tag</a> <i>string</i>
Tree	<a href="#">default-route-tag</a>
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>If a service is configured with both <b>default-route-tag X</b> and <b>proxy-arp evpn-route-tag Y</b>, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> </ul>

- If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB.

The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.

Introduced	16.0.R4
Platforms	All

### **ecmp number**

Synopsis	Maximum ECMP routes information
Context	<b>configure service epipe string bgp-evpn vxlan number ecmp number</b>
Tree	<b>ecmp</b>
Range	1 to 32
Default	1
Introduced	16.0.R1
Platforms	All

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	<b>configure service epipe string bgp-evpn vxlan number evi-three-byte-auto-rt boolean</b>
Tree	<b>evi-three-byte-auto-rt</b>
Description	When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).

Where:

- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

	When configured to <b>false</b> , route target derivation is not allowed.
Default	false
Introduced	21.10.R1
Platforms	All

## send-tunnel-encap *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send VXLAN value in encapsulation extended community
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">vxlan</a> <i>number</i> <a href="#">send-tunnel-encap</a> <i>boolean</i>
Tree	<a href="#">send-tunnel-encap</a>
Description	When configured to <b>true</b> , this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities.  When configured to <b>false</b> , no encapsulation extended community is sent.
Default	true
Introduced	16.0.R1
Platforms	All

## vxlan-instance *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VXLAN instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">vxlan</a> <i>number</i> <a href="#">vxlan-instance</a> <i>reference</i>
Tree	<a href="#">vxlan-instance</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">vxlan</a> <i>instance</i> <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**bgp-mh-site** [[site-name](#)] *string*

Synopsis	Enter the <b>bgp-mh-site</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i>
Tree	<a href="#">bgp-mh-site</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[site-name]** *string*

Synopsis	Name for the specific site
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i>
Tree	<a href="#">bgp-mh-site</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**activation-timer** *number*

Synopsis	Time to wait for BGP updates from remote PEs
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <b>activation-timer</b> <i>number</i>
Tree	<a href="#">activation-timer</a>
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the site
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable



Default	disable
Introduced	16.0.R1
Platforms	All

**boot-timer** *number*

Synopsis	Wait time after reboot to run the DF election algorithm
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <b>boot-timer</b> <i>number</i>
Tree	<a href="#">boot-timer</a>
Range	0 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

**id** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Site ID for the service
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <b>id</b> <i>number</i>
Tree	<a href="#">id</a>
Description	This command configures the ID for the site. The ID must match between services but is local to the service.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**min-down-timer** *number*

Synopsis	Minimum down time when site goes operationally down
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <b>min-down-timer</b> <i>number</i>
Tree	<a href="#">min-down-timer</a>
Range	0 to 100
Units	seconds

Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Preference to advertise in NLRI L2 extended community
Context	<b>configure</b> <a href="#">service epipe string</a> <a href="#">bgp-mh-site string</a> <a href="#">preference number</a>
Tree	<a href="#">preference</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **sap** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to be associated with this site
Context	<b>configure</b> <a href="#">service epipe string</a> <a href="#">bgp-mh-site string</a> <a href="#">sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

### **bgp-vpws**

Synopsis	Enable the <b>bgp-vpws</b> context
Context	<b>configure</b> <a href="#">service epipe string</a> <a href="#">bgp-vpws</a>
Tree	<a href="#">bgp-vpws</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the VPWS edge instance
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Context	<b>configure service epipe string</b> <i>bgp-vpws admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## local-ve

Synopsis	Enter the <b>local-ve</b> context
Context	<b>configure service epipe string</b> <i>bgp-vpws local-ve</i>
Tree	<a href="#">local-ve</a>
Introduced	16.0.R1
Platforms	All

## id number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local VPWS edge ID
Context	<b>configure service epipe string</b> <i>bgp-vpws local-ve id number</i>
Tree	<a href="#">id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## name string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local VPWS instance name
Context	<b>configure service epipe string</b> <i>bgp-vpws local-ve name string</i>
Tree	<a href="#">name</a>

String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms All

### **remote-ve** [*name*] *string*

Synopsis Enter the **remote-ve** list instance  
 Context **configure service epipe string bgp-vpws remote-ve string**  
 Tree **remote-ve**  
 Max. Instances 2  
 Introduced 16.0.R1  
 Platforms All

### **[name]** *string*

Synopsis Remote PE name to which a PW is to be signaled  
 Context **configure service epipe string bgp-vpws remote-ve string**  
 Tree **remote-ve**  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **id** *number*

Synopsis Remote VPWS edge ID  
 Context **configure service epipe string bgp-vpws remote-ve string id number**  
 Tree **id**  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms All

**customer** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	<b>configure</b> <i>service epipe string customer reference</i>
Tree	<i>customer</i>
Reference	<b>configure</b> <i>service customer string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>service epipe string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**endpoint** [*name*] *string*

Synopsis	Enter the <b>endpoint</b> list instance
Context	<b>configure</b> <i>service epipe string endpoint string</i>
Tree	<i>endpoint</i>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Service endpoint name
Context	<b>configure</b> <i>service epipe string endpoint string</i>

Tree	<a href="#">endpoint</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **hold-time-active** *number*

Synopsis	Time before entering standby when MC-LAG SAP goes down
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <a href="#">hold-time-active</a> <i>number</i>
Tree	<a href="#">hold-time-active</a>
Range	1 to 60
Units	deciseconds
Introduced	16.0.R1
Platforms	All

### **revert-time** (*number* | *keyword*)

Synopsis	Time to wait before reverting to primary spoke SDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <a href="#">revert-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">revert-time</a>
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	16.0.R1

Platforms All

### **standby-signaling** *keyword*

Synopsis Endpoint behavior to handle the PW standby bit

Context **configure service epipe** *string endpoint string standby-signaling keyword*

Tree [standby-signaling](#)

Options master, slave

Introduced 16.0.R1

Platforms All

### **eth-cfm**

Synopsis Enter the **eth-cfm** context

Context **configure service epipe** *string eth-cfm*

Tree [eth-cfm](#)

Introduced 19.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ignore-l2vpn-mtu-mismatch** *boolean*

Synopsis Ignore the L2 VPN MTU mismatch with local service MTU

Context **configure service epipe** *string ignore-l2vpn-mtu-mismatch boolean*

Tree [ignore-l2vpn-mtu-mismatch](#)

Description When configured to **true**, the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPWS service regardless of any MTU mismatch.

When configured to **false**, an MTU mismatch prevents the system from bringing up a BGP-VPWS service.

Default false

Introduced 22.2.R1

Platforms All

## load-balancing

Synopsis	Enter the <b>load-balancing</b> context
Context	<b>configure service epipe string load-balancing</b>
Tree	<a href="#">load-balancing</a>
Introduced	16.0.R1
Platforms	All

## lbl-eth-or-ip-l4-teid *boolean*

Synopsis	Enable hashing of MPLS ethernet and IP packets on SAPs
Context	<b>configure service epipe string load-balancing lbl-eth-or-ip-l4-teid boolean</b>
Tree	<a href="#">lbl-eth-or-ip-l4-teid</a>
Description	When configured to <b>true</b> , this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## per-service-hashing *boolean*

Synopsis	Enable per-service hashing for Ethernet services
Context	<b>configure service epipe string load-balancing per-service-hashing boolean</b>
Tree	<a href="#">per-service-hashing</a>
Default	false
Introduced	16.0.R1
Platforms	All

## nat-outside [[nat-group](#)] *number*

Synopsis	Enter the <b>nat-outside</b> list instance
Context	<b>configure service epipe string nat-outside number</b>
Tree	<a href="#">nat-outside</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[nat-group] number**

Synopsis	NAT group
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">nat-outside</a> <i>number</i>
Tree	<a href="#">nat-outside</a>
Max. Range	0 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of Epipe as a NAT outside service
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">nat-outside</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**oper-group reference**

Synopsis	Oper-group name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">oper-group</a> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**pbb**

Synopsis	Enter the <b>pbb</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">pbb</a>
Tree	<a href="#">pbb</a>
Introduced	16.0.R1

Platforms All

### **force-qtag-forwarding** *boolean*

Synopsis Add an IEEE 802.1q tag after CMAC addresses PBB header

Context **configure service epipe** *string pbb force-qtag-forwarding boolean*

Tree [force-qtag-forwarding](#)

Default false

Introduced 16.0.R1

Platforms All

### **local-switch-service-state** *keyword*

Synopsis Endpoint state used to determine PBB-Epipe state

Context **configure service epipe** *string pbb local-switch-service-state keyword*

Tree [local-switch-service-state](#)

Description In a PBB Epipe with two SAPs and a PBB tunnel, this command controls whether the operational state of the PBB-Epipe service depends on the state of the PBB tunnel only, or on the state of two of the three endpoints (PBB tunnel and two SAPs). The second case implies that at least one of the SAPs must be up for the PBB-Epipe service to be operationally up.

Options sap, pbb-tunnel

Default sap

Introduced 21.7.R1

Platforms All

### **tunnel**

Synopsis Enable the **tunnel** context

Context **configure service epipe** *string pbb tunnel*

Tree [tunnel](#)

Introduced 16.0.R1

Platforms All

**backbone-dest-mac** *string*

Synopsis	Backbone Destination MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">pbb</a> <a href="#">tunnel</a> <b>backbone-dest-mac</b> <i>string</i>
Tree	<a href="#">backbone-dest-mac</a>
Notes	The following elements are part of a mandatory choice: <b>backbone-dest-mac</b> or <b>backbone-dest-mac-name</b> .
Introduced	16.0.R1
Platforms	All

**backbone-dest-mac-name** *reference*

Synopsis	Backbone destination MAC name for PBB packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">pbb</a> <a href="#">tunnel</a> <b>backbone-dest-mac-name</b> <i>reference</i>
Tree	<a href="#">backbone-dest-mac-name</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">pbb</a> <a href="#">mac</a> <i>string</i>
Notes	The following elements are part of a mandatory choice: <b>backbone-dest-mac</b> or <b>backbone-dest-mac-name</b> .
Introduced	16.0.R1
Platforms	All

**backbone-vpls-service-name** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Backbone VPLS service
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">pbb</a> <a href="#">tunnel</a> <b>backbone-vpls-service-name</b> <i>reference</i>
Tree	<a href="#">backbone-vpls-service-name</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**isid number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service instance ID
Context	<b>configure service epipe string pbb tunnel isid number</b>
Tree	<a href="#">isid</a>
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**sap [sap-id] string**

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure service epipe string sap string</b>
Tree	<a href="#">sap</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[sap-id] string**

Synopsis	SAP ID
Context	<b>configure service epipe string sap string</b>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**aarp**

Synopsis	Enable the <b>aarp</b> context
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Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp</a>
Tree	<a href="#">aarp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id** *reference*

Synopsis	AARP instance ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp</a> <i>id</i> <i>reference</i>
Tree	<a href="#">id</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">aarp</a> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Role referenced by the AARP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SAP
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Context	<b>configure service epipe</b> <i>string sap string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure service epipe</b> <i>string sap string app-profile reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure application-assurance</b> <i>group number partition number policy app-profile string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth** *number*

Synopsis	SAP bandwidth
Context	<b>configure service epipe</b> <i>string sap string bandwidth number</i>
Tree	<a href="#">bandwidth</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

### **cflowd** *boolean*

Synopsis	Enable Cflowd collection and analysis on this SAP
Context	<b>configure service epipe</b> <i>string sap string cflowd boolean</i>
Tree	<a href="#">cflowd</a>
Default	false
Introduced	16.0.R1
Platforms	All

## collect-stats *boolean*

Synopsis	Collect accounting statistics
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

## cpu-protection

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>cpu-protection</b>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis	Enable the <b>eth-cfm-monitoring</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <b>eth-cfm-monitoring</b>
Tree	<a href="#">eth-cfm-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <b>aggregate</b>
Tree	<a href="#">aggregate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">car</a>
Tree	<a href="#">car</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## policy-id *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	16.0.R1
Platforms	All



**dist-cpu-protection** *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

**agg-rate**

Synopsis	Enter the <b>agg-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a>
Tree	<a href="#">agg-rate</a>
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>percent-agg-rate</b> .
Introduced	16.0.R1
Platforms	All

**adaptation-rule** *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">adaptation-rule</a> <i>keyword</i>
Tree	<a href="#">adaptation-rule</a>
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**burst-limit** (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**limit-unused-bandwidth** *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <b>limit-unused-bandwidth</b> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	All

**queue-frame-based-accounting** *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <b>queue-frame-based-accounting</b> <i>boolean</i>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

**rate** *number*

Synopsis	Enforced aggregate rate for all queues
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <b>rate</b> <i>number</i>

Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter</a> <a href="#">ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter</a> <a href="#">ipv6 reference</a>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## mac reference

Synopsis	MAC filter policy name
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Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter mac</a> <i>reference</i>
Tree	<a href="#">mac</a>
Reference	<b>configure</b> <a href="#">filter mac-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

## policer-control-policy

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## root

Synopsis	Enter the <b>root</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides root</a>
Tree	<a href="#">root</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <b>max-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority-mbs-thresholds**

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <b>priority-mbs-thresholds</b>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority** [*priority-level*] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <b>policy-name</b> <i>reference</i>

Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **qinq-mark-top-only** *boolean*

Synopsis	Mark top Q-tags
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">qinq-mark-top-only</a> <i>boolean</i>
Tree	<a href="#">qinq-mark-top-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">sap-egress</a>
Tree	<a href="#">sap-egress</a>
Introduced	16.0.R1
Platforms	All

### **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

### **hs-secondary-shaper** *string*

Synopsis	HS Secondary Shaper
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-secondary-shaper</a> <i>string</i>

Tree	<a href="#">hs-secondary-shaper</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wrr-group** [[group-id](#)] *reference*

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <i>reference</i>
Tree	<a href="#">hs-wrr-group</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **[group-id]** *reference*

Synopsis	HS WRR group identifier
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <i>reference</i>
Tree	<a href="#">hs-wrr-group</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">hs-wrr-group</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis	Class weight override of the WRR group
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <i>reference</i> <a href="#">hs-class-weight</a> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e



**percent-rate** *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <a href="#">reference</a> <b>percent-rate</b> <i>decimal-number</i>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**rate** (*number* | *keyword*)

Synopsis	Scheduling rate override applied to the HS WRR group
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <a href="#">reference</a> <b>rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a>
Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id]** *reference*

Synopsis	Policer unique ID
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Context	<b>configure service epipe string sap string egress qos sap-egress overrides policer reference</b>
Tree	<a href="#">policer</a>
Reference	<b>configure qos sap-egress string policer number</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure service epipe string sap string egress qos sap-egress overrides policer reference cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure service epipe string sap string egress qos sap-egress overrides policer reference mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
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Context	<b>configure service epipe string sap string egress qos sap-egress overrides policer</b> <i>reference packet-byte-offset number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure service epipe string sap string egress qos sap-egress overrides policer</b> <i>reference percent-rate</i>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### cir decimal-number

Synopsis	CIR percent rate
Context	<b>configure service epipe string sap string egress qos sap-egress overrides policer</b> <i>reference percent-rate cir decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### pir decimal-number

Synopsis	PIR percent rate
Context	<b>configure service epipe string sap string egress qos sap-egress overrides policer</b> <i>reference percent-rate pir decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## cir (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## pir (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">stat-mode</a> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>

Introduced 16.0.R1  
Platforms All

### **cir** *keyword*

Synopsis Constraint used when deriving the operational CIR value  
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [adaptation-rule](#) **cir** *keyword*  
Tree [cir](#)  
Options max, min, closest  
Introduced 16.0.R1  
Platforms All

### **pir** *keyword*

Synopsis Constraint used when deriving the operational PIR value  
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [adaptation-rule](#) **pir** *keyword*  
Tree [pir](#)  
Options max, min, closest  
Introduced 16.0.R1  
Platforms All

### **avg-frame-overhead** *decimal-number*

Synopsis Average packet-to-frame encapsulation overhead  
Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **avg-frame-overhead** *decimal-number*  
Tree [avg-frame-overhead](#)  
Range 0.00 to 100.00  
Introduced 16.0.R1  
Platforms All

### **burst-limit** (*number* | *keyword*)

Synopsis Explicit shaping burst size for the queue

Context	<b>configure service epipe string sap string egress qos sap-egress overrides queue reference burst-limit (number   keyword)</b>
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **cbs (number | keyword)**

Synopsis	CBS
Context	<b>configure service epipe string sap string egress qos sap-egress overrides queue reference cbs (number   keyword)</b>
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure service epipe string sap string egress qos sap-egress overrides queue reference drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

### **low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure service epipe string sap string egress qos sap-egress overrides queue reference drop-tail low</b>
Tree	<a href="#">low</a>

Introduced 16.0.R1  
 Platforms All

### **percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis Percentage reduction from the MBS for a queue drop tail  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [drop-tail](#) [low](#) **percent-reduction-from-mbs** (*number* | *keyword*)  
 Tree [percent-reduction-from-mbs](#)  
 Range 0 to 100  
 Options auto  
 Introduced 16.0.R1  
 Platforms All

### **hs-class-weight** *number*

Synopsis Class weight override for the queue  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [hs-class-weight](#) *number*  
 Tree [hs-class-weight](#)  
 Range 1 | 2 | 4 | 8  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis Enter the **hs-wred-queue** context  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#)  
*reference* [hs-wred-queue](#)  
 Tree [hs-wred-queue](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **policy** *reference*

Synopsis Slope policy applied to the HSQ queue group queue



Context	<b>configure service epipe string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference</b>
Tree	<a href="#">policy</a>
Reference	<b>configure qos slope-policy string</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-wrr-weight** *number*

Synopsis	WRR weight to parent with the queue into the scheduler
Context	<b>configure service epipe string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number</b>
Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure service epipe string sap string egress qos sap-egress overrides queue reference mbs (number   keyword)</b>
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure service epipe string sap string egress qos sap-egress overrides queue reference monitor-queue-depth</b>
Tree	<a href="#">monitor-queue-depth</a>

Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	All

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

### **violation-threshold** *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>violation-threshold</b> <i>decimal-number</i>
Tree	<a href="#">violation-threshold</a>
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

### **parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

**cir-weight** *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i>
Tree	<a href="#">cir</a>

Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

**pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a>
Tree	<a href="#">port-redirect-group</a>
Introduced	16.0.R1
Platforms	All

**group-name** *reference*

Synopsis	Name of the queue group redirect list policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>

Reference	<b>configure</b> <a href="#">qos queue-group-templates egress queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **instance** *number*

Synopsis	Instance of port queue group
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress port-redirect-group</a> <i>instance number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

### **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

### **scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>

Introduced	16.0.R1
Platforms	All

### **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (<code>#</code>, <code>\$</code>, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
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Context	<b>configure service epipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string parent cir-weight number</i>
Tree	<b>cir-weight</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **weight number**

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure service epipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string parent weight number</i>
Tree	<b>weight</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service epipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string rate</i>
Tree	<b>rate</b>
Introduced	16.0.R1
Platforms	All

### **cir (number | keyword)**

Synopsis	CIR at which the queue it to operate
Context	<b>configure service epipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string rate cir (number   keyword)</i>
Tree	<b>cir</b>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1



Platforms All

### **pir** (*number* | *keyword*)

Synopsis PIR at which the queue is to operate

Context **configure** [service epipe](#) *string* [sap](#) *string* [egress qos scheduler-policy overrides scheduler](#) *string* **rate** **pir** (*number* | *keyword*)

Tree [pir](#)

Range 1 to 6400000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms All

### **policy-name** *reference*

Synopsis Scheduler policy name

Context **configure** [service epipe](#) *string* [sap](#) *string* [egress qos scheduler-policy](#) **policy-name** *reference*

Tree [policy-name](#)

Reference **configure** [qos scheduler-policy](#) *string*

Introduced 16.0.R1

Platforms All

### **virtual-port**

Synopsis Enter the **virtual-port** context

Context **configure** [service epipe](#) *string* [sap](#) *string* [egress](#) **virtual-port**

Tree [virtual-port](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vport-name** *reference*

Synopsis Virtual port assigned to the SAP

Context **configure** [service epipe](#) *string* [sap](#) *string* [egress virtual-port](#) **vport-name** *reference*

Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port string ethernet access egress virtual-port string</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## endpoint *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the endpoint
Context	<b>configure</b> <a href="#">service epipe string sap string endpoint reference</a>
Tree	<a href="#">endpoint</a>
Reference	<b>configure</b> <a href="#">service epipe string endpoint string</a>
Introduced	16.0.R1
Platforms	All

## eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service epipe string sap string eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ais *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	<b>configure</b> <a href="#">service epipe string sap string eth-cfm ais boolean</a>
Tree	<a href="#">ais</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## collect-lmm-fc-stats

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a>
Tree	<a href="#">collect-lmm-fc-stats</a>
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fc-in-profile keyword

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc-in-profile</a> <i>keyword</i>
Tree	<a href="#">fc-in-profile</a>

Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>collect-lmm-stats</b> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ais**

Synopsis	Enable the <b>ais</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a>
Tree	<a href="#">ais</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**client-meg-level** *number*

Synopsis	Client MEG level for AIS message generation
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">client-meg-level</a> <i>number</i>
Tree	<a href="#">client-meg-level</a>
Range	1 to 7
Max.	7
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interface-support** *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">interface-support</a> <i>boolean</i>

Tree	<a href="#">interface-support</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*

Synopsis	Transmission interval for AIS messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1   60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis	Priority of the AIS messages generated by the node
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## alarm-notification

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>alarm-notification</b>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <b>fng-alarm-time</b> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <b>fng-reset-time</b> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm boolean**

Synopsis Generate CCM messages

Context **configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean**

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority number**

Synopsis Priority of CCM and LTM messages transmitted by the MEP

Context **configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number**

Tree [ccm-ltm-priority](#)

Range 0 to 7

Default 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size number**

Synopsis Number of octets of padding to insert in CCM packets

Context **configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number**

Tree [ccm-padding-size](#)

Description This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range 3 to 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cfm-vlan-tag** *string*

Synopsis VLAN tags to apply to CFM PDUs for egress processing

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **cfm-vlan-tag** *string*

Tree [cfm-vlan-tag](#)

Description This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the **vc-type vlan** or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.

String Length 1 to 9

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **csf**

Synopsis Enable the **csf** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **csf**

Tree [csf](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *decimal-number*

Synopsis Multiplication factor used to clear the CSF condition

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* **csf** **multiplier** *decimal-number*

Tree [multiplier](#)

Range 0.0 | 2.0 to 30.0

Default 3.5

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### description *string*

Synopsis Text description

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### direction *keyword*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Direction the MEP faces

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [direction](#) *keyword*

Tree [direction](#)

Options down, up

Default down

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### eth-test

Synopsis Enable the **eth-test** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#)

Tree [eth-test](#)

Description Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the **oam eth-cfm eth-test** command.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) **bit-error-threshold** *number*

Tree [bit-error-threshold](#)

Range 0 to 11840

Units bit errors

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **test-pattern**

Synopsis Enter the **test-pattern** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) **test-pattern**

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **crc-tlv** *boolean*

Synopsis Generate a CRC checksum

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [eth-test](#) **test-pattern** **crc-tlv** *boolean*

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern keyword**

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fault-propagation keyword**

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">fault-propagation</a> <i>keyword</i>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
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Context	<b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</b>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-rx-defect-window number**

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</b>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority number**

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</b>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed boolean**

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure service epipe string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</b>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <b>tx-eth-ed</b> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace](#) [eth-vsm-grace](#) [tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lbm-svc-act-responder** *boolean*

Synopsis Process service activation streams in ETH-CFM LBM

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [lbm-svc-act-responder](#) *boolean*

Tree [lbm-svc-act-responder](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis Lowest priority defect allowed to generate fault alarm

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [low-priority-defect](#) *keyword*

Tree [low-priority-defect](#)

Options all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon



Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">one-way-delay-threshold</a> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **primary-vlan** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">primary-vlan</a> <i>boolean</i>

Tree	<a href="#">primary-vlan</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mip primary-vlan** (*number* | *keyword*)

Synopsis	Enter the <b>mip</b> list instance
Context	<b>configure service epipe</b> <i>string sap string eth-cfm mip primary-vlan</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mip</a>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the <b>vc-type vlan</b> or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **primary-vlan** (*number* | *keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	<b>configure service epipe</b> <i>string sap string eth-cfm mip primary-vlan</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mip</a>
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
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Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>cfm-vlan-tag</b> <i>string</i>
Tree	<b>cfm-vlan-tag</b>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MIP
Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-ctag-levels** *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm squelch-ingress-ctag-levels</b> <i>number</i>
Tree	<b>squelch-ingress-ctag-levels</b>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p>
Range	0 to 7

Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">squelch-ingress-levels</a> <i>number</i>
Tree	<a href="#">squelch-ingress-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ethernet**

Synopsis	Enter the <b>ethernet</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ethernet</a>
Tree	<a href="#">ethernet</a>
Introduced	20.5.R1
Platforms	All

### **l1f**

Synopsis	Enter the <b>l1f</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ethernet</a> <a href="#">l1f</a>
Tree	<a href="#">l1f</a>

Description	<p>Commands in this context enable Link Loss Forwarding (LLF) on an Ethernet port. This feature provides an end-to-end OAM fault notification for Ethernet VLL service. It brings down the Ethernet port (Ethernet LLF) or sends a SONET/SDH Path AIS (ATM LLF) toward the attached CE when there is a local fault on the pseudowire or service, or a remote fault on the SAP or pseudowire, signaled with label withdrawal or T-LDP status bits. It ceases when the fault disappears.</p> <p>The Ethernet port must be configured for null encapsulation.</p> <p>This feature is also supported in Epipes with BGP-EVPN enabled. In this case, upon removal of the EVPN destination, the port transitions to an operationally down state, however the AD per-EVI route for the SAP is still advertised (the SAP remains operationally up). The port transitions to the operationally up state when the EVPN destination is created.</p>
Introduced	20.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of Link Loss Forwarding
Context	<b>configure service epipe</b> <i>string sap string ethernet llf admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

### **ignore-oper-down** *boolean*

Synopsis	Ignore operational down state of the SAP on SAP failure
Context	<b>configure service epipe</b> <i>string sap string ignore-oper-down boolean</i>
Tree	<a href="#">ignore-oper-down</a>
Description	<p>When configured to <b>true</b>, the Epipe service does not transition to the operational down state when the SAP fails. This command can only be set to <b>true</b> for a single SAP in an Epipe. The command can be used in Epipes with or without EVPN enabled.</p> <p>When configured to <b>false</b>, the Epipe service transitions to the operational down state when SAP fails.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>ingress</b> <b>filter</b>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>ingress</b> <b>filter</b> <b>ip</b> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <b>filter</b> <a href="#">ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>ingress</b> <b>filter</b> <b>ipv6</b> <i>reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <b>filter</b> <a href="#">ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## mac reference

Synopsis	MAC filter policy name
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress filter</a> <a href="#">mac reference</a>
Tree	<a href="#">mac</a>
Reference	<b>configure</b> <a href="#">filter mac-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

## match-qinq-dot1p keyword

Synopsis	Ingress match QinQ Dot1p
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">match-qinq-dot1p</a> <i>keyword</i>
Tree	<a href="#">match-qinq-dot1p</a>
Options	top, bottom
Introduced	16.0.R1
Platforms	All

## policer-control-policy

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## root

Synopsis	Enter the <b>root</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a>
Tree	<a href="#">root</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR



**min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority** [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
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Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos policer-control-policy overrides root priority-mbs-thresholds priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos policer-control-policy</b> <b>policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos policer-control-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **sap-ingress**

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos</b> <b>sap-ingress</b>
Tree	<a href="#">sap-ingress</a>
Introduced	16.0.R1
Platforms	All

### **fp-redirect-group**

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b> <b>fp-redirect-group</b>
Tree	<a href="#">fp-redirect-group</a>
Introduced	16.0.R1
Platforms	All

**group-name** *reference*

Synopsis	Queue group template name created on forwarding plane
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**instance** *number*

Synopsis	Queue group instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

**ip-criteria**

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ip-criteria</a>
Tree	<a href="#">ip-criteria</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**activate-entry-tag** *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ip-criteria</a> <a href="#">activate-entry-tag</a> <i>number</i>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ipv6-criteria**

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ipv6-criteria</a>
Tree	<a href="#">ipv6-criteria</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**activate-entry-tag** *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ipv6-criteria</a> <a href="#">activate-entry-tag</a> <i>number</i>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id] reference**

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs (number | keyword)**

Synopsis	CBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">cbs</a> ( <i>number   keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs (number | keyword)**

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">mbs</a> ( <i>number   keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">packet-byte-offset</a> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <b>adaptation-rule</b>



Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">cir</a> <a href="#">keyword</a>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <a href="#">pir</a> <a href="#">keyword</a>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**cbs (number | keyword)**

Synopsis	CBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">cbs</a> <a href="#">(number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

## drop-tail

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">drop-tail</a>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

## mbs (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824

---

Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b>
Tree	<a href="#">monitor-queue-depth</a>
Introduced	21.7.R1
Platforms	All

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Default	false
Introduced	21.7.R1
Platforms	All

### **parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	CIR parameter that overrides parent for queue group
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Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">cir-weight</a> <a href="#">number</a>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">weight</a> <a href="#">number</a>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <a href="#">decimal-number</a>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

**pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR rate
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Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference rate pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Policy ID
Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos sap-ingress</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress queuing-type</b> <i>keyword</i>
Tree	<a href="#">queuing-type</a>
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure service epipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

**scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Introduced	16.0.R1
Platforms	All

**[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

## parent

Synopsis Enter the **parent** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **parent**

Tree [parent](#)

Introduced 16.0.R1

Platforms All

## cir-weight *number*

Synopsis Weight used at the within-CIR port priority level

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **parent** **cir-weight** *number*

Tree [cir-weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

## weight *number*

Synopsis Relative weight of the scheduler to feed the queue

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **parent** **weight** *number*

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

## rate

Synopsis Enter the **rate** context

Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **rate**

Tree [rate](#)



Introduced 16.0.R1  
 Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR at which the queue it to operate  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) **cir** (*number* | *keyword*)  
 Tree [cir](#)  
 Range 0 to 6400000000  
 Units kilobps  
 Options sum, max  
 Introduced 16.0.R1  
 Platforms All

### **pir** (*number* | *keyword*)

Synopsis PIR at which the queue is to operate  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* [rate](#) **pir** (*number* | *keyword*)  
 Tree [pir](#)  
 Range 1 to 6400000000  
 Units kilobps  
 Options max  
 Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Scheduler policy name  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) **policy-name** *reference*  
 Tree [policy-name](#)  
 Reference **configure** [qos](#) [scheduler-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms All

## qtag-manipulation

Synopsis	Enter the <b>qtag-manipulation</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a>
Tree	<a href="#">qtag-manipulation</a>
Introduced	16.0.R1
Platforms	All

## c-tag (*number* | *keyword*)

Synopsis	Inner ingress VLAN translation for two service delimiting VLAN values
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a> <a href="#">c-tag</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">c-tag</a>
Range	0 to 4094
Options	tag-*
Notes	The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).
Introduced	16.0.R1
Platforms	All

## push-dot1q-vlan (*number* | *keyword*)

Synopsis	VLAN translation information
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qtag-manipulation</a> <a href="#">push-dot1q-vlan</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">push-dot1q-vlan</a>
Range	0 to 4094
Options	use-sap-svlan
Notes	The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).
Introduced	16.0.R1
Platforms	All

## s-tag *number*

Synopsis	Outer ingress VLN translation for two service delimiting VLAN values
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Context	<b>configure service epipe string sap string ingress qtag-manipulation s-tag number</b>
Tree	<a href="#">s-tag</a>
Range	0 to 4094
Notes	The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).
Introduced	16.0.R1
Platforms	All

## **l2tpv3-session**

Synopsis	Enable the <b>l2tpv3-session</b> context
Context	<b>configure service epipe string sap string l2tpv3-session</b>
Tree	<a href="#">l2tpv3-session</a>
Introduced	16.0.R4
Platforms	All

## **admin-state keyword**

Synopsis	Administrative state of the session for the service
Context	<b>configure service epipe string sap string l2tpv3-session admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

## **pseudo-wire**



### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>pseudo-wire</b> context
Context	<b>configure service epipe string sap string l2tpv3-session pseudo-wire</b>
Tree	<a href="#">pseudo-wire</a>
Introduced	16.0.R4
Platforms	All

## ethernet



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the Ethernet PW-type for the L2TPv3 session
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a> <a href="#">pseudo-wire</a> <a href="#">ethernet</a>
Tree	<a href="#">ethernet</a>
Notes	The following elements are part of a choice: <b>ethernet</b> or <b>ethernet-vlan-id</b> .
Introduced	16.0.R4
Platforms	All

## ethernet-vlan-id *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet-VLAN PW-type ID for the L2TPv3 session
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a> <a href="#">pseudo-wire</a> <a href="#">ethernet-vlan-id</a> <i>number</i>
Tree	<a href="#">ethernet-vlan-id</a>
Range	0 to 4095
Notes	The following elements are part of a choice: <b>ethernet</b> or <b>ethernet-vlan-id</b> .
Introduced	16.0.R4
Platforms	All

## router



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>router</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a> <a href="#">router</a>
Tree	<a href="#">router</a>

Introduced 16.0.R4  
 Platforms All

### **group** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Tunnel group name  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [router](#) [group](#) *string*  
 Tree [group](#)  
 String Length 1 to 32  
 Introduced 16.0.R4  
 Platforms All

### **router-instance** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router name used to identify the router instance  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [router](#) [router-instance](#) *string*  
 Tree [router-instance](#)  
 String Length 1 to 64  
 Introduced 16.0.R4  
 Platforms All

### **vc-id** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ID for the L2TPv3 session  
 Context **configure** [service](#) [epipe](#) *string* [sap](#) *string* [l2tpv3-session](#) [vc-id](#) *number*  
 Tree [vc-id](#)

Range	1 to 4294967295
Introduced	16.0.R4
Platforms	All

## lag

Synopsis	Enter the <b>lag</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>lag</b>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

## link-map-profile *number*

Synopsis	LAG link map profile
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>lag</b> <a href="#">link-map-profile</a> <i>number</i>
Tree	<a href="#">link-map-profile</a>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

## per-link-hash

Synopsis	Enter the <b>per-link-hash</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>lag</b> <a href="#">per-link-hash</a>
Tree	<a href="#">per-link-hash</a>
Introduced	16.0.R1
Platforms	All

## class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>lag</b> <a href="#">per-link-hash</a> <a href="#">class</a> <i>number</i>
Tree	<a href="#">class</a>
Range	1 to 3

Default	1
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

### **mc-ring**

Synopsis	Enable the <b>mc-ring</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>mc-ring</b>
Tree	<a href="#">mc-ring</a>
Introduced	16.0.R1
Platforms	All

### **ring-node** *string*

Synopsis	Name for the ring node associated with this SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mc-ring</a> <b>ring-node</b> <i>string</i>
Tree	<a href="#">ring-node</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group** *reference*

Synopsis	Monitor operational group
----------	---------------------------

Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">monitor-oper-group</a> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

### **multi-service-site** *reference*

Synopsis	Multi service site name
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">multi-service-site</a> <i>reference</i>
Tree	<a href="#">multi-service-site</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">oper-group</a> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

### **transit-policy**

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a>
Tree	<a href="#">transit-policy</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## ip reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy prefix reference</a>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## segment-routing-v6 [[instance](#)] *number*

Synopsis	Enter the <b>segment-routing-v6</b> list instance
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>
Description	Commands in this context configure the SRv6 instance that is used in the service.
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[instance]** *number*

Synopsis Segment routing v6 instance  
 Context **configure service epipe** *string segment-routing-v6 number*  
 Tree [segment-routing-v6](#)  
 Range 1  
 Notes This element is part of a list key.  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **locator** [[locator-name](#)] *reference*

Synopsis Enter the **locator** list instance  
 Context **configure service epipe** *string segment-routing-v6 number locator reference*  
 Tree [locator](#)  
 Max. 1  
 Instances  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[locator-name]** *reference*

Synopsis SRv6 locator name  
 Context **configure service epipe** *string segment-routing-v6 number locator reference*  
 Tree [locator](#)  
 Reference **configure router** *string segment-routing segment-routing-v6 locator string*  
 Notes This element is part of a list key.  
 Introduced 21.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **function**

Synopsis Enter the **function** context

Context	<b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> <a href="#">function</a>
Tree	<a href="#">function</a>
Description	Commands in this context configure SRv6 SID function values and parameters for the locator.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## end-dx2

Synopsis	Enable the <b>end-dx2</b> context
Context	<b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-dx2</a>
Tree	<a href="#">end-dx2</a>
Description	Commands in this context configure the SRv6 End.DX2 behavior and function value that is associated with the SRv6 instance in the service. This means that decapsulation and cross-connect to the egress SAP occurs in the Epipe service.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value *number*

Synopsis	SRv6 function value
Context	<b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i> <a href="#">function</a> <a href="#">end-dx2</a> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.  When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## micro-segment-locator [[locator-name](#)] *reference*

Synopsis	Enter the <b>micro-segment-locator</b> list instance
Context	<b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">micro-segment-locator</a> <i>reference</i>

Tree	<a href="#">micro-segment-locator</a>
Max. Instances	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### [**locator-name**] *reference*

Synopsis	Micro-segment SRv6 locator name
Context	<b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">micro-segment-locator</a> <i>reference</i>
Tree	<a href="#">micro-segment-locator</a>
Description	This command associates a pre-defined micro-segment SRv6 locator (defined in the <b>configure router segment-routing segment-routing-v6</b> context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.
Reference	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **function**

Synopsis	Enter the <b>function</b> context
Context	<b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">micro-segment-locator</a> <i>reference</i> <b>function</b>
Tree	<a href="#">function</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **udx2**

Synopsis	Enable the <b>udx2</b> context
Context	<b>configure service epipe</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">micro-segment-locator</a> <i>reference</i> <b>function</b> <b>udx2</b>
Tree	<a href="#">udx2</a>

Description	Commands in this context configure the SRv6 micro-segment uDX2 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and cross-connect to the egress SAP occurs in the Epipe service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure service epipe</b> <i>string segment-routing-v6 number micro-segment-locator reference function udx2 value number</i>
Tree	<a href="#">value</a>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**service-id number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure service epipe</b> <i>string service-id number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**service-mtu number**

Synopsis	MTU size
Context	<b>configure service epipe</b> <i>string service-mtu number</i>

Tree [service-mtu](#)

Description This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range 1 to 9782

Introduced 16.0.R1

Platforms All

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance

Context **configure** [service epipe](#) *string* **spoke-sdp** *string*

Tree [spoke-sdp](#)

Introduced 16.0.R1

Platforms All

**[sdp-bind-id]** *string*

Synopsis	SDP binding ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**aarp**

Synopsis	Enable the <b>aarp</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>aarp</b>
Tree	<a href="#">aarp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id reference**

Synopsis	AARP instance ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>aarp</b> <i>id reference</i>
Tree	<a href="#">id</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <b>aarp</b> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Role referenced by the AARP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>aarp</b> <i>type keyword</i>
Tree	<a href="#">type</a>
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy** *reference*

Synopsis	Policy to collect accounting statistics
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**adv-service-mtu** *number*

Synopsis	Service MTU used in signaling
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">adv-service-mtu</a> <i>number</i>
Tree	<a href="#">adv-service-mtu</a>
Description	<p>This command configures the MTU value that is signaled in the targeted LDP for the spoke-SDP, instead of the service MTU. However, the configuration does not affect the locally enforced value, which is still based on the service MTU.</p> <p>This MTU value cannot be configured on a spoke-SDP that is bound to an SDP with the <b>adv-mtu-override</b> command (<b>configure service sdp</b> context).</p> <p>When unconfigured, an adjusted service MTU is used (<b>service-mtu</b> command).</p>
Range	0 to 9782
Introduced	21.5.R1
Platforms	All



**app-profile** *reference*

Synopsis	Application profile name for this SDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bandwidth** (*number* | *keyword*)

Synopsis	Bandwidth that is reserved for this SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bandwidth</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">bandwidth</a>
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	16.0.R1
Platforms	All

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Introduced	21.2.R1
Platforms	All

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	21.2.R1
Platforms	All

**encap** *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <b>encap</b> <i>keyword</i>
Tree	<a href="#">encap</a>
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template associated with the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	21.2.R1
Platforms	All

**failure-action** *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">failure-action</a> <i>keyword</i>
Tree	<a href="#">failure-action</a>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Options	none, down
Default	none
Introduced	21.2.R1
Platforms	All

**wait-for-up-timer** *number*

Synopsis	Time waited for BFD up status
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>spoke-sdp</i> <i>string</i> <i>bfd</i> <i>wait-for-up-timer</i> <i>number</i>
Tree	<i>wait-for-up-timer</i>
Description	<p>This command configures the time interval that is used to wait for a BFD session to come up.</p> <p>This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.</p>
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>spoke-sdp</i> <i>string</i> <i>collect-stats</i> <i>boolean</i>
Tree	<i>collect-stats</i>
Default	false
Introduced	16.0.R1
Platforms	All

**control-word** *boolean*

Synopsis	Use the control word as preferred
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>spoke-sdp</i> <i>string</i> <i>control-word</i> <i>boolean</i>
Tree	<i>control-word</i>
Default	false
Introduced	16.0.R1
Platforms	All

## cpu-protection

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure service epipe string spoke-sdp string cpu-protection</b>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis	Enable the <b>eth-cfm-monitoring</b> context
Context	<b>configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring</b>
Tree	<a href="#">eth-cfm-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	<b>configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring aggregate</b>
Tree	<a href="#">aggregate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	<b>configure service epipe string spoke-sdp string cpu-protection eth-cfm-monitoring car</b>
Tree	<a href="#">car</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## policy-id *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress filter</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress filter ip reference</b>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress filter ipv6 reference</b>
Tree	<b>ipv6</b>
Reference	<b>configure filter ipv6-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## mac reference

Synopsis	MAC filter policy name
Context	<b>configure service epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress filter mac reference</b>
Tree	<b>mac</b>
Reference	<b>configure filter mac-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## **l2tpv3**

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure service epipe string spoke-sdp string egress l2tpv3</b>
Tree	<b>l2tpv3</b>
Introduced	16.0.R1
Platforms	All

## **cookie string**

Synopsis	Cookie parameters
Context	<b>configure service epipe string spoke-sdp string egress l2tpv3 cookie string</b>
Tree	<b>cookie</b>
String Length	18 to 23
Introduced	16.0.R1
Platforms	All

## **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service epipe string spoke-sdp string egress qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	All

## **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure service epipe string spoke-sdp string egress qos network</b>
Tree	<b>network</b>
Introduced	16.0.R1
Platforms	All

## **policy-name reference**

Synopsis	Network policy ID
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Context	<b>configure service epipe string spoke-sdp string egress qos network policy-name reference</b>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos network string</b>
Introduced	16.0.R1
Platforms	All

### port-redirect-group

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure service epipe string spoke-sdp string egress qos network port-redirect-group</b>
Tree	<a href="#">port-redirect-group</a>
Introduced	16.0.R1
Platforms	All

### group-name *reference*

Synopsis	Name of the egress port queue group
Context	<b>configure service epipe string spoke-sdp string egress qos network port-redirect-group group-name reference</b>
Tree	<a href="#">group-name</a>
Reference	<b>configure qos queue-group-templates egress queue-group string</b>
Introduced	16.0.R1
Platforms	All

### instance *number*

Synopsis	Queue-group instance ID
Context	<b>configure service epipe string spoke-sdp string egress qos network port-redirect-group instance number</b>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All



**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure</b> <i>service epipe string spoke-sdp string egress vc-label number</i>
Tree	<i>vc-label</i>
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

**endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <i>service epipe string spoke-sdp string endpoint</i>
Tree	<i>endpoint</i>
Introduced	16.0.R1
Platforms	All

**icb** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Bind SDP as type Inter-Chassis Backup (ICB)
Context	<b>configure</b> <i>service epipe string spoke-sdp string endpoint icb boolean</i>
Tree	<i>icb</i>
Default	false
Introduced	16.0.R1
Platforms	All

## name *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service endpoint name
Context	<b>configure service epipe string spoke-sdp string endpoint name reference</b>
Tree	<b>name</b>
Reference	<b>configure service epipe string endpoint string</b>
Introduced	16.0.R1
Platforms	All

## precedence (*number* | *keyword*)

Synopsis	Precedence when multiple SDP binds are on one endpoint
Context	<b>configure service epipe string spoke-sdp string endpoint precedence (<i>number</i>   <i>keyword</i>)</b>
Tree	<b>precedence</b>
Range	1 to 4
Options	primary
Default	4
Introduced	16.0.R1
Platforms	All

## entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	<b>configure service epipe string spoke-sdp string entropy-label</b>
Tree	<b>entropy-label</b>
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

## eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
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Context	<b>configure service epipe string spoke-sdp string eth-cfm</b>
Tree	<b>eth-cfm</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### collect-lmm-fc-stats

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure service epipe string spoke-sdp string eth-cfm collect-lmm-fc-stats</b>
Tree	<b>collect-lmm-fc-stats</b>
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure service epipe string spoke-sdp string eth-cfm collect-lmm-fc-stats fc keyword</b>
Tree	<b>fc</b>
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc-in-profile** *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc-in-profile</a> <i>keyword</i>
Tree	<a href="#">fc-in-profile</a>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-stats</a> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
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Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure eth-cfm domain</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure eth-cfm domain</b> <i>string association string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the MEP  
 Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **admin-state** *keyword*  
 Tree **admin-state**  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ais**

Synopsis Enable the **ais** context  
 Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **ais**  
 Tree **ais**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **client-meg-level** *number*

Synopsis Client MEG level for AIS message generation  
 Context **configure** **service** **epipe** *string* **spoke-sdp** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **ais** **client-meg-level** *number*  
 Tree **client-meg-level**  
 Range 1 to 7  
 Max. 7  
 Instances  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interface-support** *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>interface-support</b> <i>boolean</i>
Tree	<a href="#">interface-support</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval** *number*

Synopsis	Transmission interval for AIS messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>interval</b> <i>number</i>
Tree	<a href="#">interval</a>
Range	1   60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** *number*

Synopsis	Priority of the AIS messages generated by the node
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Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais priority number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## alarm-notification

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</i>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
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Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm boolean**

Synopsis	Generate CCM messages
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority number**

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-padding-size number**

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.

This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through **configure eth-cfm domain association ccm-interval**) is less than 1 second.

Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	<b>configure</b> <a href="#">service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number cfm-vlan-tag string</a>
Tree	<a href="#">cfm-vlan-tag</a>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the <b>vc-type vlan</b> or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **csf**

Synopsis	Enable the <b>csf</b> context
Context	<b>configure</b> <a href="#">service epipe string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</a>
Tree	<a href="#">csf</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
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Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</i>
Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **direction** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number direction keyword</i>
Tree	<a href="#">direction</a>
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis	Enable the <b>eth-test</b> context
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Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</i>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</i>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **test-pattern**

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</i>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **crc-tlv** *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure service epipe</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean</i>

Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fault-propagation** *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">fault-propagation</a> <i>keyword</i>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-ed

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <i>number</i>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <i>boolean</i>

Tree	<a href="#">rx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>When configured to <b>false</b>, the router disables the Nokia Grace function.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">tx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lbm-svc-act-responder** *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">lbm-svc-act-responder</a> <i>boolean</i>
Tree	<a href="#">lbm-svc-act-responder</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**primary-vlan** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>primary-vlan</b> <i>boolean</i>
Tree	<a href="#">primary-vlan</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mip** **primary-vlan** (*number* | *keyword*)

Synopsis	Enter the <b>mip</b> list instance
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mip</b> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mip</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**primary-vlan** (*number* | *keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mip</b> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mip</a>
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mip</b> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>cfm-vlan-tag</b> <i>string</i>
Tree	<b>cfm-vlan-tag</b>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mac-address** *string*

Synopsis	MAC address of the MIP
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mip</b> <b>primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**squelch-ingress-ctag-levels** *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	<b>configure</b> <b>service</b> <b>epipe</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>squelch-ingress-ctag-levels</b> <i>number</i>
Tree	<b>squelch-ingress-ctag-levels</b>
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

Range	0 to 7
Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sqelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>spoke-sdp</i> <i>string</i> <i>eth-cfm</i> <b>sqelch-ingress-levels</b> <i>number</i>
Tree	<a href="#">sqelch-ingress-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **force-vc-forwarding** *keyword*

Synopsis	VC forwarding action
Context	<b>configure</b> <i>service</i> <i>epipe</i> <i>string</i> <i>spoke-sdp</i> <i>string</i> <b>force-vc-forwarding</b> <i>keyword</i>
Tree	<a href="#">force-vc-forwarding</a>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

## hash-label

Synopsis	Enable the <b>hash-label</b> context
Context	<b>configure service epipe string spoke-sdp string hash-label</b>
Tree	<a href="#">hash-label</a>
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i> .
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

## signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	<b>configure service epipe string spoke-sdp string hash-label signal-capability</b>
Tree	<a href="#">signal-capability</a>
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.  The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service epipe string spoke-sdp string ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service epipe string spoke-sdp string ingress filter</b>
Tree	<a href="#">filter</a>

Introduced 16.0.R1  
Platforms All

### **ip reference**

Synopsis IPv4 filter policy name  
Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip](#) *reference*  
Tree [ip](#)  
Reference **configure** [filter](#) [ip-filter](#) *string*  
Introduced 16.0.R1  
Platforms All

### **ipv6 reference**

Synopsis IPv6 filter policy name  
Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ipv6](#) *reference*  
Tree [ipv6](#)  
Reference **configure** [filter](#) [ipv6-filter](#) *string*  
Introduced 16.0.R1  
Platforms All

### **mac reference**

Synopsis MAC filter policy name  
Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [mac](#) *reference*  
Tree [mac](#)  
Reference **configure** [filter](#) [mac-filter](#) *string*  
Introduced 16.0.R1  
Platforms All

### **I2tpv3**

Synopsis Enter the **I2tpv3** context  
Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [I2tpv3](#)  
Tree [I2tpv3](#)

Introduced 16.0.R1  
Platforms All

## cookie

Synopsis Enter the **cookie** context  
Context **configure** [service](#) [epipe](#) [string](#) [spoke-sdp](#) [string](#) [ingress](#) [l2tpv3](#) [cookie](#)  
Tree [cookie](#)  
Introduced 16.0.R1  
Platforms All

## cookie1 *string*

Synopsis Value of cookie-1 for the tunnel  
Context **configure** [service](#) [epipe](#) [string](#) [spoke-sdp](#) [string](#) [ingress](#) [l2tpv3](#) [cookie](#) [cookie1](#) [string](#)  
Tree [cookie1](#)  
String Length 18 to 23  
Introduced 16.0.R1  
Platforms All

## cookie2 *string*

Synopsis Value of cookie-1 for the tunnel  
Context **configure** [service](#) [epipe](#) [string](#) [spoke-sdp](#) [string](#) [ingress](#) [l2tpv3](#) [cookie](#) [cookie2](#) [string](#)  
Tree [cookie2](#)  
String Length 18 to 23  
Introduced 16.0.R1  
Platforms All

## qos

Synopsis Enter the **qos** context  
Context **configure** [service](#) [epipe](#) [string](#) [spoke-sdp](#) [string](#) [ingress](#) [qos](#)  
Tree [qos](#)  
Introduced 16.0.R1

Platforms All

## network

Synopsis Enter the **network** context

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#)

Tree [network](#)

Introduced 16.0.R1

Platforms All

## fp-redirect-group

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 16.0.R1

Platforms All

## group-name *reference*

Synopsis Name of the forwarding plane queue group template

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [fp-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*

Introduced 16.0.R1

Platforms All

## instance *number*

Synopsis Instance of FP ingress queue group for the SDP binding

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [fp-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 16.0.R1



Platforms All

### **policy-name** *reference*

Synopsis Network policy ID

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [qos](#) [network](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [network](#) *string*

Introduced 16.0.R1

Platforms All

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) *number*

Tree [vc-label](#)

Range 1 to 1048575

Introduced 16.0.R1

Platforms All

### **monitor-oper-group** *reference*

Synopsis Operational group that affects state of the SDP bind

Context **configure** [service](#) [epipe](#) *string* [spoke-sdp](#) *string* [monitor-oper-group](#) *reference*

Tree [monitor-oper-group](#)

Reference **configure** [service](#) [oper-group](#) *string*

Notes The following elements are part of a choice: **monitor-oper-group** or **oper-group**.

Introduced 16.0.R1

Platforms All

**oper-group** *reference*

Synopsis	Operational group identifier
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">oper-group</a> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

**pw-status**

Synopsis	Enter the <b>pw-status</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">pw-status</a>
Tree	<a href="#">pw-status</a>
Introduced	16.0.R1
Platforms	All

**block-on-peer-fault** *boolean*

Synopsis	Block transmit direction of PW based on status code
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">pw-status</a> <a href="#">block-on-peer-fault</a> <i>boolean</i>
Tree	<a href="#">block-on-peer-fault</a>
Default	false
Notes	The following elements are part of a choice: <b>block-on-peer-fault</b> or <b>standby-signaling-slave</b> .
Introduced	16.0.R1
Platforms	All

**signaling** *boolean*

Synopsis	Allow SDP binding to support pseudowire status signaling
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">pw-status</a> <a href="#">signaling</a> <i>boolean</i>
Tree	<a href="#">signaling</a>
Default	true
Introduced	16.0.R1

Platforms All

### **standby-signaling-slave** *boolean*

Synopsis Block spoke transmission based on PW standby status

Context **configure** [service epipe](#) *string* [spoke-sdp](#) *string* [pw-status](#) **standby-signaling-slave** *boolean*

Tree [standby-signaling-slave](#)

Default false

Notes The following elements are part of a choice: **block-on-peer-fault** or **standby-signaling-slave**.

Introduced 16.0.R1

Platforms All

### **source-bmac**

Synopsis Enter the **source-bmac** context

Context **configure** [service epipe](#) *string* [spoke-sdp](#) *string* [source-bmac](#)

Tree [source-bmac](#)

Introduced 16.0.R1

Platforms All

### **use-sdp-bmac-lsb** *boolean*

Synopsis Allow the spoke SDP to be part of a redundant pseudo-wire within PBB Epipe service

Context **configure** [service epipe](#) *string* [spoke-sdp](#) *string* [source-bmac](#) **use-sdp-bmac-lsb** *boolean*

Tree [use-sdp-bmac-lsb](#)

Default false

Introduced 16.0.R1

Platforms All

### **transit-policy**

Synopsis Enable the **transit-policy** context

Context **configure** [service epipe](#) *string* [spoke-sdp](#) *string* [transit-policy](#)

Tree	<a href="#">transit-policy</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <i>ip reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure</b> <a href="#">service epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <i>prefix reference</i>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vc-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Virtual circuit type associated with the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vc-type</a> <i>keyword</i>
Tree	<a href="#">vc-type</a>
Options	ether, vlan
Default	ether
Introduced	16.0.R1
Platforms	All

**vlan-vc-tag** *number*

Synopsis	SDP bind VC tag
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vlan-vc-tag</a> <i>number</i>
Tree	<a href="#">vlan-vc-tag</a>
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

**test** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate as a test service
Context	<b>configure</b> <a href="#">service</a> <a href="#">epipe</a> <i>string</i> <a href="#">test</a> <i>boolean</i>
Tree	<a href="#">test</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vc-switching** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	<b>configure</b> <i>service epipe</i> <i>string</i> <b>vc-switching</b> <i>boolean</i>
Tree	<b>vc-switching</b>
Default	false
Introduced	16.0.R1
Platforms	All

**vpn-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	<b>configure</b> <i>service epipe</i> <i>string</i> <b>vpn-id</b> <i>number</i>
Tree	<b>vpn-id</b>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**vxlan**

Synopsis	Enter the <b>vxlan</b> context
Context	<b>configure</b> <i>service epipe</i> <i>string</i> <b>vxlan</b>
Tree	<b>vxlan</b>
Introduced	16.0.R1
Platforms	All

**instance** [**vxlan-instance**] *number*

Synopsis	Enter the <b>instance</b> list instance
Context	<b>configure</b> <i>service epipe</i> <i>string</i> <b>vxlan instance</b> <i>number</i>

Tree	<a href="#">instance</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

### **[vxlan-instance]** *number*

Synopsis	VXLAN instance
Context	<b>configure</b> <a href="#">service epipe</a> <i>string vxlan instance number</i>
Tree	<a href="#">instance</a>
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **egress-vtep**

Synopsis	Enter the <b>egress-vtep</b> context
Context	<b>configure</b> <a href="#">service epipe</a> <i>string vxlan instance number egress-vtep</i>
Tree	<a href="#">egress-vtep</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	VTEP IP address used when originating VXLAN packets
Context	<b>configure</b> <a href="#">service epipe</a> <i>string vxlan instance number egress-vtep ip-address (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">ip-address</a>
Introduced	16.0.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group associated with egress VTEP address
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Context	<b>configure service epipe</b> <i>string vxlan instance number egress-vtep oper-group reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure service</b> <a href="#">oper-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**vni number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VNI of the VXLAN
Context	<b>configure service epipe</b> <i>string vxlan instance number vni number</i>
Tree	<a href="#">vni</a>
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**source-vtep** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Vxlan source virtual tunnel endpoint information
Context	<b>configure service epipe</b> <i>string vxlan source-vtep (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">source-vtep</a>
Introduced	16.0.R1
Platforms	All

**ies** [[service-name](#)] *string*

Synopsis	Enter the <b>ies</b> list instance
Context	<b>configure service ies</b> <i>string</i>
Tree	<a href="#">ies</a>
Introduced	16.0.R1
Platforms	All



**[service-name]** *string*

Synopsis	Administrative service name
Context	<b>configure service ies</b> <i>string</i>
Tree	<b>ies</b>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**aa-interface** [*interface-name*] *string*

Synopsis	Enter the <b>aa-interface</b> list instance
Context	<b>configure service ies</b> <i>string aa-interface</i> <i>string</i>
Tree	<b>aa-interface</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[interface-name]** *string*

Synopsis	Interface name
Context	<b>configure service ies</b> <i>string aa-interface</i> <i>string</i>
Tree	<b>aa-interface</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure service ies</b> <i>string aa-interface</i> <i>string admin-state</i> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **primary**

Synopsis	Enable the <b>primary</b> context
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Context	<b>configure service ies string aa-interface string ipv4 primary</b>
Tree	<b>primary</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address string**

Synopsis	Primary IPv4 address assigned to the interface
Context	<b>configure service ies string aa-interface string ipv4 primary address string</b>
Tree	<b>address</b>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length number**

Synopsis	IPv4 address prefix length
Context	<b>configure service ies string aa-interface string ipv4 primary prefix-length number</b>
Tree	<b>prefix-length</b>
Range	0 to 32
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sap [sap-id] string**

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure service ies string aa-interface string sap string</b>
Tree	<b>sap</b>
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sap-id] string**

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">aa-interface string</a> <a href="#">sap string</a>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the SAP
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">aa-interface string</a> <a href="#">sap string</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">aa-interface string</a> <a href="#">sap string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">aa-interface string</a> <a href="#">sap string</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <a href="#">reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap-egress

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a>
Tree	<a href="#">sap-egress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**virtual-port**

Synopsis	Enter the <b>virtual-port</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress virtual-port</a>
Tree	<a href="#">virtual-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vport-name** *reference*

Synopsis	Virtual port assigned to the SAP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress virtual-port vport-name</a> <i>reference</i>
Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet access egress virtual-port</a> <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fwd-wholesale**

Synopsis	Enter the <b>fwd-wholesale</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fwd-wholesale</a>
Tree	<a href="#">fwd-wholesale</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pppoe-service *reference*

Synopsis	PPPoE service name
Context	<b>configure service ies</b> <i>string aa-interface string sap string fwd-wholesale pppoe-service reference</i>
Tree	<a href="#">pppoe-service</a>
Reference	<b>configure service epipe</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service ies</b> <i>string aa-interface string sap string ingress</i>
Tree	<a href="#">ingress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service ies</b> <i>string aa-interface string sap string ingress qos</i>
Tree	<a href="#">qos</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap-ingress

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure service ies</b> <i>string aa-interface string sap string ingress qos sap-ingress</i>
Tree	<a href="#">sap-ingress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure service ies</b> <i>string aa-interface string sap string ingress qos sap-ingress overrides</i>
Tree	<i>overrides</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policy-name *reference*

Synopsis	Policy ID
Context	<b>configure service ies</b> <i>string aa-interface string sap string ingress qos sap-ingress policy-name reference</i>
Tree	<i>policy-name</i>
Reference	<b>configure qos sap-ingress</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lag

Synopsis	Enter the <b>lag</b> context
Context	<b>configure service ies</b> <i>string aa-interface string sap string lag</i>
Tree	<i>lag</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aarp-interface [*interface-name*] *string*

Synopsis	Enter the <b>aarp-interface</b> list instance
Context	<b>configure service ies</b> <i>string aarp-interface string</i>
Tree	<i>aarp-interface</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[interface-name] string**

Synopsis	Interface name
Context	<b>configure service ies string aarp-interface string</b>
Tree	<b>aarp-interface</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the interface
Context	<b>configure service ies string aarp-interface string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure service ies string aarp-interface string description string</b>
Tree	<b>description</b>
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-mtu number**

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure service ies string aarp-interface string ip-mtu number</b>
Tree	<b>ip-mtu</b>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.

Range	512 to 9786
Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** [**sdp-bind-id**] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>aarp-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[sdp-bind-id]** *string*

Synopsis	SDP binding ID
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>aarp-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **aarp**

Synopsis	Enable the <b>aarp</b> context
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>aarp-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>aarp</b>
Tree	<b>aarp</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AARP instance ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string aarp id reference</i>
Tree	<a href="#">id</a>
Reference	<b>configure</b> <a href="#">application-assurance aarp</a> <i>number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type keyword****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	<b>configure</b> <a href="#">service ies</a> <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string aarp type keyword</i>
Tree	<a href="#">type</a>
Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of this service SDP binding
Context	<b>configure</b> <a href="#">service ies</a> <i>string aarp-interface</i> <i>string spoke-sdp</i> <i>string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip** *reference*

Synopsis	IP filter ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC egress value that indicates a specific connection
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <b>vc-label</b> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>ingress</b>
Tree	<a href="#">ingress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <b>filter</b>
Tree	<a href="#">filter</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip** *reference*

Synopsis	IP filter name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <b>filter</b> <b>ip</b> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <b>ip-filter</b> <i>string</i>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC ingress value that indicates a specific connection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	1 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the service
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**customer** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">customer</a> <i>reference</i>
Tree	<a href="#">customer</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i>

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **igmp-host-tracking**

Synopsis	Enter the <b>igmp-host-tracking</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">igmp-host-tracking</a>
Tree	<a href="#">igmp-host-tracking</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **expiry-time** *number*

Synopsis	Time that the system continues to track inactive hosts
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>igmp-host-tracking</b> <b>expiry-time</b> <i>number</i>
Tree	<b>expiry-time</b>
Range	1 to 65535
Units	seconds
Default	260
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface** [**interface-name**] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Description	Commands in this context create a logical IP routing interface. When created, attributes such as an IP address and SAP ID can be associated with the IP interface.
Introduced	16.0.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	Interface name
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**cflowd-parameters**

Synopsis	Enter the <b>cflowd-parameters</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>cflowd-parameters</b>
Tree	<a href="#">cflowd-parameters</a>
Introduced	16.0.R1
Platforms	All

**sampling** [[sampling-type](#)] *keyword*

Synopsis	Enter the <b>sampling</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <b>sampling</b> <i>keyword</i>
Tree	<a href="#">sampling</a>
Introduced	16.0.R1
Platforms	All

**[[sampling-type](#)]** *keyword*

Synopsis	Traffic sampling type
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <b>sampling</b> <i>keyword</i>
Tree	<a href="#">sampling</a>
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

### **direction** *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>direction</b> <i>keyword</i>
Tree	<a href="#">direction</a>
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R1
Platforms	All

### **sample-profile** (*keyword* | *number*)

Synopsis	Sample profile ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>sample-profile</b> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">sample-profile</a>
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All

### **type** *keyword*

Synopsis	Type of cflowd analysis
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **cpu-protection** *reference*

Synopsis	CPU protection policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cpu-protection</a> <i>reference</i>
Tree	<a href="#">cpu-protection</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">cpu-protection</a> <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

### **dynamic-tunnel-redundant-nexthop** *string*

Synopsis	Redundant next-hop address for the dynamic IPsec tunnel
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">dynamic-tunnel-redundant-nexthop</a> <i>string</i>
Tree	<a href="#">dynamic-tunnel-redundant-nexthop</a>
Description	This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service.
Notes	The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or ( <b>dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop</b> ).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## hold-time

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure service ies string interface string hold-time</b>
Tree	<b>hold-time</b>
Introduced	16.0.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service ies string interface string hold-time ipv4</b>
Tree	<b>ipv4</b>
Introduced	16.0.R1
Platforms	All

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure service ies string interface string hold-time ipv4 down</b>
Tree	<b>down</b>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure service ies string interface string hold-time ipv4 down init-only <i>boolean</i></b>
Tree	<b>init-only</b>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false

Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

**up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv6 down</b>
Tree	<b>down</b>
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv6 down init-only</b> <i>boolean</i>
Tree	<b>init-only</b>
Description	When configured to <b>true</b> , the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

## seconds *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>hold-time ipv6 down seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 1200

Units	seconds
Introduced	16.0.R1
Platforms	All

## up

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

## seconds *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time ipv6 up seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

## if-attribute

Synopsis	Enter the <b>if-attribute</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a>
Tree	<a href="#">if-attribute</a>
Introduced	16.0.R1
Platforms	All

## admin-group *reference*

Synopsis	Administrative group name for the interface
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Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>reference</i>
Tree	<a href="#">admin-group</a>
Description	This command specifies the administrative group membership to an interface. The configured administrative group membership is applied in all levels or areas the interface is participating in. The same interface cannot have different memberships in different levels or areas.
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">admin-group</a> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **srlog-group** [*name*] *reference*

Synopsis	Add a list entry for <b>srlog-group</b>
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">srlog-group</a> <i>reference</i>
Tree	<a href="#">srlog-group</a>
Introduced	16.0.R1
Platforms	All

### **[name]** *reference*

Synopsis	SRLG name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <a href="#">srlog-group</a> <i>reference</i>
Tree	<a href="#">srlog-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <a href="#">srlog-group</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ingress</b>
Tree	<a href="#">ingress</a>
Introduced	19.7.R1



Platforms All

### **destination-class-lookup** *boolean*

Synopsis Enable BGP destination class lookup

Context **configure** [service ies](#) *string* [interface](#) *string* [ingress destination-class-lookup](#) *boolean*

Tree [destination-class-lookup](#)

Description When configured to **true**, the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the **destination-class** match criterion for an IP filter policy to filter egress traffic based on BGP destination classes.

When configured to **false**, destination class lookup is not enabled.

Default false

Introduced 20.7.R1

Platforms All

### **policy-accounting** *reference*

Synopsis Ingress policy accounting template name

Context **configure** [service ies](#) *string* [interface](#) *string* [ingress policy-accounting](#) *reference*

Tree [policy-accounting](#)

Reference **configure** [routing-options policy-accounting policy-acct-template](#) *string*

Introduced 19.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **ingress-stats** *boolean*

Synopsis Collect ingress statistics

Context **configure** [service ies](#) *string* [interface](#) *string* [ingress-stats](#) *boolean*

Tree [ingress-stats](#)

Default false

Introduced 16.0.R1

Platforms All

**ip-mtu** *number*

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

**ipsec**

Synopsis	Enable the <b>ipsec</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a>
Tree	<a href="#">ipsec</a>
Description	Commands in this context configure an IPsec secured interface.
Introduced	22.7.R1
Platforms	VSR

**admin-state** *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

**ip-exception** *reference*

Synopsis	IP exception filter
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ip-exception</a> <i>reference</i>
Tree	<a href="#">ip-exception</a>

Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	<b>configure filter ip-exception string</b>
Introduced	22.7.R1
Platforms	VSR

### **ipsec-tunnel [name] string**

Synopsis	Enter the <b>ipsec-tunnel</b> list instance
Context	<b>configure service ies string interface string ipsec ipsec-tunnel string</b>
Tree	<a href="#">ipsec-tunnel</a>
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

### **[name] string**

Synopsis	IPsec tunnel name
Context	<b>configure service ies string interface string ipsec ipsec-tunnel string</b>
Tree	<a href="#">ipsec-tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

### **admin-state keyword**

Synopsis	Administrative state of the IPsec tunnel
Context	<b>configure service ies string interface string ipsec ipsec-tunnel string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1

Platforms VSR

## bfd



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **bfd** context

Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [bfd](#)

Tree [bfd](#)

Introduced 22.7.R1

Platforms VSR

## bfd-designate *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Designate IPsec tunnel to carry BFD traffic

Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [bfd bfd-designate](#) *boolean*

Tree [bfd-designate](#)

Default false

Introduced 22.7.R1

Platforms VSR

## bfd-liveness



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **bfd-liveness** context

Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [bfd bfd-liveness](#)

Tree [bfd-liveness](#)

Description	Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session. BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.
Introduced	22.7.R1
Platforms	VSR

### **dest-ip** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">bfd bfd-liveness</a> <b>dest-ip</b> <i>string</i>
Tree	<a href="#">dest-ip</a>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **interface** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">bfd bfd-liveness</a> <b>interface</b> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

**service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <i>service ies string interface string ipsec ipsec-tunnel string bfd bfd-liveness service-name string</i>
Tree	<i>service-name</i>
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

**clear-df-bit** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	<b>configure</b> <i>service ies string interface string ipsec ipsec-tunnel string clear-df-bit boolean</i>
Tree	<i>clear-df-bit</i>
Description	When configured to <b>true</b> , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

**copy-traffic-class-upon-decapsulation** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>copy-traffic-class-upon-decapsulation</b> <i>boolean</i>
Tree	<b>copy-traffic-class-upon-decapsulation</b>
Description	When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

### **encapsulated-ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>encapsulated-ip-mtu</b> <i>number</i>
Tree	<b>encapsulated-ip-mtu</b>
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

## icmp-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp-generation</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">icmp-generation</a>
Tree	<a href="#">icmp-generation</a>
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

## frag-required



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>frag-required</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">icmp-generation</a> <a href="#">frag-required</a>
Tree	<a href="#">frag-required</a>
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">admin-state</a> <i>keyword</i>



Tree	<a href="#">admin-state</a>
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

### **message-count** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">message-count</a> <i>number</i>
Tree	<a href="#">message-count</a>

Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp6-generation</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a>
Tree	<a href="#">icmp6-generation</a>
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>packet-too-big</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a>
Tree	<a href="#">packet-too-big</a>
Description	Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.  The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.  The private MTU for the tunnel is configured via the <b>configure router interface ipsec ipsec-tunnel ip-mtu</b> command for the interface.
Introduced	22.7.R1

Platforms VSR

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

### **interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

**message-count** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>message-count</b> <i>number</i>
Tree	<b>message-count</b>
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

**ip-mtu** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>ip-mtu</b> <i>number</i>
Tree	<b>ip-mtu</b>
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

**key-exchange****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>key-exchange</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">key-exchange</a>
Tree	<a href="#">key-exchange</a>
Introduced	22.7.R1
Platforms	VSR

## dynamic



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>dynamic</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">key-exchange</a> <a href="#">dynamic</a>
Tree	<a href="#">dynamic</a>
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	22.7.R1
Platforms	VSR

## auto-establish *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">key-exchange</a> <a href="#">dynamic auto-establish</a> <i>boolean</i>
Tree	<a href="#">auto-establish</a>
Default	false
Introduced	22.7.R1
Platforms	VSR

## cert

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>cert</b> context
Context	<b>configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert</b>
Tree	<b>cert</b>
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	22.7.R1
Platforms	VSR

## cert-profile *reference*

Synopsis	Certificate profile name
Context	<b>configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert cert-profile reference</b>
Tree	<b>cert-profile</b>
Reference	<b>configure ipsec cert-profile string</b>
Introduced	22.7.R1
Platforms	VSR

## status-verify

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert status-verify</b>
Tree	<b>status-verify</b>
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	22.7.R1
Platforms	VSR

**default-result** *keyword*

Synopsis	Default result for Certificate Status Verification
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert</b> <b>status-verify</b> <b>default-result</b> <i>keyword</i>
Tree	<b>default-result</b>
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	22.7.R1
Platforms	VSR

**primary** *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert</b> <b>status-verify</b> <b>primary</b> <i>keyword</i>
Tree	<b>primary</b>
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ojsp
Default	crl
Introduced	22.7.R1
Platforms	VSR

**secondary** *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert</b> <b>status-verify</b> <b>secondary</b> <i>keyword</i>
Tree	<b>secondary</b>
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ojsp
Default	none

Introduced 22.7.R1  
 Platforms VSR

### **trust-anchor-profile** *reference*

Synopsis Trust anchor profile name  
 Context **configure** [service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic cert trust-anchor-profile reference](#)  
 Tree [trust-anchor-profile](#)  
 Reference **configure** [ipsec trust-anchor-profile string](#)  
 Introduced 22.7.R1  
 Platforms VSR

### **id**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **id** context  
 Context **configure** [service ies string interface string ipsec ipsec-tunnel string key-exchange dynamic id](#)  
 Tree [id](#)  
 Description Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows:
 

- Psk: local tunnel IP address
- Cert-auth: subject of the local certificate

 Introduced 22.7.R1  
 Platforms VSR

### **fqdn** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis FQDN used as the local ID IKE type



Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic id fqdn</b> <i>string</i>
Tree	<b>fqdn</b>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

### **ipv4** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic id ipv4</b> <i>string</i>
Tree	<b>ipv4</b>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

### **ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic id ipv6</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>ipv6</b>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

## ike-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic ike-policy</a> <i>reference</i>
Tree	<a href="#">ike-policy</a>
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.
Reference	<b>configure</b> <a href="#">ipsec ike-policy</a> <i>number</i>
Introduced	22.7.R1
Platforms	VSR

## ipsec-transform *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	<b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

## pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>pre-shared-key</b> <i>string</i>
Tree	<b>pre-shared-key</b>
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

## manual



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>manual</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual</b>
Tree	<b>manual</b>
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	22.7.R1
Platforms	VSR

## keys [**security-association**] *number* *direction* *keyword*

Synopsis	Enter the <b>keys</b> list instance
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>manual</b> <b>keys</b> <i>number</i> <i>direction</i> <i>keyword</i>
Tree	<b>keys</b>
Description	Commands in this context configure the security association list for the tunnel.
Introduced	22.7.R1
Platforms	VSR

## [**security-association**] *number*

Synopsis	SA entry ID
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange manual keys</b> <i>number</i> <b>direction</b> <i>keyword</i>
Tree	<a href="#">keys</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

### **direction** *keyword*

Synopsis	Direction of the IPsec tunnel
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange manual keys</b> <i>number</i> <b>direction</b> <i>keyword</i>
Tree	<a href="#">keys</a>
Options	inbound, outbound
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

### **authentication-key** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the authentication algorithm
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange manual keys</b> <i>number</i> <b>direction</b> <i>keyword</i> <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 130
Introduced	22.7.R1
Platforms	VSR

## encryption-key *string*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Key used for the encryption algorithm
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">encryption-key</a> <i>string</i>
Tree	<a href="#">encryption-key</a>
String Length	1 to 66
Introduced	22.7.R1
Platforms	VSR

## ipsec-transform *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Reference	<b>configure</b> <a href="#">ipsec ipsec-transform</a> <i>number</i>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

## spi *number*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">spi</a> <i>number</i>
Tree	<a href="#">spi</a>

Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.  The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **local-gateway-address-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>local-gateway-address-override</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>local-gateway-address-override</b>
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

### **max-history-key-records**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>max-history-key-records</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>max-history-key-records</b>
Tree	<b>max-history-key-records</b>
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1

Platforms VSR

### esp number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of recent records

Context **configure** service ies string interface string ipsec ipsec-tunnel string max-history-key-records esp number

Tree esp

Range 1 to 48

Introduced 22.7.R1

Platforms VSR

### ike number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum number of historical IKE key records

Context **configure** service ies string interface string ipsec ipsec-tunnel string max-history-key-records ike number

Tree ike

Range 1 to 3

Introduced 22.7.R1

Platforms VSR

### pmtu-discovery-aging number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Aging out time of the learned path MTU

Context **configure** service ies string interface string ipsec ipsec-tunnel string pmtu-discovery-aging number

Tree	<a href="#">pmtu-discovery-aging</a>
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	22.7.R1
Platforms	VSR

### **private-sap** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <b>private-sap</b> <i>number</i>
Tree	<a href="#">private-sap</a>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **private-service** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>private-service</b> <i>string</i>
Tree	<a href="#">private-service</a>
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

### **private-tcp-mss-adjust** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>private-tcp-mss-adjust</b> <i>number</i>
Tree	<a href="#">private-tcp-mss-adjust</a>
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>propagate-pmtu-v4</b> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>

Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <b>propagate-pmtu-v6</b> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v6</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

### **public-tcp-mss-adjust** (*number | keyword*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <b>public-tcp-mss-adjust</b> ( <i>number   keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto

Introduced 22.7.R1  
 Platforms VSR

### **remote-gateway-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Remote IPsec tunnel endpoint address  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [remote-gateway-address](#) (*ipv4-address-no-zone | ipv6-address-no-zone*)  
 Tree [remote-gateway-address](#)  
 Introduced 22.7.R1  
 Platforms VSR

### **replay-window** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Anti-replay window size  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [replay-window](#) *number*  
 Tree [replay-window](#)  
 Description This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.  
 Range 32 | 64 | 128 | 256 | 512  
 Units packets  
 Introduced 22.7.R1  
 Platforms VSR

## security-policy



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>security-policy</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">security-policy</a>
Tree	<a href="#">security-policy</a>
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

## id number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">security-policy id number</a>
Tree	<a href="#">id</a>
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

## strict-match *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">security-policy strict-match boolean</a>
Tree	<a href="#">strict-match</a>
Description	When configured to <b>true</b> , this command enables strict match of the security policy entry.

When a CREATE\_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.

If there is no match, the setup fails, and TS\_UNACCEPTABLE is sent.

If there is a match, but there is an existing CHILD\_SA for the matched security policy, the setup fails, and NO\_PROPOSAL\_CHOSEN is sent.

If there is a match, and there is not a CHILD\_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD\_SA is created.

Default	false
Introduced	22.7.R1
Platforms	VSR

### ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipv6-exception</b> <i>reference</i>
Tree	<a href="#">ipv6-exception</a>
Description	This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.
Reference	<b>configure filter ipv6-exception</b> <i>string</i>
Introduced	22.7.R1
Platforms	VSR

### public-sap *number*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec public-sap</b> <i>number</i>
Tree	<a href="#">public-sap</a>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1

Platforms VSR

## tunnel-group *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tunnel group ID

Context **configure service ies** *string* **interface** *string* **ipsec tunnel-group** *reference*

Tree **tunnel-group**

Reference **configure isa tunnel-group** *number*

Notes This element is mandatory.

Introduced 22.7.R1

Platforms VSR

## ipv4

Synopsis Enter the **ipv4** context

Context **configure service ies** *string* **interface** *string* **ipv4**

Tree **ipv4**

Introduced 16.0.R1

Platforms All

## addresses

Synopsis Enter the **addresses** context

Context **configure service ies** *string* **interface** *string* **ipv4 addresses**

Tree **addresses**

Introduced 16.0.R1

Platforms All

## address [**ipv4-address**] *string*

Synopsis Enter the **address** list instance

Context **configure service ies** *string* **interface** *string* **ipv4 addresses** **address** *string*

Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**[ipv4-address]** *string*

Synopsis	IPv4 address for the interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 addresses</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 addresses</a> <a href="#">address</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**allow-directed-broadcasts** *boolean*

Synopsis	Forward directed broadcasts
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 allow-directed-broadcasts</a> <i>boolean</i>
Tree	<a href="#">allow-directed-broadcasts</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure service ies string interface string ipv4 bfd</b>
Tree	<b>bfd</b>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of BFD sessions
Context	<b>configure service ies string interface string ipv4 bfd admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**echo-receive number**

Synopsis	Minimum echo interval over this interface
Context	<b>configure service ies string interface string ipv4 bfd echo-receive number</b>
Tree	<b>echo-receive</b>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

**multiplier number**

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure service ies string interface string ipv4 bfd multiplier number</b>
Tree	<b>multiplier</b>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.



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Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **receive number**

Synopsis	BFD receive interval over this interface
Context	<b>configure service ies string interface string ipv4 bfd receive number</b>
Tree	<a href="#">receive</a>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **transmit-interval number**

Synopsis	BFD transmit interval over this interface
Context	<b>configure service ies string interface string ipv4 bfd transmit-interval number</b>
Tree	<a href="#">transmit-interval</a>
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Local termination point for the BFD session
Context	<b>configure service ies string interface string ipv4 bfd type keyword</b>
Tree	<b>type</b>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dhcp**

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure service ies string interface string ipv4 dhcp</b>
Tree	<b>dhcp</b>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of DHCP
Context	<b>configure service ies string interface string ipv4 dhcp admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**gi-address** *string*

Synopsis	GI address for the DHCP relay
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">gi-address</a> <i>string</i>
Tree	<a href="#">gi-address</a>
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	All

**lease-populate**

Synopsis	Enter the <b>lease-populate</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">lease-populate</a>
Tree	<a href="#">lease-populate</a>
Introduced	16.0.R1
Platforms	All

**max-leases** *number*

Synopsis	Maximum number of DHCPv4 leases allowed
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">lease-populate</a> <a href="#">max-leases</a> <i>number</i>

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Tree	<a href="#">max-leases</a>
Range	0 to 511999
Introduced	16.0.R1
Platforms	All

## option-82

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a>
Tree	<a href="#">option-82</a>
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

## action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a> <i>action keyword</i>
Tree	<a href="#">action</a>
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	All

## circuit-id

Synopsis	Enter the <b>circuit-id</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a> <a href="#">circuit-id</a>
Tree	<a href="#">circuit-id</a>
Introduced	16.0.R1
Platforms	All

## ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">ascii-tuple</a>
Tree	<a href="#">ascii-tuple</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## ifindex

Synopsis	Use the interface index for the circuit ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">ifindex</a>
Tree	<a href="#">ifindex</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## none

Synopsis	Do not include the circuit ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">none</a>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## sap-id

Synopsis	Use the SAP ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">sap-id</a>
Tree	<a href="#">sap-id</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .

Introduced	16.0.R1
Platforms	All

## vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">vlan-ascii-tuple</a>
Tree	<a href="#">vlan-ascii-tuple</a>
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## remote-id

Synopsis	Enter the <b>remote-id</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a> <a href="#">remote-id</a>
Tree	<a href="#">remote-id</a>
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

## ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82</a> <a href="#">remote-id</a> <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1

Platforms All

## mac

Synopsis Use the MAC address for the remote ID

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp option-82 remote-id mac](#)

Tree [mac](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

## none

Synopsis Do not include the remote ID

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp option-82 remote-id none](#)

Tree [none](#)

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

## vendor-specific-option

Synopsis Enter the **vendor-specific-option** context

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option](#)

Tree [vendor-specific-option](#)

Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.

Introduced 16.0.R1

Platforms All

## client-mac-address *boolean*

Synopsis Send the MAC address in the VSO

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option client-mac-address](#) *boolean*

Tree [client-mac-address](#)

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Default	false
Introduced	16.0.R1
Platforms	All

**pool-name** *boolean*

Synopsis	Send the pool name in the VSO
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> <b>pool-name</b> <i>boolean</i>
Tree	<b>pool-name</b>
Default	false
Introduced	16.0.R1
Platforms	All

**sap-id** *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> <b>sap-id</b> <i>boolean</i>
Tree	<b>sap-id</b>
Default	false
Introduced	16.0.R1
Platforms	All

**service-id** *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b> <b>service-id</b> <i>boolean</i>
Tree	<b>service-id</b>
Default	false
Introduced	16.0.R1
Platforms	All



**string** *string*

Synopsis	User-defined ASCII string for the VSO
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">string</a> <a href="#">string</a>
Tree	<a href="#">string</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**system-id** *boolean*

Synopsis	Send the system ID in the VSO
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">system-id</a> <a href="#">boolean</a>
Tree	<a href="#">system-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**proxy-server**

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a>
Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a> <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **emulated-server** *string*

Synopsis IP address used as the DHCP server address for the SAP

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server emulated-server](#) *string*

Tree [emulated-server](#)

Description This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.

Introduced 16.0.R1

Platforms All

### **lease-time**

Synopsis Enter the **lease-time** context

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server lease-time](#)

Tree [lease-time](#)

Introduced 16.0.R1

Platforms All

### **radius-override** *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server lease-time radius-override](#) *boolean*

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms All

### **value** *number*

Synopsis DHCP lease time

Context **configure** [service ies](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server lease-time value](#) *number*

Tree	<a href="#">value</a>
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	All

### **python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">python-policy</a> <a href="#">reference</a>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

### **relay-plain-bootp** *boolean*

Synopsis	Enable relaying of plain BOOTP packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-plain-bootp</a> <a href="#">boolean</a>
Tree	<a href="#">relay-plain-bootp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **relay-proxy**

Synopsis	Enable the <b>relay-proxy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a>
Tree	<a href="#">relay-proxy</a>
Introduced	16.0.R1
Platforms	All

### **release-update-src-ip** *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp relay-proxy release-update-src-ip</b> <i>boolean</i>
Tree	<a href="#">release-update-src-ip</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **siaddr-override** *string*

Synopsis	DHCP server IP address for address hiding function
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp relay-proxy siaddr-override</b> <i>string</i>
Tree	<a href="#">siaddr-override</a>
Introduced	16.0.R1
Platforms	All

### **release-include-gi-address** *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp release-include-gi-address</b> <i>boolean</i>
Tree	<a href="#">release-include-gi-address</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *string*

Synopsis	IP addresses for DHCP server requests
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 dhcp server</b> <i>string</i>
Tree	<a href="#">server</a>
Description	This command configures a list of servers that this interface forwards requests to.  The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **src-ip-addr** *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>src-ip-addr</b> <i>keyword</i>
Tree	<a href="#">src-ip-addr</a>
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	All

### **trusted** *boolean*

Synopsis	Relay untrusted packets
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>trusted</b> <i>boolean</i>
Tree	<a href="#">trusted</a>
Description	<p>When configured to <b>true</b>, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **use-arp** *boolean*

Synopsis	Use ARP to determine the destination hardware address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>use-arp</b> <i>boolean</i>
Tree	<a href="#">use-arp</a>

Default	false
Introduced	16.0.R1
Platforms	All

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp</a>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	All

## mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp mask-reply</a> <i>boolean</i>
Tree	<a href="#">mask-reply</a>
Default	true
Introduced	16.0.R1
Platforms	All

## param-problem

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a>
Tree	<a href="#">param-problem</a>
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **redirects**

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp</a> <b>redirects</b>
Tree	<a href="#">redirects</a>
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>

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Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All



**ttl-expired**

Synopsis	Enter the <b>ttl-expired</b> context
Context	<b>configure service ies string interface string ipv4 icmp ttl-expired</b>
Tree	<b>ttl-expired</b>
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of sending TTL expired messages
Context	<b>configure service ies string interface string ipv4 icmp ttl-expired admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number number**

Synopsis	Maximum number of TTL expired messages to send
Context	<b>configure service ies string interface string ipv4 icmp ttl-expired number number</b>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds number**

Synopsis	Time used to limit the number of TTL expired messages
Context	<b>configure service ies string interface string ipv4 icmp ttl-expired seconds number</b>
Tree	<b>seconds</b>
Range	1 to 60

Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

## unreachables

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure service ies string interface string ipv4 icmp unreachables</b>
Tree	<a href="#">unreachables</a>
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	<b>configure service ies string interface string ipv4 icmp unreachables admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## number *number*

Synopsis	Maximum number of unreachable messages to send
Context	<b>configure service ies string interface string ipv4 icmp unreachables number number</b>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**ip-helper-address** *string*

Synopsis	Gateway address
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">ip-helper-address</a> <i>string</i>
Tree	<a href="#">ip-helper-address</a>
Introduced	16.0.R1
Platforms	All

**local-dhcp-server** *reference*

Synopsis	DHCP server for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">local-dhcp-server</a> <i>reference</i>
Tree	<a href="#">local-dhcp-server</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**neighbor-discovery**

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

**host-route**

Synopsis	Enter the <b>host-route</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a>
Tree	<a href="#">host-route</a>
Introduced	19.10.R1
Platforms	All

**populate** [[route-type](#)] *keyword*

Synopsis	Enter the <b>populate</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i>
Tree	<a href="#">populate</a>
Introduced	19.10.R1
Platforms	All

**[route-type]** *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i>
Tree	<a href="#">populate</a>
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**route-tag** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i> <a href="#">route-tag</a> <i>number</i>

Tree	<a href="#">route-tag</a>
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	19.10.R1
Platforms	All

### **learn-unsolicited** *boolean*

Synopsis	Learn new entries from any received NA message
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <b>learn-unsolicited</b> <i>boolean</i>
Tree	<a href="#">learn-unsolicited</a>
Description	<p>When configured to <b>true</b>, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to <b>false</b>, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> <li>• If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.</li> <li>• If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.</li> </ul>
Default	false
Introduced	16.0.R1
Platforms	All

### **limit**

Synopsis	Enter the <b>limit</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <b>limit</b>
Tree	<a href="#">limit</a>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Generate log entries only if limit is reached
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a> <a href="#">log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-entries** *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a> <a href="#">max-entries</a> <i>number</i>
Tree	<a href="#">max-entries</a>
Range	0 to 524288
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Threshold value that triggers a warning message
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">limit</a> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

### **local-proxy-arp** *boolean*

Synopsis	Enable local proxy ARP on interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">local-proxy-arp</a> <i>boolean</i>

Tree	<a href="#">local-proxy-arp</a>
Description	When configured to <b>true</b> , the router enables local proxy ARP on the interface. When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

### **populate** *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">populate</a> <i>boolean</i>
Tree	<a href="#">populate</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **proactive-refresh** *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">proactive-refresh</a> <i>boolean</i>
Tree	<a href="#">proactive-refresh</a>
Description	When configured to <b>true</b> , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries). When configured to <b>false</b> , the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.
Default	false
Introduced	16.0.R1
Platforms	All

### **proxy-arp-policy** *reference*

Synopsis	Proxy ARP policy name
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Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery proxy-arp-policy</a> <i>reference</i>
Tree	<a href="#">proxy-arp-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **remote-proxy-arp** *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery remote-proxy-arp</a> <i>boolean</i>
Tree	<a href="#">remote-proxy-arp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **retry-timer** *number*

Synopsis	ARP retry interval
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery retry-timer</a> <i>number</i>
Tree	<a href="#">retry-timer</a>
Range	1 to 300
Units	deciseconds
Default	50
Introduced	16.0.R1
Platforms	All

### **static-neighbor** [[ipv4-address](#)] *string*

Synopsis	Enter the <b>static-neighbor</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery static-neighbor</a> <i>string</i>



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Tree	<a href="#">static-neighbor</a>
Introduced	16.0.R1
Platforms	All

### **[ipv4-address] string**

Synopsis	IPv4 address that corresponds to the physical address
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery static-neighbor string</a>
Tree	<a href="#">static-neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **mac-address string**

Synopsis	MAC address for the static neighbor
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery static-neighbor string mac-address string</a>
Tree	<a href="#">mac-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **static-neighbor-unnumbered**

Synopsis	Enable the <b>static-neighbor-unnumbered</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery static-neighbor-unnumbered</a>
Tree	<a href="#">static-neighbor-unnumbered</a>
Introduced	16.0.R1
Platforms	All

### **mac-address string**

Synopsis	MAC address for the static neighbor
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery static-neighbor-unnumbered mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery timeout</b> <i>number</i>
Tree	<b>timeout</b>
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

### **primary**

Synopsis	Enable the <b>primary</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 primary</b>
Tree	<b>primary</b>
Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 primary address</b> <i>string</i>
Tree	<b>address</b>
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

### **broadcast** *keyword*

Synopsis	Broadcast address format
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <b>broadcast</b> <i>keyword</i>
Tree	<a href="#">broadcast</a>
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <b>prefix-length</b> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on the IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <b>track-srrp</b> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **qos-route-lookup** *keyword*

Synopsis	IP address for QoS route lookup for ingress IP packets
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 qos-route-lookup</b> <i>keyword</i>
Tree	<b>qos-route-lookup</b>
Description	This command specifies the IP address type used for QPPB enabled per-packet QoS handling (in terms of FC and priority). When using QPPB, routes are associated with a QoS treatment (FC and optionally priority) through either explicit configuration or the route policy. If an IPv4 or IPv6 packet arrives on an interface where the configuration of this command applies to the packet, the QoS treatment of the packet is based on the route that matched the destination IP address or the route that matched the source IP address.  See "Enabling QPPB on an IP interface" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about QPPB.
Options	destination, source, source-and-dest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **secondary** [**address**] *string*

Synopsis	Enter the <b>secondary</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 secondary</b> <i>string</i>
Tree	<b>secondary</b>
Introduced	16.0.R1
Platforms	All

### [**address**] *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 secondary</b> <i>string</i>
Tree	<b>secondary</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **broadcast** *keyword*

Synopsis	Broadcast address format
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 secondary</b> <i>string</i> <b>broadcast</b> <i>keyword</i>
Tree	<b>broadcast</b>

Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

### **igp-inhibit** *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 secondary</a> <i>string</i> <b>igp-inhibit</b> <i>boolean</i>
Tree	<a href="#">igp-inhibit</a>
Description	When configured to <b>true</b> , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 secondary</a> <i>string</i> <b>prefix-length</b> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on the IP address
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 secondary</a> <i>string</i> <b>track-srrp</b> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **tcp-mss** *number*

Synopsis	TCP maximum segment size for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <b>tcp-mss</b> <i>number</i>
Tree	<a href="#">tcp-mss</a>
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

### **unnumbered**

Synopsis	Enter the <b>unnumbered</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <b>unnumbered</b>
Tree	<a href="#">unnumbered</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** *string*

Synopsis	IP address of the unnumbered interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">unnumbered</a> <b>ip-address</b> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

### **ip-int-name** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">unnumbered</a> <b>ip-int-name</b> <i>string</i>
Tree	<a href="#">ip-int-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

## system

Synopsis	IP interface as an unnumbered interface
Context	<b>configure service ies string interface string ipv4 unnumbered system</b>
Tree	<a href="#">system</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>ip-int-name</b> , or <b>system</b> .
Introduced	16.0.R1
Platforms	All

## urpf-check

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure service ies string interface string ipv4 urpf-check</b>
Tree	<a href="#">urpf-check</a>
Introduced	16.0.R1
Platforms	All

## ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	<b>configure service ies string interface string ipv4 urpf-check ignore-default boolean</b>
Tree	<a href="#">ignore-default</a>
Default	false
Introduced	16.0.R1
Platforms	All

## mode *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure service ies string interface string ipv4 urpf-check mode keyword</b>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

**vrrp** [*virtual-router-id*] *number*

Synopsis	Enter the <b>vrrp</b> list instance
Context	<b>configure</b> <i>service</i> <i>ies</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <b>vrrp</b> <i>number</i>
Tree	<b>vrrp</b>
Introduced	16.0.R1
Platforms	All

**[virtual-router-id]** *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	<b>configure</b> <i>service</i> <i>ies</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <b>vrrp</b> <i>number</i>
Tree	<b>vrrp</b>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of VRRP
Context	<b>configure</b> <i>service</i> <i>ies</i> <i>string</i> <i>interface</i> <i>string</i> <i>ipv4</i> <b>vrrp</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable



Default	enable
Introduced	16.0.R1
Platforms	All

### **authentication-key string**

Synopsis	Password for simple text authentication
Context	<b>configure service ies string interface string ipv4 vrrp number authentication-key string</b>
Tree	<b>authentication-key</b>
Description	<p>This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.</p> <p>If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.</p>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

### **backup string**

Synopsis	Virtual router IP addresses for the interface
Context	<b>configure service ies string interface string ipv4 vrrp number backup string</b>
Tree	<b>backup</b>
Description	<p>This command associates virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p>

Max. Instances	16
Introduced	16.0.R1
Platforms	All

## bfd-liveness

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipv4 vrrp number</a> <b>bfd-liveness</b>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

## dest-ip string



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipv4 vrrp number</a> <a href="#">bfd-liveness</a> <b>dest-ip string</b>
Tree	<a href="#">dest-ip</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## interface-name string



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string ipv4 vrrp number</a> <a href="#">bfd-liveness</a> <b>interface-name string</b>
Tree	<a href="#">interface-name</a>
String Length	1 to 32

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **service-name** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">bfd-liveness</a> <a href="#">service-name</a> <a href="#">string</a>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **init-delay** *number*

Synopsis	VRRP initialization delay timer
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">init-delay</a> <a href="#">number</a>
Tree	<a href="#">init-delay</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

### **mac** *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">mac</a> <a href="#">string</a>
Tree	<a href="#">mac</a>
Description	This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.  Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many

hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.

Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with *unicast-mac-address* as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced	16.0.R1
Platforms	All

### **master-int-inherit** *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>master-int-inherit</b> <i>boolean</i>
Tree	<a href="#">master-int-inherit</a>
Description	<p>When configured to <b>true</b>, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to <b>false</b>, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

### **message-interval** *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>message-interval</b> <i>number</i>
Tree	<a href="#">message-interval</a>
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command:</p>

- When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The **master-int-inherit** command has no effect when operating as master.
- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	1 to 2559
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### monitor-oper-group *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">monitor-oper-group</a> <a href="#">reference</a>
Tree	<a href="#">monitor-oper-group</a>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <a href="#">string</a>
Introduced	22.2.R1
Platforms	All

**ntp-reply** *boolean*

Synopsis	Allow processing of NTP requests
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <b>ntp-reply</b> <a href="#">boolean</a>
Tree	<a href="#">ntp-reply</a>
Description	When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to <b>false</b> , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

**oper-group** *reference*

Synopsis	Operational group name associated with the VRRP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <b>oper-group</b> <a href="#">reference</a>
Tree	<a href="#">oper-group</a>
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

**owner** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <b>owner</b> <a href="#">boolean</a>
Tree	<a href="#">owner</a>
Description	When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.

	When configured to <b>false</b> , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

### **passive** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">passive</a> <i>boolean</i>
Tree	<a href="#">passive</a>
Description	<p>When configured to <b>true</b>, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to <b>false</b>, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **ping-reply** *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">ping-reply</a> <i>boolean</i>
Tree	<a href="#">ping-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false

Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	VRRP priority control policy
Context	<b>configure service ies string interface string ipv4 vrrp number policy reference</b>
Tree	<a href="#">policy</a>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	<b>configure vrrp policy number</b>
Introduced	16.0.R1
Platforms	All

### **preempt boolean**

Synopsis	Allow the VRRP to override an existing non-owner master
Context	<b>configure service ies string interface string ipv4 vrrp number preempt boolean</b>
Tree	<a href="#">preempt</a>
Description	<p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All



**priority number**

Synopsis	Base priority for the VRRP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">priority</a> <a href="#">number</a>
Tree	<a href="#">priority</a>
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.  The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**ssh-reply boolean**

Synopsis	Allow the non-owner master to reply to SSH requests
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">ssh-reply</a> <a href="#">boolean</a>
Tree	<a href="#">ssh-reply</a>
Description	When configured to <b>true</b> , the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).  When configure to <b>false</b> , SSH requests to non-owner master virtual IP addresses are silently discarded.
Default	false
Introduced	16.0.R1
Platforms	All

**standby-forwarding boolean**

Synopsis	Allow standby router to forward traffic
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">standby-forwarding</a> <a href="#">boolean</a>
Tree	<a href="#">standby-forwarding</a>
Description	When configured to <b>true</b> , the standby router forwards all traffic.

When configured to **false**, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.

Default	false
Introduced	16.0.R1
Platforms	All

### **telnet-reply** *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>telnet-reply</b> <i>boolean</i>
Tree	<a href="#">telnet-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to <b>false</b>, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **traceroute-reply** *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <b>traceroute-reply</b> <i>boolean</i>
Tree	<a href="#">traceroute-reply</a>
Description	<p>When configured to <b>true</b>, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to <b>false</b>, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure service ies string interface string ipv6</b>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

## address [[ipv6-address](#)] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure service ies string interface string ipv6 address string</b>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

## [[ipv6-address](#)] *string*

Synopsis	IPv6 address assigned to the interface
Context	<b>configure service ies string interface string ipv6 address string</b>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## duplicate-address-detection *boolean*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	<b>configure service ies string interface string ipv6 address string duplicate-address-detection boolean</b>
Tree	<a href="#">duplicate-address-detection</a>
Description	When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD).

When configured to **false**, the router disables DAD and sets the address to preferred, even if there is a duplicated address.

Default	true
Introduced	16.0.R1
Platforms	All

### **eui-64** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>address</b> <i>string</i> <b>eui-64</b> <i>boolean</i>
Tree	<b>eui-64</b>
Description	When configured to <b>true</b> , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

### **prefix-length** *number*

Synopsis	IPv6 address prefix length
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>address</b> <i>string</i> <b>prefix-length</b> <i>number</i>
Tree	<b>prefix-length</b>
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **primary-preference** *number*

Synopsis	Index assigned to the IPv6 address of the interface
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 address</b> <i>string</i> <b>primary-preference</b> <i>number</i>
Tree	<b>primary-preference</b>
Description	<p>This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.</p> <p>If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 address</b> <i>string</i> <b>track-srrp</b> <i>number</i>
Tree	<b>track-srrp</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 bfd</b>
Tree	<b>bfd</b>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 bfd admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd</a> <a href="#">echo-receive</a> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

### **receive** *number*

Synopsis	BFD receive interval over this interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd</a> <a href="#">receive</a> <i>number</i>
Tree	<a href="#">receive</a>
Description	This command specifies the receive interval for the BFD session.

On the 7750 SR, this command can only be configured to a value less than 100 when the **type** command is configured to **cpm-np**.

Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **transmit-interval** *number*

Synopsis	BFD transmit interval over this interface
Context	<b>configure service ies string interface string ipv6 bfd transmit-interval number</b>
Tree	<a href="#">transmit-interval</a>
Description	This command configures the transmit intervals.  On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Local termination point for the BFD session
Context	<b>configure service ies string interface string ipv6 bfd type keyword</b>
Tree	<a href="#">type</a>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.  The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>

Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## dhcp6

Synopsis	Enter the <b>dhcp6</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	All

## relay

Synopsis	Enter the <b>relay</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a>
Tree	<a href="#">relay</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">description</a> <i>string</i>



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Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## lease-populate

Synopsis	Enter the <b>lease-populate</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate</b>
Tree	<a href="#">lease-populate</a>
Introduced	16.0.R1
Platforms	All

## max-nbr-of-leases *number*

Synopsis	Maximum lease state entries allowed for the interface
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate max-nbr-of-leases</b> <i>number</i>
Tree	<a href="#">max-nbr-of-leases</a>
Range	0 to 32767
Default	0
Introduced	16.0.R1
Platforms	All

## route-populate

Synopsis	Enter the <b>route-populate</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate</b>
Tree	<a href="#">route-populate</a>
Introduced	16.0.R1
Platforms	All

## na *boolean*

Synopsis	Create route based on IA_NA prefix option in relay-reply message
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate na</b> <i>boolean</i>
Tree	<b>na</b>
Default	false
Introduced	16.0.R1
Platforms	All

## pd

Synopsis	Enable the <b>pd</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate pd</b>
Tree	<b>pd</b>
Introduced	16.0.R1
Platforms	All

## exclude *boolean*

Synopsis	Create back hole route based on prefix exclude option in relay-reply message
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate pd exclude</b> <i>boolean</i>
Tree	<b>exclude</b>
Default	false
Introduced	16.0.R1
Platforms	All

## ta *boolean*

Synopsis	Create route based on IA_TA prefix option in relay-reply message
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate ta</b> <i>boolean</i>
Tree	<b>ta</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **link-address** *string*

Synopsis	Link address of the DHCPv6 relay messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">link-address</a> <a href="#">string</a>
Tree	<a href="#">link-address</a>
Introduced	16.0.R1
Platforms	All

### **neighbor-resolution** *boolean*

Synopsis	Enable neighbor resolution via DHCPv6 relay
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">neighbor-resolution</a> <a href="#">boolean</a>
Tree	<a href="#">neighbor-resolution</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **option**

Synopsis	Enter the <b>option</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a>
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	All

### **interface-id**

Synopsis	Enter the <b>interface-id</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">option</a> <a href="#">interface-id</a>
Tree	<a href="#">interface-id</a>
Introduced	16.0.R1
Platforms	All

## ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay option interface-id</b> <b>ascii-tuple</b>
Tree	<a href="#">ascii-tuple</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay option interface-id</b> <b>if-index</b>
Tree	<a href="#">if-index</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## sap-id

Synopsis	Use SAP ID in interface ID option in relay packet
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay option interface-id</b> <b>sap-id</b>
Tree	<a href="#">sap-id</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## string *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay option interface-id</b> <b>string</b> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 80
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .

Introduced 16.0.R1  
 Platforms All

### **remote-id** *boolean*

Synopsis Send remote ID option in the DHCPv6 relay packet  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipv6 dhcp6 relay option remote-id](#) *boolean*  
 Tree [remote-id](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **python-policy** *reference*

Synopsis Python policy name  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipv6 dhcp6 relay python-policy](#) *reference*  
 Tree [python-policy](#)  
 Reference **configure** [python](#) [python-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **server** *string*

Synopsis DHCPv6 servers to which the DHCPv6 requests are forwarded  
 Context **configure** [service ies](#) *string* [interface](#) *string* [ipv6 dhcp6 relay server](#) *string*  
 Tree [server](#)  
 Max. Instances 8  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **source-address** *string*

Synopsis Source IPv6 address of the DHCPv6 relay messages

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay source-address</b> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	All

### **user-db** *reference*

Synopsis	Local user database for authentication
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay user-db</b> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure subscriber-mgmt local-user-db</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server**

Synopsis	Enter the <b>server</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 server</b>
Tree	<a href="#">server</a>
Introduced	16.0.R1
Platforms	All

### **max-nbr-of-leases** *number*

Synopsis	DHCPv6 leases allowed
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 server max-nbr-of-leases</b> <i>number</i>
Tree	<a href="#">max-nbr-of-leases</a>
Range	0 to 8000
Default	8000
Introduced	16.0.R1
Platforms	All

## prefix-delegation

Synopsis	Enter the <b>prefix-delegation</b> context
Context	<b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation</b>
Tree	<a href="#">prefix-delegation</a>
Description	Commands in this context configure the options for delegating a long-lived prefix from a delegating router to a requesting router, where the delegating router does not require knowledge about the link topology in the network to which the prefixes are assigned.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the prefix delegation
Context	<b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## prefix [[ipv6-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string</b>
Tree	<a href="#">prefix</a>
Description	Commands in this context configure the IPv6 prefix that is delegated by the system.
Introduced	16.0.R1
Platforms	All

## [[ipv6-prefix](#)] *string*

Synopsis	IPv6 address and prefix
Context	<b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string</b>

Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **client-id**

Synopsis	Enter the <b>client-id</b> context
Context	<b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id</b>
Tree	<a href="#">client-id</a>
Introduced	16.0.R1
Platforms	All

### **duid string**

Synopsis	Requesting router ID
Context	<b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id duid string</b>
Tree	<a href="#">duid</a>
String Length	1 to 130
Introduced	16.0.R1
Platforms	All

### **iaid number**

Synopsis	IAID from the requesting router to match
Context	<b>configure service ies string interface string ipv6 dhcp6 server prefix-delegation prefix string client-id iaid number</b>
Tree	<a href="#">iaid</a>
Description	This command configures the Identity Association ID (IAID) associated with a prefix delegation entry and must match the IAID sent by the requesting router for the prefix delegation to succeed.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All



**preferred-lifetime** (*number* | *keyword*)

Synopsis	Preferred lifetime of the prefix
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <b>preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Description	This command configures the preferred lifetime of the prefix. The value cannot be greater than the valid lifetime value.
Range	1 to 4294967294
Units	seconds
Options	infinite
Default	604800
Introduced	16.0.R1
Platforms	All

**valid-lifetime** (*number* | *keyword*)

Synopsis	Valid lifetime of the prefix
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	1 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

**duplicate-address-detection** *boolean*

Synopsis	Enable Duplicate Address Detection per interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">duplicate-address-detection</a> <i>boolean</i>
Tree	<a href="#">duplicate-address-detection</a>
Default	true
Introduced	16.0.R1

Platforms All

### **forward-ipv4-packets** *boolean*

Synopsis Forward unencapsulated IPv4 packets  
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) **forward-ipv4-packets** *boolean*  
 Tree [forward-ipv4-packets](#)  
 Default false  
 Introduced 19.5.R1  
 Platforms All

### **icmp6**

Synopsis Enter the **icmp6** context  
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) **icmp6**  
 Tree [icmp6](#)  
 Introduced 16.0.R1  
 Platforms All

### **packet-too-big**

Synopsis Enter the **packet-too-big** context  
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) **packet-too-big**  
 Tree [packet-too-big](#)  
 Description Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of Packet Too Big message sends  
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [ipv6](#) [icmp6](#) [packet-too-big](#) **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable

Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit Packet Too Big messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

**param-problem**

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">param-problem</a>
Tree	<a href="#">param-problem</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Parameter Problem message sends
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

### **redirects**

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects</b>
Tree	<a href="#">redirects</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Redirect message sends
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>icmp6</b> <b>redirects</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number to limit ICMPv6 Redirect messages per time frame
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>icmp6</b> <b>redirects</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit ICMPv6 Redirect messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>icmp6</b> <b>redirects</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

**time-exceeded**

Synopsis	Enter the <b>time-exceeded</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>icmp6</b> <b>time-exceeded</b>
Tree	<b>time-exceeded</b>

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Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Time Exceeded message sends
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">time-exceeded</a> <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">time-exceeded</a> <a href="#">number</a> <a href="#">number</a>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">time-exceeded</a> <a href="#">seconds</a> <a href="#">number</a>
Tree	<a href="#">seconds</a>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

## unreachables

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure service ies string interface string ipv6 icmp6 unreachables</b>
Tree	<b>unreachables</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	<b>configure service ies string interface string ipv6 icmp6 unreachables admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## number *number*

Synopsis	Number to limit Unreachable messages per time frame
Context	<b>configure service ies string interface string ipv6 icmp6 unreachables number number</b>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

## seconds *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	<b>configure service ies string interface string ipv6 icmp6 unreachables seconds number</b>
Tree	<b>seconds</b>
Range	1 to 60
Default	10

Introduced	16.0.R1
Platforms	All

## link-local-address

Synopsis	Enter the <b>link-local-address</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">link-local-address</a>
Tree	<a href="#">link-local-address</a>
Introduced	16.0.R1
Platforms	All

## address *string*

Synopsis	IPv6 link-local address
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">address</a> <a href="#">string</a>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

## duplicate-address-detection *boolean*

Synopsis	Enable Duplicate Address Detection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">duplicate-address-detection</a> <a href="#">boolean</a>
Tree	<a href="#">duplicate-address-detection</a>
Description	When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD) on the interface.  When configured to <b>false</b> , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

## local-dhcp-server *reference*

Synopsis	DHCP server for the interface
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 local-dhcp-server</b> <i>reference</i>
Tree	<a href="#">local-dhcp-server</a>
Reference	<b>configure router</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery</b>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

## host-route

Synopsis	Enter the <b>host-route</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery host-route</b>
Tree	<a href="#">host-route</a>
Introduced	20.2.R1
Platforms	All

## populate [[route-type](#)] *keyword*

Synopsis	Enter the <b>populate</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery host-route populate</b> <i>keyword</i>
Tree	<a href="#">populate</a>
Introduced	20.2.R1
Platforms	All

## [[route-type](#)] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery host-route populate</b> <i>keyword</i>

Tree	<a href="#">populate</a>
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	All

### **route-tag** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i> <b>route-tag</b> <i>number</i>
Tree	<a href="#">route-tag</a>
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	20.2.R1
Platforms	All

### **learn-unsolicited** *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">learn-unsolicited</a> <i>keyword</i>
Tree	<a href="#">learn-unsolicited</a>
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.  When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

## limit

Synopsis	Enter the <b>limit</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery limit</b>
Tree	<b>limit</b>
Introduced	16.0.R1
Platforms	All

## log-only *boolean*

Synopsis	Generate log entries when limit is reached
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery limit log-only</b> <i>boolean</i>
Tree	<b>log-only</b>
Description	When configured to <b>true</b> , the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.  When configured to <b>false</b> , the router does not send the warning message.
Default	false
Introduced	16.0.R1
Platforms	All

## max-entries *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 neighbor-discovery limit max-entries</b> <i>number</i>
Tree	<b>max-entries</b>
Description	This command configures the maximum number of entries that can be learned on an IP interface.  When unconfigured, no maximum limit is imposed.
Range	0 to 102400
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Threshold percentage that triggers a warning message
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery limit threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

**local-proxy-nd** *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery local-proxy-nd</a> <i>boolean</i>
Tree	<a href="#">local-proxy-nd</a>
Description	<p>When configured to <b>true</b>, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.</p> <p>When configured to <b>false</b>, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**proactive-refresh** *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery proactive-refresh</a> <i>keyword</i>
Tree	<a href="#">proactive-refresh</a>
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both

Introduced 16.0.R1  
 Platforms All

### **proxy-nd-policy** *reference*

Synopsis Proxy Neighbor Discovery policy name for the interface  
 Context **configure** [service ies string](#) [interface string](#) [ipv6 neighbor-discovery proxy-nd-policy reference](#)  
 Tree [proxy-nd-policy](#)  
 Reference **configure** [policy-options policy-statement string](#)  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **reachable-time** *number*

Synopsis Neighbor reachability detection timer  
 Context **configure** [service ies string](#) [interface string](#) [ipv6 neighbor-discovery reachable-time number](#)  
 Tree [reachable-time](#)  
 Range 30 to 3600  
 Introduced 16.0.R1  
 Platforms All

### **secure-nd**

Synopsis Enter the **secure-nd** context  
 Context **configure** [service ies string](#) [interface string](#) [ipv6 neighbor-discovery secure-nd](#)  
 Tree [secure-nd](#)  
 Introduced 16.0.R1  
 Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery secure-nd admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**allow-unsecured-msgs** *boolean*

Synopsis	Accept unsecured messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery secure-nd allow-unsecured-msgs</a> <i>boolean</i>
Tree	<a href="#">allow-unsecured-msgs</a>
Description	When configured to <b>true</b> , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to <b>false</b> , the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

**public-key-min-bits** *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery secure-nd public-key-min-bits</a> <i>number</i>
Tree	<a href="#">public-key-min-bits</a>
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

**security-parameter** *number*

Synopsis	Security parameter used in the generation of a CGA
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a> <a href="#">security-parameter</a> <i>number</i>
Tree	<a href="#">security-parameter</a>
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

**stale-time** *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">stale-time</a> <i>number</i>
Tree	<a href="#">stale-time</a>
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

**static-neighbor** [[ipv6-address](#)] *string*

Synopsis	Enter the <b>static-neighbor</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i>
Tree	<a href="#">static-neighbor</a>
Introduced	16.0.R1
Platforms	All

**[[ipv6-address](#)]** *string*

Synopsis	IPv6 address corresponding to the physical address
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i>
Tree	<a href="#">static-neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **mac-address** *string*

Synopsis MAC address for the static neighbor

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [neighbor-discovery](#) [static-neighbor](#) [string](#) **mac-address** [string](#)

Tree [mac-address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **qos-route-lookup** *keyword*

Synopsis IP address for QoS route lookup for ingress IP packets

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [qos-route-lookup](#) [keyword](#)

Tree [qos-route-lookup](#)

Description This command specifies the IP address type used for QPPB enabled per-packet QoS handling (in terms of FC and priority). When using QPPB, routes are associated with a QoS treatment (FC and optionally priority) through either explicit configuration or the route policy. If an IPv4 or IPv6 packet arrives on an interface where the configuration of this command applies to the packet, the QoS treatment of the packet is based on the route that matched the destination IP address or the route that matched the source IP address.

See "Enabling QPPB on an IP interface" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about QPPB.

Options destination, source, source-and-dest

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tcp-mss** *number*

Synopsis TCP maximum segment size for the interface

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [ipv6](#) [tcp-mss](#) [number](#)

Tree [tcp-mss](#)

Range 1220 to 9726

Introduced 16.0.R1



Platforms All

## urpf-check

Synopsis Enable the **urpf-check** context  
 Context **configure service ies string interface string ipv6 urpf-check**  
 Tree [urpf-check](#)  
 Introduced 16.0.R1  
 Platforms All

## ignore-default *boolean*

Synopsis Ignore default route when performing a uRPF check  
 Context **configure service ies string interface string ipv6 urpf-check ignore-default boolean**  
 Tree [ignore-default](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## mode *keyword*

Synopsis Unicast RPF check mode  
 Context **configure service ies string interface string ipv6 urpf-check mode keyword**  
 Tree [mode](#)  
 Options strict, loose, strict-no-ecmp  
 Default strict  
 Introduced 16.0.R1  
 Platforms All

## vrrp [*virtual-router-id*] *number*

Synopsis Enter the **vrrp** list instance  
 Context **configure service ies string interface string ipv6 vrrp number**  
 Tree [vrrp](#)  
 Max. Instances 4

Introduced	16.0.R1
Platforms	All

### **[virtual-router-id]** *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">vrrp</a> <i>number</i>
Tree	<a href="#">vrrp</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of VRRP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">vrrp</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**backup string**

Synopsis	Virtual router IP addresses for the interface
Context	<b>configure service ies string interface string ipv6 vrrp number backup string</b>
Tree	<b>backup</b>
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p> <p>For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.</p> <p>See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.</p>
Max. Instances	4
Introduced	16.0.R1
Platforms	All

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure service ies string interface string ipv6 vrrp number bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Introduced	16.0.R1
Platforms	All

**dest-ip (ipv4-address-no-zone | ipv6-address-no-zone)****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	<b>configure service ies string interface string ipv6 vrrp number bfd-liveness dest-ip</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>dest-ip</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **interface-name** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure service ies string interface string ipv6 vrrp number bfd-liveness interface-name string</b>
Tree	<b>interface-name</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **service-name** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure service ies string interface string ipv6 vrrp number bfd-liveness service-name string</b>
Tree	<b>service-name</b>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**init-delay number**

Synopsis	VRRP initialization delay timer
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <b>init-delay</b> <a href="#">number</a>
Tree	<a href="#">init-delay</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**mac string**

Synopsis	Virtual MAC address to use in ARP responses
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <b>mac</b> <a href="#">string</a>
Tree	<a href="#">mac</a>
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
Introduced	16.0.R1
Platforms	All

**master-int-inherit boolean**

Synopsis	Allow master instance to dictate the master down timer
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <b>master-int-inherit</b> <a href="#">boolean</a>
Tree	<a href="#">master-int-inherit</a>

Description	<p>When configured to <b>true</b>, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to <b>false</b>, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

### **message-interval** *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	<b>configure</b> <i>service ies string interface string ipv6 vrrp number message-interval number</i>
Tree	<a href="#">message-interval</a>
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command:</p> <ul style="list-style-type: none"> <li>• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as the master.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.</li> </ul>
Range	10 to 4095
Units	centiseconds
Default	100
Introduced	16.0.R1
Platforms	All

## monitor-oper-group *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">monitor-oper-group</a> <a href="#">reference</a>
Tree	<a href="#">monitor-oper-group</a>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <a href="#">string</a>
Introduced	22.2.R1
Platforms	All

## ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">ntp-reply</a> <a href="#">boolean</a>
Tree	<a href="#">ntp-reply</a>
Description	When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to <b>false</b> , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

## oper-group *reference*

Synopsis	Operational group name associated with the VRRP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">vrrp</a> <a href="#">number</a> <a href="#">oper-group</a> <a href="#">reference</a>
Tree	<a href="#">oper-group</a>
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master

router (MR), the operational group is up. The operational group is down for all other VRRP states.

Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **owner** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	<b>configure service ies</b> <i>string interface string ipv6 vrrp number owner</i> <i>boolean</i>
Tree	<i>owner</i>
Description	When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.  When configured to <b>false</b> , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

### **passive** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	<b>configure service ies</b> <i>string interface string ipv6 vrrp number passive</i> <i>boolean</i>
Tree	<i>passive</i>
Description	When configured to <b>true</b> , the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).



When configured to **false**, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.

Default	false
Introduced	16.0.R1
Platforms	All

### **ping-reply** *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">ping-reply</a> <i>boolean</i>
Tree	<a href="#">ping-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **policy** *reference*

Synopsis	VRRP priority control policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	<b>configure</b> <a href="#">vrrp</a> <a href="#">policy</a> <i>number</i>

Introduced	16.0.R1
Platforms	All

### **preempt** *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">preempt</a> <i>boolean</i>
Tree	<a href="#">preempt</a>
Description	When configured to <b>true</b> , this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.  When configured to <b>false</b> , this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.
Default	true
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Base priority for the VRRP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Description	This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.  The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **standby-forwarding** *boolean*

Synopsis	Allow standby router to forward traffic
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">standby-forwarding</a> <i>boolean</i>

Tree	<a href="#">standby-forwarding</a>
Description	When configured to <b>true</b> , the standby router forwards all traffic. When configured to <b>false</b> , the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.
Default	false
Introduced	16.0.R1
Platforms	All

### **telnet-reply** *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>telnet-reply</b> <i>boolean</i>
Tree	<a href="#">telnet-reply</a>
Description	When configured to <b>true</b> , the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address). When configured to <b>false</b> , the router silently discards Telnet requests sent to non-owner master virtual IP addresses.
Default	false
Introduced	16.0.R1
Platforms	All

### **traceroute-reply** *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <b>traceroute-reply</b> <i>boolean</i>
Tree	<a href="#">traceroute-reply</a>
Description	When configured to <b>true</b> , the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance. When configured to <b>false</b> , the router silently discards traceroute requests sent to non-owner master virtual IP addresses. Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).
Default	false
Introduced	16.0.R1

Platforms All

## load-balancing

Synopsis Enter the **load-balancing** context

Context **configure service ies string interface string load-balancing**

Tree [load-balancing](#)

Introduced 16.0.R1

Platforms All

## flow-label-load-balancing *boolean*

Synopsis Enable flow label load balancing

Context **configure service ies string interface string load-balancing flow-label-load-balancing boolean**

Tree [flow-label-load-balancing](#)

Description When configured to **true**, the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.

When configured to **false**, the router disables load balancing in ECMP and LAG.

Default false

Introduced 21.5.R1

Platforms All

## ip-load-balancing *keyword*

Synopsis IP load-balancing algorithm

Context **configure service ies string interface string load-balancing ip-load-balancing keyword**

Tree [ip-load-balancing](#)

Description This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the **l4-load-balancing** command is enabled, this command also includes the source or destination port in the hash inputs.

Options both, destination, source, inner-ip

Default both

Introduced 16.0.R3

Platforms All

### **spi-load-balancing** *boolean*

Synopsis	Enable SPI use in hashing
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i>
Tree	<a href="#">spi-load-balancing</a>
Description	When configured to <b>true</b> , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

### **teid-load-balancing** *boolean*

Synopsis	Enable use of TEID in hashing
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">teid-load-balancing</a> <i>boolean</i>
Tree	<a href="#">teid-load-balancing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **loopback** *boolean*

Synopsis	Use interface as a loopback interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopback</a> <i>boolean</i>
Tree	<a href="#">loopback</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mac** *string*

Synopsis	MAC address for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Introduced	16.0.R1

Platforms All

### **mac-accounting** *boolean*

Synopsis Enable MAC accounting functionality  
 Context **configure** *service ies string interface string mac-accounting boolean*  
 Tree [mac-accounting](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **monitor-oper-group** *reference*

Synopsis Operational group to monitor  
 Context **configure** *service ies string interface string monitor-oper-group reference*  
 Tree [monitor-oper-group](#)  
 Reference **configure** *service oper-group string*  
 Introduced 16.0.R1  
 Platforms All

### **multi-chassis-shunting-profile** *reference*

Synopsis Multi-chassis shunting profile name  
 Context **configure** *service ies string interface string multi-chassis-shunting-profile reference*  
 Tree [multi-chassis-shunting-profile](#)  
 Description This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.  
 Reference **configure** *router string ipsec multi-chassis-shunting-profile string*  
 Notes The following elements are part of a choice: **multi-chassis-shunting-profile** or (**dynamic-tunnel-redundant-nexthop** and **static-tunnel-redundant-nexthop**).  
 Introduced 22.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**multicast-network-domain** *reference*

Synopsis	Network domain name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">multicast-network-domain</a> <i>reference</i>
Tree	<a href="#">multicast-network-domain</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ping-template**

Synopsis	Enable the <b>ping-template</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a>
Tree	<a href="#">ping-template</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the ping template
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**destination-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ping template destination address
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a> <a href="#">destination-address</a> <i>string</i>
Tree	<a href="#">destination-address</a>

Description	This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address.  Unnumbered interfaces and loopback addresses are not supported.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### name reference



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ping template name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a> <i>name</i> <i>reference</i>
Tree	<a href="#">name</a>
Description	This command configures the name of the ping template to be assigned to the IP interface.
Reference	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i>
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### ptp-hw-assist

Synopsis	Enter the <b>ptp-hw-assist</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ptp-hw-assist</a>
Tree	<a href="#">ptp-hw-assist</a>
Description	Commands in this context enable the port-based timestamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.  Only one interface per physical port can have port-based timestamping assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**admin-state** *keyword*

Synopsis	Administrative state of the PTP timestamping assist
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ptp-hw-assist</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**radius-auth-policy** *reference*

Synopsis	Authentication policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">radius-auth-policy</a> <i>reference</i>
Tree	<a href="#">radius-auth-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap** [[sap-id](#)] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## **aarp**

Synopsis	Enable the <b>aarp</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>aarp</b>
Tree	<a href="#">aarp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **id reference**

Synopsis	AARP instance ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>aarp</b> <i>id reference</i>
Tree	<a href="#">id</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <b>aarp</b> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **type keyword**

Synopsis	Role referenced by the AARP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>aarp</b> <i>type keyword</i>
Tree	<a href="#">type</a>
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **accounting-policy reference**

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>accounting-policy</b> <i>reference</i>
Tree	<a href="#">accounting-policy</a>

Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SAP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**anti-spoof** *keyword*

Synopsis	Anti-spoof filtering
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">anti-spoof</a> <i>keyword</i>
Tree	<a href="#">anti-spoof</a>
Options	source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bandwidth** *number*

Synopsis	SAP bandwidth
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>bandwidth</b> <i>number</i>
Tree	<b>bandwidth</b>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

### **calling-station-id** *string*

Synopsis	Calling station ID
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>calling-station-id</b> <i>string</i>
Tree	<b>calling-station-id</b>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis	Collect accounting statistics
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<b>collect-stats</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection</b>
Tree	<b>cpu-protection</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis	Enable the <b>eth-cfm-monitoring</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a>
Tree	<a href="#">eth-cfm-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">aggregate</a>
Tree	<a href="#">aggregate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">car</a>
Tree	<a href="#">car</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a>
Tree	<a href="#">ip-src-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## policy-id *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <a href="#">reference</a>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <a href="#">number</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

## dist-cpu-protection *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dist-cpu-protection</a> <a href="#">reference</a>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <a href="#">string</a>
Introduced	16.0.R1

Platforms All

## egress

Synopsis Enter the **egress** context

Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress](#)

Tree [egress](#)

Introduced 16.0.R1

Platforms All

## agg-rate

Synopsis Enter the **agg-rate** context

Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress](#) [agg-rate](#)

Tree [agg-rate](#)

Notes The following elements are part of a choice: **agg-rate** or **percent-agg-rate**.

Introduced 16.0.R1

Platforms All

## adaptation-rule *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used

Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress](#) [agg-rate](#) [adaptation-rule](#) *keyword*

Tree [adaptation-rule](#)

Options max, min, closest

Default closest

Introduced 22.10.R1

Platforms 7750 SR-1, 7750 SR-s

## burst-limit (*number* | *keyword*)

Synopsis Shaping burst size when an aggregate shaper is used

Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress](#) [agg-rate](#) [burst-limit](#) (*number* | *keyword*)

Tree [burst-limit](#)

Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

### **limit-unused-bandwidth** *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress agg-rate limit-unused-bandwidth</a> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **queue-frame-based-accounting** *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress agg-rate queue-frame-based-accounting</a> <i>boolean</i>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **rate** *number*

Synopsis	Enforced aggregate rate for all queues
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress agg-rate rate</a> <i>number</i>
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1



Platforms All

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms All

## ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress filter](#) [ip reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter ip-filter string](#)  
 Introduced 16.0.R1  
 Platforms All

## ipv6 reference

Synopsis IPv6 filter policy name  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress filter](#) [ipv6 reference](#)  
 Tree [ipv6](#)  
 Reference **configure** [filter ipv6-filter string](#)  
 Introduced 16.0.R1  
 Platforms All

## qos

Synopsis Enter the **qos** context  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [egress qos](#)  
 Tree [qos](#)  
 Introduced 16.0.R1  
 Platforms All

## **policer-control-policy**

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure service ies string interface string sap string egress qos policer-control-policy</b>
Tree	<b>policer-control-policy</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure service ies string interface string sap string egress qos policer-control-policy overrides</b>
Tree	<b>overrides</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **root**

Synopsis	Enter the <b>root</b> context
Context	<b>configure service ies string interface string sap string egress qos policer-control-policy overrides root</b>
Tree	<b>root</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **max-rate** (*number | keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure service ies string interface string sap string egress qos policer-control-policy overrides root max-rate</b> ( <i>number   keyword</i> )
Tree	<b>max-rate</b>
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority-mbs-thresholds**

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority** [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>

Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **qinq-mark-top-only** *boolean*

Synopsis	Mark top Q-tags
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos qinq-mark-top-only</a> <i>boolean</i>
Tree	<a href="#">qinq-mark-top-only</a>
Default	false
Introduced	16.0.R1

Platforms All

## sap-egress

Synopsis Enter the **sap-egress** context

Context **configure service ies string interface string sap string egress qos sap-egress**

Tree [sap-egress](#)

Introduced 16.0.R1

Platforms All

## overrides

Synopsis Enter the **overrides** context

Context **configure service ies string interface string sap string egress qos sap-egress overrides**

Tree [overrides](#)

Introduced 16.0.R1

Platforms All

## hs-secondary-shaper *string*

Synopsis HS Secondary Shaper

Context **configure service ies string interface string sap string egress qos sap-egress overrides hs-secondary-shaper string**

Tree [hs-secondary-shaper](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## hs-wrr-group [[group-id](#)] *reference*

Synopsis Enter the **hs-wrr-group** list instance

Context **configure service ies string interface string sap string egress qos sap-egress overrides hs-wrr-group reference**

Tree [hs-wrr-group](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

**[group-id] reference**

Synopsis	HS WRR group identifier
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">egress qos sap-egress overrides</a> <a href="#">hs-wrr-group reference</a>
Tree	<a href="#">hs-wrr-group</a>
Reference	<b>configure</b> <a href="#">qos sap-egress string</a> <a href="#">hs-wrr-group number</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-class-weight number**

Synopsis	Class weight override of the WRR group
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">egress qos sap-egress overrides</a> <a href="#">hs-wrr-group reference</a> <a href="#">hs-class-weight number</a>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**percent-rate decimal-number**

Synopsis	Percent rate override applied to the HS WRR group
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">egress qos sap-egress overrides</a> <a href="#">hs-wrr-group reference</a> <a href="#">percent-rate decimal-number</a>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**rate (number | keyword)**

Synopsis	Scheduling rate override applied to the HS WRR group
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b> <b>hs-wrr-group</b> <i>reference</i> <b>rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### [\[policer-id\]](#) *reference*

Synopsis	Policer unique ID
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure qos sap-egress</b> <i>string</i> <a href="#">policer</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b> <a href="#">policer</a> <i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>

Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** *decimal-number*

Synopsis CIR percent rate

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress overrides](#)  
[policer](#) [reference](#) [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** *decimal-number*

Synopsis PIR percent rate

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress overrides](#)  
[policer](#) [reference](#) [percent-rate](#) [pir](#) *decimal-number*

Tree [pir](#)

Range 0.01 to 100.00

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate**

Synopsis Enter the **rate** context

Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [egress qos sap-egress overrides](#)  
[policer](#) [reference](#) [rate](#)

Tree [rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** (*number* | *keyword*)

Synopsis CIR rate

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b> <b>policer reference rate cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b> <b>policer reference rate pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides</b> <b>policer reference stat-mode</b> <i>keyword</i>
Tree	<b>stat-mode</b>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue** [*queue-id*] *reference*

Synopsis	Enter the <b>queue</b> list instance
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Context	<b>configure service ies string interface string sap string egress qos sap-egress overrides queue reference</b>
Tree	<b>queue</b>
Introduced	16.0.R1
Platforms	All

### **[queue-id] reference**

Synopsis	Policer unique ID
Context	<b>configure service ies string interface string sap string egress qos sap-egress overrides queue reference</b>
Tree	<b>queue</b>
Reference	<b>configure qos sap-egress string queue number</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure service ies string interface string sap string egress qos sap-egress overrides queue reference adaptation-rule</b>
Tree	<b>adaptation-rule</b>
Introduced	16.0.R1
Platforms	All

### **cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure service ies string interface string sap string egress qos sap-egress overrides queue reference adaptation-rule cir keyword</b>
Tree	<b>cir</b>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**pir** *keyword*

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <b>pir</b> <i>keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**avg-frame-overhead** *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>avg-frame-overhead</b> <i>decimal-number</i>
Tree	<a href="#">avg-frame-overhead</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

**burst-limit** (*number* | *keyword*)

Synopsis	Explicit shaping burst size for the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

**cbs** (*number* | *keyword*)

Synopsis	CBS
----------	-----

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

## drop-tail

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference drop-tail low</b>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	16.0.R1

Platforms All

### **hs-class-weight** *number*

Synopsis Class weight override for the queue

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **hs-class-weight** *number*

Tree [hs-class-weight](#)

Range 1 | 2 | 4 | 8

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis Enter the **hs-wred-queue** context

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **hs-wred-queue**

Tree [hs-wred-queue](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **policy** *reference*

Synopsis Slope policy applied to the HSQ queue group queue

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **hs-wred-queue** [policy](#) *reference*

Tree [policy](#)

Reference **configure** [qos](#) [slope-policy](#) *string*

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **hs-wrr-weight** *number*

Synopsis WRR weight to parent with the queue into the scheduler

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **hs-wrr-weight** *number*

Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<a href="#">configure service ies string interface string sap string egress qos sap-egress overrides queue reference mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<a href="#">configure service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth</a>
Tree	<a href="#">monitor-queue-depth</a>
Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	All

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<a href="#">configure service ies string interface string sap string egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling boolean</a>
Tree	<a href="#">fast-polling</a>
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.

Default	false
Introduced	20.10.R1
Platforms	All

### **violation-threshold** *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>violation-threshold</b> <i>decimal-number</i>
Tree	<a href="#">violation-threshold</a>
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

### **parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

### **cir-weight** *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All



**weight number**

Synopsis	PIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">weight</a> <a href="#">number</a>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir decimal-number**

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <a href="#">decimal-number</a>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

**pir decimal-number**

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <a href="#">decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00

Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a>
Tree	<a href="#">port-redirect-group</a>
Introduced	16.0.R1
Platforms	All

**group-name** *reference*

Synopsis	Name of the queue group redirect list policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**instance** *number*

Synopsis	Instance of port queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535

Introduced	16.0.R1
Platforms	All

## **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

## **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

## **scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Introduced	16.0.R1
Platforms	All

## **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Description	This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on),

the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
----------	--

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>parent weight</b> <i>number</i>
Tree	<b>weight</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>rate</b>
Tree	<b>rate</b>
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>rate cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos scheduler-policy overrides scheduler</b> <i>string</i> <b>rate pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 6400000000
Units	kilobps

Options	max
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress qos scheduler-policy policy-name reference</a>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos scheduler-policy string</a>
Introduced	16.0.R1
Platforms	All

### **queue-group-redirect-list** *reference*

Synopsis	Assign queue-group redirect list
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress queue-group-redirect-list reference</a>
Tree	<a href="#">queue-group-redirect-list</a>
Reference	<b>configure</b> <a href="#">qos queue-group-redirect-list string</a>
Introduced	16.0.R1
Platforms	All

### **virtual-port**

Synopsis	Enter the <b>virtual-port</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">egress virtual-port</a>
Tree	<a href="#">virtual-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vport-name** *reference*

Synopsis	Virtual port assigned to the SAP
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Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">vport-name</a> <i>reference</i>
Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## collect-lmm-fc-stats

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a>
Tree	<a href="#">collect-lmm-fc-stats</a>
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fc keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>



Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc-in-profile** *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>
Tree	<b>fc-in-profile</b>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-stats</b> <i>boolean</i>
Tree	<b>collect-lmm-stats</b>

Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** *md-admin-name reference ma-admin-name reference mep-id number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure</b> <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	<b>configure</b> <i>eth-cfm domain string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> <i>service ies string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</i>
Tree	<i>mep</i>
Reference	<b>configure</b> <i>eth-cfm domain string association string</i>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ais** *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <i>boolean</i>
Tree	<a href="#">ais</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## alarm-notification

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>alarm-notification</b>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-alarm-time *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>alarm-notification</b> <b>fng-alarm-time</b> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fng-reset-time *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>alarm-notification</b> <b>fng-reset-time</b> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm boolean**

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <b>ccm boolean</b>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority number**

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <b>ccm-ltm-priority number</b>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-padding-size number**

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <b>ccm-padding-size number</b>
Tree	<a href="#">ccm-padding-size</a>
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b>) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**csf**

Synopsis	Enable the <b>csf</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>csf</b>
Tree	<a href="#">csf</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**multiplier** *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>csf</b> <a href="#">multiplier</a> <i>decimal-number</i>
Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>eth-test</b>
Tree	<a href="#">eth-test</a>

Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>eth-test</b> <b>bit-error-threshold</b> <i>number</i>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **test-pattern**

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>eth-test</b> <b>test-pattern</b>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **crc-tlv** *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>eth-test</b> <b>test-pattern</b> <b>crc-tlv</b> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pattern** *keyword*

Synopsis Test pattern for Ethernet Test frames

Context **configure** *service* *ies* *string* *interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *eth-test* *test-pattern* *pattern* *keyword*

Tree [pattern](#)

Description This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Options all-zeros, all-ones

Default all-zeros

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fault-propagation** *keyword*

Synopsis Fault propagation for the MEP

Context **configure** *service* *ies* *string* *interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *fault-propagation* *keyword*

Tree [fault-propagation](#)

Options use-if-status-tlv, suspend-ccm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis Enter the **grace** context

Context **configure** *service* *ies* *string* *interface* *string* *sap* *string* *eth-cfm* *mep* *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number* *grace*

Tree [grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <a href="#">grace eth-ed</a>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window number**

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <a href="#">grace eth-ed max-rx-defect-window number</a>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority number**

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <a href="#">grace eth-ed priority number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-ed boolean**

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string</a> <a href="#">eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <a href="#">grace eth-ed rx-eth-ed boolean</a>

Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace tx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**squelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>squelch-ingress-levels</b> <i>number</i>
Tree	<a href="#">squelch-ingress-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max.	8
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fwd-wholesale**

Synopsis	Enter the <b>fwd-wholesale</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>fwd-wholesale</b>
Tree	<a href="#">fwd-wholesale</a>
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe-service** *reference*

Synopsis PPPoE service name

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [fwd-wholesale](#) [pppoe-service](#) *reference*

Tree [pppoe-service](#)

Reference **configure** [service](#) [epipe](#) *string*

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-admin-state** *keyword*

Synopsis Administrative state of host creation on the SAP

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [host-admin-state](#) *keyword*

Tree [host-admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-lockout-policy** *reference*

Synopsis Host lockout policy

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [host-lockout-policy](#) *reference*

Tree [host-lockout-policy](#)

Reference **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ingress**

Synopsis Enter the **ingress** context

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#)

Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ipv6</a> <i>reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>

Introduced 16.0.R1  
 Platforms All

### **match-qinq-dot1p** keyword

Synopsis Ingress match QinQ Dot1p  
 Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos](#) [match-qinq-dot1p](#) *keyword*  
 Tree [match-qinq-dot1p](#)  
 Options top, bottom  
 Introduced 16.0.R1  
 Platforms All

### **policer-control-policy**

Synopsis Enter the **policer-control-policy** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos](#) [policer-control-policy](#)  
 Tree [policer-control-policy](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **overrides**

Synopsis Enable the **overrides** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos](#) [policer-control-policy](#) [overrides](#)  
 Tree [overrides](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **root**

Synopsis Enter the **root** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress qos](#) [policer-control-policy](#) [overrides](#) [root](#)  
 Tree [root](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy</a> <a href="#">overrides root max-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority-mbs-thresholds**

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy</a> <a href="#">overrides root priority-mbs-thresholds</a>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos policer-control-policy</a> <a href="#">overrides root priority-mbs-thresholds min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR



**priority** [*priority-level*] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress</b> <b>qos</b> <b>policer-control-policy</b> <b>overrides</b> <b>root</b> <b>priority-mbs-thresholds</b> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress</b> <b>qos</b> <b>policer-control-policy</b> <b>overrides</b> <b>root</b> <b>priority-mbs-thresholds</b> <b>priority</b> <i>number</i>
Tree	<b>priority</b>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress</b> <b>qos</b> <b>policer-control-policy</b> <b>overrides</b> <b>root</b> <b>priority-mbs-thresholds</b> <b>priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mbs-contribution</b>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policy-name** *reference*

Synopsis	Policer control policy name
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos policer-control-policy</b> <i>policy-name</i> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos policer-control-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## sap-ingress

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b>
Tree	<a href="#">sap-ingress</a>
Introduced	16.0.R1
Platforms	All

## fp-redirect-group

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress fp-redirect-group</b>
Tree	<a href="#">fp-redirect-group</a>
Introduced	16.0.R1
Platforms	All

## group-name *reference*

Synopsis	Queue group template name created on forwarding plane
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress fp-redirect-group</b> <i>group-name</i> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**instance** *number*

Synopsis	Queue group instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

**ip-criteria**

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ip-criteria</a>
Tree	<a href="#">ip-criteria</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**activate-entry-tag** *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">ip-criteria</a> <a href="#">activate-entry-tag</a> <i>number</i>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ipv6-criteria**

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure</b> <a href="#">service ies string interface string sap string ingress qos sap-ingress overrides ipv6-criteria</a>
Tree	<a href="#">ipv6-criteria</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**activate-entry-tag** *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	<b>configure</b> <a href="#">service ies string interface string sap string ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag number</a>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">service ies string interface string sap string ingress qos sap-ingress overrides policer reference</a>
Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service ies string interface string sap string ingress qos sap-ingress overrides policer reference</a>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos sap-ingress string policer number</a>
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>cir</b> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue** [\[queue-id\]](#) *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

### **[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All



**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <b>cir</b> <a href="#">keyword</a>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">adaptation-rule</a> <b>pir</b> <a href="#">keyword</a>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**cbs (number | keyword)**

Synopsis	CBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>cbs</b> <a href="#">(number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b>

Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

## low

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

## percent-reduction-from-mbs (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

## mbs (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

## monitor-queue-depth

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b>
Tree	<a href="#">monitor-queue-depth</a>
Introduced	21.7.R1
Platforms	All

## fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Default	false
Introduced	21.7.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1

Platforms All

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [parent](#) **weight** [number](#)

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) **percent-rate**

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

### **cir** *decimal-number*

Synopsis CIR percent rate

Context **configure** [service](#) [ies](#) [string](#) [interface](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#) [reference](#) [percent-rate](#) **cir** [decimal-number](#)

Tree [cir](#)

Range 0.00 to 100.00

Introduced 16.0.R1

Platforms All

### **pir** *decimal-number*

Synopsis PIR percent rate

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b> <b>queue</b> <i>reference</i> <b>percent-rate pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b> <b>queue</b> <i>reference</i> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b> <b>queue</b> <i>reference</i> <b>rate</b> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides</b> <b>queue</b> <i>reference</i> <b>rate</b> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000

Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Policy ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">queuing-type</a> <i>keyword</i>
Tree	<a href="#">queuing-type</a>
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

### **overrides**

Synopsis	Enter the <b>overrides</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy overrides</b>
Tree	<b>overrides</b>
Introduced	16.0.R1
Platforms	All

### **scheduler** [**scheduler-name**] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy overrides scheduler</b> <i>string</i>
Tree	<b>scheduler</b>
Introduced	16.0.R1
Platforms	All

### **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy overrides scheduler</b> <i>string</i>
Tree	<b>scheduler</b>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string parent</b>
Tree	<b>parent</b>
Introduced	16.0.R1
Platforms	All

**cir-weight number**

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string parent cir-weight number</b>
Tree	<b>cir-weight</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string parent weight number</b>
Tree	<b>weight</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service ies string interface string sap string ingress qos scheduler-policy overrides scheduler string rate</b>
Tree	<b>rate</b>
Introduced	16.0.R1



Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR at which the queue it to operate

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **rate** **cir** (*number* | *keyword*)

Tree [cir](#)

Range 0 to 6400000000

Units kilobps

Options sum, max

Introduced 16.0.R1

Platforms All

### **pir** (*number* | *keyword*)

Synopsis PIR at which the queue is to operate

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string* **rate** **pir** (*number* | *keyword*)

Tree [pir](#)

Range 1 to 6400000000

Units kilobps

Options max

Introduced 16.0.R1

Platforms All

### **policy-name** *reference*

Synopsis Scheduler policy name

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [scheduler-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [scheduler-policy](#) *string*

Introduced 16.0.R1

Platforms All

**queue-group-redirect-list** *reference*

Synopsis	Queue group redirect list
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ingress queue-group-redirect-list reference</a>
Tree	<a href="#">queue-group-redirect-list</a>
Reference	<b>configure</b> <a href="#">qos queue-group-redirect-list string</a>
Introduced	16.0.R1
Platforms	All

**ip-tunnel** [[tunnel-name](#)] *string*

Synopsis	Enter the <b>ip-tunnel</b> list instance
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ip-tunnel string</a>
Tree	<a href="#">ip-tunnel</a>
Description	Commands in this context configure an IP-GRE or IP-IP tunnel and associate it with a private tunnel SAP within an IES service.
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[tunnel-name]** *string*

Synopsis	IP tunnel name
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ip-tunnel string</a>
Tree	<a href="#">ip-tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the IP tunnel
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **backup-remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup remote IP address that is applied to this tunnel
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>backup-remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>backup-remote-ip-address</b>
Introduced	16.0.R1
Platforms	All

### **clear-df-bit** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear the Do-not-Fragment bit
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>clear-df-bit</b> <i>boolean</i>
Tree	<b>clear-df-bit</b>
Description	When configured to <b>true</b> , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum. When configured to <b>false</b> , clearing of the DF bit is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**delivery-service** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service to originate and terminate GRE packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>delivery-service</b> <i>string</i>
Tree	<a href="#">delivery-service</a>
Description	This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel. The GRE tunnel does not come up until a valid delivery service is configured.
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**description** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dest-ip** [[dest-ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>dest-ip</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>dest-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dest-ip</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [**dest-ip-address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis IP address of the remote IP tunnel endpoint

Context **configure service ies string interface string sap string ip-tunnel string dest-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree **dest-ip**

Description This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dscp** keyword



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Differentiated Services Code Point (DSCP) name

Context **configure service ies string interface string sap string ip-tunnel string dscp** keyword

Tree **dscp**

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encapsulated-ip-mtu** number



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum size of the encapsulated tunnel packet

Context	<b>configure service ies string interface string sap string ip-tunnel string encapsulated-ip-mtu number</b>
Tree	<b>encapsulated-ip-mtu</b>
Description	This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gre-header



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>gre-header</b> context
Context	<b>configure service ies string interface string sap string ip-tunnel string gre-header</b>
Tree	<b>gre-header</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the GRE header in the tunnel
Context	<b>configure service ies string interface string sap string ip-tunnel string gre-header admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

## key

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>key</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">gre-header</a> <a href="#">key</a>
Tree	<a href="#">key</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the keys in the GRE header
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">gre-header</a> <a href="#">key</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## receive *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Receive key of the GRE header
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">gre-header</a> <a href="#">key</a> <a href="#">receive</a> <i>number</i>
Tree	<a href="#">receive</a>
Max. Range	0 to 4294967295
Default	0

Introduced 16.0.R1  
 Platforms All

### send number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send key of the GRE header  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [ip-tunnel string](#) [gre-header key](#)  
[send number](#)  
 Tree [send](#)  
 Max. Range 0 to 4294967295  
 Default 0  
 Introduced 16.0.R1  
 Platforms All

### icmp-generation



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **icmp-generation** context  
 Context **configure** [service ies string](#) [interface string](#) [sap string](#) [ip-tunnel string](#) [icmp-generation](#)  
 Tree [icmp-generation](#)  
 Introduced 21.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### frag-required



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **frag-required** context



Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b>
Tree	<b>frag-required</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval that the ICMP messages can be sent
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### message-count *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages sent
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ip-tunnel</a> <a href="#">string</a> <a href="#">icmp-generation</a> <a href="#">frag-required</a> <a href="#">message-count</a> <i>number</i>
Tree	<a href="#">message-count</a>
Description	This command configures the maximum number of ICMP messages that can be sent during the period specified by the <b>interval</b> command.
Range	10 to 1000
Default	100
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### icmp6-generation



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp6-generation</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ip-tunnel</a> <a href="#">string</a> <a href="#">icmp6-generation</a>
Tree	<a href="#">icmp6-generation</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### packet-too-big



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>packet-too-big</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a>
Tree	<a href="#">packet-too-big</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending Packet Too Big messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **number** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of PTB ICMPv6 messages that can be sent
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Description	This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**seconds** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval when PTB messages can be sent
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-mtu** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP MTU for the interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>ip-mtu</b> <i>number</i>
Tree	<b>ip-mtu</b>
Description	This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value.  When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipsec-transport-mode-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transport mode profile name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">ipsec-transport-mode-profile</a> <i>reference</i>
Tree	<a href="#">ipsec-transport-mode-profile</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transport-mode-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IP address of this tunnel
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">local-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-ip-address</a>
Description	This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6).  When this command specifies an IPv6 address, it must be a global unicast address.
Introduced	16.0.R1
Platforms	All

**pmtu-discovery-aging** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to age out the learned path MTU
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>pmtu-discovery-aging</b> <i>number</i>
Tree	<a href="#">pmtu-discovery-aging</a>
Description	This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the private side
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>private-tcp-mss-adjust</b> <i>number</i>
Tree	<a href="#">private-tcp-mss-adjust</a>
Description	This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>propagate-pmtu-v4</b> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of path MTU to IPv6 hosts
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>propagate-pmtu-v6</b> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** (*number | keyword*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the public side
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>public-tcp-mss-adjust</b> ( <i>number   keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Description	This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reassemble** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum reassembly wait time
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">reassemble</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">reassemble</a>
Description	This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.
Range	1 to 5000
Units	milliseconds
Options	use-tunnel-group-setting, none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of the tunnel
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">remote-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">remote-ip-address</a>
Introduced	16.0.R1
Platforms	All

**ipsec-gateway** [[name](#)] *string*

Synopsis	Enter the <b>ipsec-gateway</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i>
Tree	<a href="#">ipsec-gateway</a>
Max. Instances	1



Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis IPsec gateway name  
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string*  
 Tree [ipsec-gateway](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the IPsec gateway  
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string* **admin-state** *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cert**

Synopsis Enter the **cert** context  
 Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-gateway](#) *string* **cert**  
 Tree [cert](#)  
 Introduced 19.7.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cert-profile** *reference*

Synopsis Certificate profile name

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert</b> <b>cert-profile</b> <i>reference</i>
Tree	<a href="#">cert-profile</a>
Reference	<b>configure ipsec cert-profile</b> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## status-verify

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert</b> <b>status-verify</b>
Tree	<a href="#">status-verify</a>
Description	Commands in this context configure certificate revocation status verification.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-result *keyword*

Synopsis	Default result of Certificate Status Verification (CSV)
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert</b> <b>status-verify</b> <b>default-result</b> <i>keyword</i>
Tree	<a href="#">default-result</a>
Description	This command specifies the default result when both the primary and secondary methods fail to provide an answer.
Options	revoked, good
Default	revoked
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## primary *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert</b> <b>status-verify</b> <b>primary</b> <i>keyword</i>
Tree	<a href="#">primary</a>

Options	crl, ocsp
Default	crl
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **secondary** *keyword*

Synopsis	Secondary method of CSV to verify the revocation status
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert status-verify</a> <b>secondary</b> <i>keyword</i>
Tree	<a href="#">secondary</a>
Options	none, crl, ocsp
Default	none
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **trust-anchor-profile** *reference*

Synopsis	Trust anchor profile name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert trust-anchor-profile</a> <i>reference</i>
Tree	<a href="#">trust-anchor-profile</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">trust-anchor-profile</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **client-db**

Synopsis	Enable the <b>client-db</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">client-db</a>
Tree	<a href="#">client-db</a>
Description	Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fallback** *boolean*

Synopsis	Fall back to the default authentication policy
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string ipsec-gateway string client-db fallback</a> <i>boolean</i>
Tree	<a href="#">fallback</a>
Description	When configured to <b>true</b> , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database.  When configured to <b>false</b> and the client database lookup fails to return a matched result, the system fails the tunnel setup.
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name** *reference*

Synopsis	Client database name
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string ipsec-gateway string client-db name</a> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure ipsec client-db string</b>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-secure-service**

Synopsis	Enable the <b>default-secure-service</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string sap string ipsec-gateway string default-secure-service</a>
Tree	<a href="#">default-secure-service</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private IPsec tunnel interface name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-secure-service interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default security service name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-secure-service service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-tunnel-template** *reference*

Synopsis	Default tunnel policy template for the gateway
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-tunnel-template</a> <i>reference</i>
Tree	<a href="#">default-tunnel-template</a>
Reference	<b>configure</b> <a href="#">ipsec tunnel-template</a> <i>number</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp-address-assignment

Synopsis	Enter the <b>dhcp-address-assignment</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ipsec-gateway</a> <a href="#">string</a> <a href="#">dhcp-address-assignment</a>
Tree	<a href="#">dhcp-address-assignment</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcpv4

Synopsis	Enable the <b>dhcpv4</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ipsec-gateway</a> <a href="#">string</a> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv4</a>
Tree	<a href="#">dhcpv4</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the IPsec DHCPv4 server
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ipsec-gateway</a> <a href="#">string</a> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv4</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gi-address *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Gateway IP address of DHCPv4 packets sent by the system
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ipsec-gateway</a> <a href="#">string</a> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv4</a> <a href="#">gi-address</a> <i>string</i>

Tree	<a href="#">gi-address</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **send-release** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv4 release message when IPsec tunnel removed
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv4</a> <b>send-release</b> <i>boolean</i>
Tree	<a href="#">send-release</a>
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **server**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>server</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv4</a> <b>server</b>
Tree	<a href="#">server</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv4 server addresses
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv4 server address</b> <i>string</i>
Tree	<b>address</b>
Description	This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance used to reach the DHCPv4 server
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv4 server router-instance</b> <i>string</i>
Tree	<b>router-instance</b>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcpv6**

Synopsis	Enable the <b>dhcpv6</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv6</b>
Tree	<b>dhcpv6</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the DHCPv6 server
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Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **link-address** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Link address of the relayed DHCPv6 packets
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6</a> <a href="#">link-address</a> <i>string</i>
Tree	<a href="#">link-address</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **send-release** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv6 release message when IPsec tunnel removed
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6</a> <a href="#">send-release</a> <i>boolean</i>
Tree	<a href="#">send-release</a>
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## server

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>server</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv6 server</b>
Tree	<b>server</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server addresses
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv6 server address</b> <i>string</i>
Tree	<b>address</b>
Description	This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router-instance *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance to reach the DHCPv6 server
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv6 server router-instance</b> <i>string</i>

Tree	<a href="#">router-instance</a>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ike-policy** *reference*

Synopsis	IKE policy ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">ike-policy</a> <i>reference</i>
Tree	<a href="#">ike-policy</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ike-policy</a> <i>number</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local**

Synopsis	Enter the <b>local</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local</a>
Tree	<a href="#">local</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address-assignment**

Synopsis	Enable the <b>address-assignment</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local</a> <a href="#">address-assignment</a>
Tree	<a href="#">address-assignment</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of local address assignments
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Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp-server *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv4 server name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment</a> <a href="#">ipv4</a> <a href="#">dhcp-server</a> <i>string</i>
Tree	<a href="#">dhcp-server</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the pool defined in the specified DHCPv4 server
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router-instance *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID for the local DHCPv4 server
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## secondary-pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the secondary pool defined in the DHCPv4 server
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> <a href="#">secondary-pool</a> <i>string</i>

Tree	<a href="#">secondary-pool</a>
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp-server *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv6 server name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment</a> <a href="#">ipv6</a> <a href="#">dhcp-server</a> <i>string</i>
Tree	<a href="#">dhcp-server</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pool string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secondary pool name defined in the DHCPv6 server
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local address-assignment ipv6 pool string</a>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router-instance string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID hosting the DHCPv6 connection
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local address-assignment ipv6 router-instance string</a>
Tree	<a href="#">router-instance</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gateway-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local gateway address of the IPsec gateway
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local gateway-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )

Tree	<a href="#">gateway-address</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id**

Synopsis	Enter the <b>id</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id</a>
Tree	<a href="#">id</a>
Description	Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**auto****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Select ID based on authentication method in IKE policy
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id auto</a>
Tree	<a href="#">auto</a>
Notes	The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fqdn string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN as the local ID type
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id fqdn string</a>
Tree	<a href="#">fqdn</a>



String Length	1 to 255
Notes	The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv4 string



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address as the local ID type
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id ipv4 string</a>
Tree	<a href="#">ipv4</a>
Notes	The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address as the local ID type
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ipsec-gateway string</a> <a href="#">local id ipv6 (<i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>)</a>
Tree	<a href="#">ipv6</a>
Notes	The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### max-history-key-records

Synopsis	Enter the <b>max-history-key-records</b> context
----------	--

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>max-history-key-records</b>
Tree	<b>max-history-key-records</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esp number**

Synopsis	Maximum number of recent records
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>max-history-key-records</b> <b>esp</b> <i>number</i>
Tree	<b>esp</b>
Range	1 to 48
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ike number**

Synopsis	Maximum number of historical IKE keys recorded
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>max-history-key-records</b> <b>ike</b> <i>number</i>
Tree	<b>ike</b>
Range	1 to 3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pre-shared-key string**

Synopsis	Pre-shared key for the IPsec gateway
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>pre-shared-key</b> <i>string</i>
Tree	<b>pre-shared-key</b>
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## radius

Synopsis	Enter the <b>radius</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>radius</b>
Tree	<b>radius</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-policy *reference*

Synopsis	RADIUS accounting policy
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>radius</b> <b>accounting-policy</b> <i>reference</i>
Tree	<b>accounting-policy</b>
Reference	<b>configure ipsec radius</b> <b>accounting-policy</b> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication-policy *reference*

Synopsis	RADIUS authentication policy
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>radius</b> <b>authentication-policy</b> <i>reference</i>
Tree	<b>authentication-policy</b>
Reference	<b>configure ipsec radius</b> <b>authentication-policy</b> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ts-list *reference*

Synopsis	TS list used for IKEv2 TS negotiation
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>ts-list</b> <i>reference</i>
Tree	<b>ts-list</b>
Reference	<b>configure ipsec</b> <b>ts-list</b> <i>string</i>
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lag

Synopsis Enter the **lag** context

Context **configure** *service ies string interface string sap string lag*

Tree [lag](#)

Introduced 16.0.R1

Platforms All

## link-map-profile *number*

Synopsis LAG link map profile for a SAP or network interface

Context **configure** *service ies string interface string sap string lag link-map-profile number*

Tree [link-map-profile](#)

Description This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range 1 to 64

Introduced 16.0.R1

Platforms All

## per-link-hash

Synopsis Enter the **per-link-hash** context

Context **configure** *service ies string interface string sap string lag per-link-hash*

Tree [per-link-hash](#)

Introduced 16.0.R1

Platforms All

## class *number*

Synopsis Class used on LAG egress using weighted per-link-hash

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag per-link-hash class</b> <i>number</i>
Tree	<b>class</b>
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag per-link-hash weight</b> <i>number</i>
Tree	<b>weight</b>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

### **multi-service-site** *reference*

Synopsis	Multi service site name
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>multi-service-site</b> <i>reference</i>
Tree	<b>multi-service-site</b>
Reference	<b>configure service customer</b> <i>string</i> <b>multi-service-site</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **static-host**

Synopsis	Enter the <b>static-host</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b>
Tree	<b>static-host</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4 [ip] string mac string**

Synopsis	Enter the <b>ipv4</b> list instance
Context	<b>configure service ies string interface string sap string static-host ipv4 string mac string</b>
Tree	<b>ipv4</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ip] string**

Synopsis	IP address
Context	<b>configure service ies string interface string sap string static-host ipv4 string mac string</b>
Tree	<b>ipv4</b>
MD-CLI Default	0.0.0.0
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac string**

Synopsis	MAC address
Context	<b>configure service ies string interface string sap string static-host ipv4 string mac string</b>
Tree	<b>ipv4</b>
MD-CLI Default	00:00:00:00:00:00
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the static host
Context	<b>configure service ies string interface string sap string static-host ipv4 string mac string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **anccp-string** *string*

Synopsis	ANCCP string
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <b>anccp-string</b> <a href="#">string</a>
Tree	<a href="#">anccp-string</a>
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **app-profile**

Synopsis	Enter the <b>app-profile</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <b>app-profile</b>
Tree	<a href="#">app-profile</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** *reference*

Synopsis	Application profile used by the static host
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <b>app-profile</b> <a href="#">profile</a> <a href="#">reference</a>
Tree	<a href="#">profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-profile</a> <a href="#">string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id** *string*

Synopsis	Intermediate destination ID
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Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">int-dest-id</a> <i>string</i>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile** *reference*

Synopsis	SLA profile name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Sub-profile name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id**

Synopsis	Enter the <b>subscriber-id</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a>
Tree	<a href="#">subscriber-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**string** *string*

Synopsis	Subscriber identification
Context	<b>configure</b> <i>service ies string interface string sap string static-host ipv4 string mac string subscriber-id string string</i>
Tree	<i>string</i>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**use-sap-id**

Synopsis	Use the SAP id as subscriber ID
Context	<b>configure</b> <i>service ies string interface string sap string static-host ipv4 string mac string subscriber-id use-sap-id</i>
Tree	<i>use-sap-id</i>
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**transit-policy**

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure</b> <i>service ies string interface string sap string transit-policy</i>
Tree	<i>transit-policy</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
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Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy prefix</a> <i>reference</i>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy-ipv4** *reference*

Synopsis	Host connectivity IPv4 policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">shcv-policy-ipv4</a> <i>reference</i>
Tree	<a href="#">shcv-policy-ipv4</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>

Tree	<a href="#">spoke-sdp</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP binding ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**aarp**

Synopsis	Enable the <b>aarp</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>aarp</b>
Tree	<a href="#">aarp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id reference**

Synopsis	AARP instance ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>aarp</b> <i>id reference</i>
Tree	<a href="#">id</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <b>aarp</b> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Role referenced by the AARP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">aarp</a> <a href="#">type</a> <a href="#">keyword</a>
Tree	<a href="#">type</a>
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy reference**

Synopsis	Policy to collect accounting statistics
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">accounting-policy</a> <a href="#">reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <a href="#">number</a>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the SDP binding to the service
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**app-profile reference**

Synopsis	Application profile name for this SDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">app-profile</a> <a href="#">reference</a>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-profile</a> <a href="#">string</a>
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **bfd**

Synopsis Enter the **bfd** context

Context **configure service ies string interface string spoke-sdp string bfd**

Tree [bfd](#)

Introduced 21.2.R1

Platforms All

## **bfd-liveness**

Synopsis Enable the **bfd-liveness** context

Context **configure service ies string interface string spoke-sdp string bfd bfd-liveness**

Tree [bfd-liveness](#)

Introduced 21.2.R1

Platforms All

## **encap keyword**

Synopsis BFD encapsulation used on the SDP binding

Context **configure service ies string interface string spoke-sdp string bfd bfd-liveness encap keyword**

Tree [encap](#)

Options ipv4

Default ipv4

Introduced 21.2.R1

Platforms All

## **bfd-template reference**

Synopsis BFD template associated with the SDP binding

Context **configure service ies string interface string spoke-sdp string bfd bfd-template reference**

Tree [bfd-template](#)

Description This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum

transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the **configure router bfd** context.

Reference	<b>configure bfd bfd-template</b> <i>string</i>
Introduced	21.2.R1
Platforms	All

### **failure-action** *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>bfd failure-action</b> <i>keyword</i>
Tree	<b>failure-action</b>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Options	none, down
Default	none
Introduced	21.2.R1
Platforms	All

### **wait-for-up-timer** *number*

Synopsis	Time waited for BFD up status
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>bfd wait-for-up-timer</b> <i>number</i>
Tree	<b>wait-for-up-timer</b>
Description	<p>This command configures the time interval that is used to wait for a BFD session to come up.</p> <p>This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.</p>
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

**control-word** *boolean*

Synopsis	Use the control word as preferred
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>control-word</b> <i>boolean</i>
Tree	<a href="#">control-word</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>cpu-protection</b>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**eth-cfm-monitoring**

Synopsis	Enable the <b>eth-cfm-monitoring</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <b>eth-cfm-monitoring</b>
Tree	<a href="#">eth-cfm-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [cpu-protection eth-cfm-monitoring aggregate](#)

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [cpu-protection eth-cfm-monitoring car](#)

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## ip-src-monitoring

Synopsis Enable IP source monitoring for CPU protection

Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [cpu-protection ip-src-monitoring](#)

Tree [ip-src-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis Monitor MAC for CPU protection

Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [cpu-protection mac-monitoring](#)

Tree [mac-monitoring](#)



Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **policy-id** *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a>

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Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

### **ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ipv6 reference**

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter ipv6 reference</a>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

### **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress qos network</a>
Tree	<a href="#">network</a>

Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Network policy ID  
 Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network policy-name reference](#)  
 Tree [policy-name](#)  
 Reference **configure** [qos network string](#)  
 Introduced 16.0.R1  
 Platforms All

### **port-redirect-group**

Synopsis Enter the **port-redirect-group** context  
 Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network port-redirect-group](#)  
 Tree [port-redirect-group](#)  
 Introduced 16.0.R1  
 Platforms All

### **group-name** *reference*

Synopsis Name of the egress port queue group  
 Context **configure** [service ies string](#) [interface string](#) [spoke-sdp string](#) [egress qos network port-redirect-group group-name reference](#)  
 Tree [group-name](#)  
 Reference **configure** [qos queue-group-templates egress queue-group string](#)  
 Introduced 16.0.R1  
 Platforms All

### **instance** *number*

Synopsis Queue-group instance ID

Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress qos network port-redirect-group</b> <i>instance</i> <b>number</b>
Tree	<b>instance</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>egress vc-label</b> <i>number</i>
Tree	<b>vc-label</b>
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

### **entropy-label**

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>entropy-label</b>
Tree	<b>entropy-label</b>
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

### **eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b>
Tree	<b>eth-cfm</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**collect-lmm-fc-stats**

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure service ies string interface string spoke-sdp string eth-cfm collect-lmm-fc-stats</b>
Tree	<b>collect-lmm-fc-stats</b>
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc keyword**

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure service ies string interface string spoke-sdp string eth-cfm collect-lmm-fc-stats fc keyword</b>
Tree	<b>fc</b>
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc-in-profile keyword**

Synopsis	Forwarding class name for profile-aware counter
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm collect-lmm-fc-stats fc-in-profile</b> <i>keyword</i>
Tree	<b>fc-in-profile</b>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm collect-lmm-stats</b> <i>boolean</i>
Tree	<b>collect-lmm-stats</b>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<b>mep</b>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm domain string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm domain string</a> <a href="#">association string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>admin-state</b> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ais** *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>ais</b> <a href="#">boolean</a>
Tree	<a href="#">ais</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>alarm-notification</b>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <b>fng-alarm-time</b> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <b>fng-reset-time</b> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm** *boolean*

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm</b> <i>boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
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Context	<b>configure</b> <i>service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <i>service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **csf**

Synopsis	Enable the <b>csf</b> context
Context	<b>configure</b> <i>service ies string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</i>
Tree	<a href="#">csf</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf multiplier</b> <i>decimal-number</i>
Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b> <b>bit-error-threshold</b> <i>number</i>

Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## test-pattern

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">crc-tlv</a> <a href="#">boolean</a>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <a href="#">keyword</a>
Tree	<a href="#">pattern</a>

Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fault-propagation** *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>fault-propagation</b> <i>keyword</i>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>grace</b>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <b>eth-ed</b>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-rx-defect-window** *number*

Synopsis Maximum received ETH-ED expected defect window duration

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace](#) [eth-ed](#) **max-rx-defect-window** *number*

Tree [max-rx-defect-window](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis Transmission priority for ETH-ED PDUs

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace](#) [eth-ed](#) **priority** *number*

Tree [priority](#)

Range 0 to 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed** *boolean*

Synopsis Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP

Context **configure** [service](#) [ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) [mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace](#) [eth-ed](#) **rx-eth-ed** *boolean*

Tree [rx-eth-ed](#)

Description This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <a href="#">boolean</a>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <a href="#">boolean</a>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">tx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">one-way-delay-threshold</a> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>



Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <i>service ies string interface string spoke-sdp string eth-cfm squelch-ingress-levels number</i>
Tree	<a href="#">squelch-ingress-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **hash-label**

Synopsis	Enable the <b>hash-label</b> context
Context	<b>configure</b> <i>service ies string interface string spoke-sdp string hash-label</i>
Tree	<a href="#">hash-label</a>
Description	<p>Commands in this context configure the use of hash labels for egress datapaths.</p> <p>For information about hash-label handling, see the "Hash labels" section of the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i>.</p>
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

## signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">hash-label</a> <a href="#">signal-capability</a>
Tree	<a href="#">signal-capability</a>
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.  The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1

Platforms All

### ipv6 reference

Synopsis IPv6 filter policy name  
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [ingress filter ipv6 reference](#)  
 Tree [ipv6](#)  
 Reference **configure** [filter ipv6-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### qos

Synopsis Enter the **qos** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [ingress qos](#)  
 Tree [qos](#)  
 Introduced 16.0.R1  
 Platforms All

### network

Synopsis Enter the **network** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [ingress qos network](#)  
 Tree [network](#)  
 Introduced 16.0.R1  
 Platforms All

### fp-redirect-group

Synopsis Enter the **fp-redirect-group** context  
 Context **configure** [service ies](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [ingress qos network fp-redirect-group](#)  
 Tree [fp-redirect-group](#)  
 Introduced 16.0.R1  
 Platforms All

**group-name** *reference*

Synopsis	Name of the forwarding plane queue group template
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**instance** *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Network policy ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos network</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress vc-label</b> <i>number</i>
Tree	<b>vc-label</b>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

## transit-policy

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>transit-policy</b>
Tree	<b>transit-policy</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>transit-policy ip</b> <i>reference</i>
Tree	<b>ip</b>
Reference	<b>configure application-assurance group</b> <i>number</i> <b>partition</b> <i>number</i> <b>transit-ip-policy</b> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
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Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vc-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Virtual circuit type associated with the SDP binding
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vc-type</a> <i>keyword</i>
Tree	<a href="#">vc-type</a>
Options	ether, ipipe
Default	ether
Introduced	16.0.R1
Platforms	All

### **static-tunnel-redundant-nexthop** *string*

Synopsis	Address for the static ISA tunnel redundant next-hop
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">static-tunnel-redundant-nexthop</a> <i>string</i>
Tree	<a href="#">static-tunnel-redundant-nexthop</a>
Description	This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel. The next-hop address is resolved in the routing table of the corresponding service.
Notes	The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or ( <b>dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop</b> ).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tos-marking-state** *keyword*

Synopsis	TOS marking state
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>tos-marking-state</b> <i>keyword</i>
Tree	<a href="#">tos-marking-state</a>
Options	trusted, untrusted
Default	untrusted
Introduced	16.0.R1
Platforms	All

**tunnel** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable/disable tunnel interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>tunnel</b> <i>boolean</i>
Tree	<a href="#">tunnel</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vas-if-type** *keyword*

Synopsis	VAS interface type
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>vas-if-type</b> <i>keyword</i>
Tree	<a href="#">vas-if-type</a>
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

**vpls** [[vpls-name](#)] *string*

Synopsis	Enter the <b>vpls</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>vpls</b> <i>string</i>
Tree	<a href="#">vpls</a>

Max. Instances	1
Introduced	16.0.R1
Platforms	All

### **[vpls-name]** *string*

Synopsis	VPLS service
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">vpls string</a>
Tree	<a href="#">vpls</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

### **reclassify-using-qos** *reference*

Synopsis	Egress QoS policy
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">interface string</a> <a href="#">vpls string</a> <a href="#">egress</a> <a href="#">reclassify-using-qos reference</a>
Tree	<a href="#">reclassify-using-qos</a>
Reference	<b>configure</b> <a href="#">qos sap-egress string</a>
Introduced	16.0.R1
Platforms	All

### **routed-override-filter**

Synopsis	Enter the <b>routed-override-filter</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>egress</b> <b>routed-override-filter</b>
Tree	<b>routed-override-filter</b>
Introduced	16.0.R1
Platforms	All

### ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>egress</b> <b>routed-override-filter</b> <b>ip reference</b>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>egress</b> <b>routed-override-filter</b> <b>ipv6 reference</b>
Tree	<b>ipv6</b>
Reference	<b>configure filter ipv6-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### evpn

Synopsis	Enter the <b>evpn</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn</b>
Tree	<b>evpn</b>
Introduced	19.10.R1
Platforms	All

### arp

Synopsis	Enter the <b>arp</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn arp</b>
Tree	<b>arp</b>
Introduced	19.10.R1
Platforms	All

### **advertise** [*route-type*] *keyword*

Synopsis	Enter the <b>advertise</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn arp advertise</b> <i>keyword</i>
Tree	<b>advertise</b>
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The <b>learn-dynamic</b> command must be set to <b>false</b> when using this functionality.
Introduced	19.10.R1
Platforms	All

### [*route-type*] *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn arp advertise</b> <i>keyword</i>
Tree	<b>advertise</b>
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **route-tag** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn arp advertise</b> <i>keyword</i> <b>route-tag</b> <i>number</i>

Tree	<a href="#">route-tag</a>
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	19.10.R1
Platforms	All

### **flood-garp-and-unknown-req** *boolean*

Synopsis	Allow CPM originated ARP frames to flood R-VPLS service
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn arp</a> <b>flood-garp-and-unknown-req</b> <i>boolean</i>
Tree	<a href="#">flood-garp-and-unknown-req</a>
Description	When configured to <b>true</b> , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command. When configured to <b>false</b> , CPM-originated ARP flooding is suppressed.
Default	true
Introduced	19.10.R1
Platforms	All

### **learn-dynamic** *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn arp</a> <b>learn-dynamic</b> <i>boolean</i>
Tree	<a href="#">learn-dynamic</a>
Description	When configured to <b>true</b> , the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to <b>false</b> , learning is disabled and table entries are not created for these messages.
Default	true
Introduced	19.10.R1
Platforms	All

**nd**

Synopsis	Enter the <b>nd</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <b>nd</b>
Tree	<a href="#">nd</a>
Introduced	20.5.R1
Platforms	All

**advertise** [[route-type](#)] *keyword*

Synopsis	Enter the <b>advertise</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <b>nd</b> <a href="#">advertise</a> <i>keyword</i>
Tree	<a href="#">advertise</a>
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes.  The <b>learn-dynamic</b> command must be set to <b>false</b> when using this functionality.
Introduced	20.5.R1
Platforms	All

**[[route-type](#)]** *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <b>nd</b> <a href="#">advertise</a> <i>keyword</i>
Tree	<a href="#">advertise</a>
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**route-tag** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn nd advertise</b> <i>keyword</i> <b>route-tag</b> <i>number</i>
Tree	<b>route-tag</b>
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	20.5.R1
Platforms	All

### **learn-dynamic** *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn nd learn-dynamic</b> <i>boolean</i>
Tree	<b>learn-dynamic</b>
Description	When configured to <b>true</b> , the system processes ARP or ND messages that arrive on EVPN tunnels.  When configured to <b>false</b> , learning is disabled and table entries are not created for these messages.
Default	true
Introduced	20.5.R1
Platforms	All

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>ingress</b>
Tree	<b>ingress</b>
Introduced	16.0.R1
Platforms	All

### **routed-override-filter**

Synopsis	Enter the <b>routed-override-filter</b> context
Context	<b>configure service ies</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>ingress</b> <b>routed-override-filter</b>

Tree	<a href="#">routed-override-filter</a>
Introduced	16.0.R1
Platforms	All

**ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">ingress</a> <a href="#">routed-override-filter ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ipv6 reference**

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">ingress</a> <a href="#">routed-override-filter ipv6 reference</a>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**redundant-interface** [\[interface-name\]](#) *string*

Synopsis	Enter the <b>redundant-interface</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i>
Tree	<a href="#">redundant-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[interface-name]** *string*

Synopsis	Interface name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i>

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Tree	<a href="#">redundant-interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <b>hold-time</b>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>hold-time ipv4</b>
Tree	<b>ipv4</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>hold-time ipv4 down</b>
Tree	<b>down</b>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>hold-time ipv4 down init-only</b> <i>boolean</i>
Tree	<b>init-only</b>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## seconds *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure service ies</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>hold-time ipv4 down seconds</b> <i>number</i>
Tree	<b>seconds</b>



Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## up

Synopsis	Enter the <b>up</b> context
Context	<b>configure service ies string redundant-interface string hold-time ipv4 up</b>
Tree	<b>up</b>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## seconds *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure service ies string redundant-interface string hold-time ipv4 up seconds number</b>
Tree	<b>seconds</b>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-mtu *number*

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure service ies string redundant-interface string ip-mtu number</b>
Tree	<b>ip-mtu</b>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service ies string redundant-interface string ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## primary

Synopsis	Enable the <b>primary</b> context
Context	<b>configure service ies string redundant-interface string ipv4 primary</b>
Tree	<a href="#">primary</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address *string*

Synopsis	IPv4 address to be assigned to the interface
Context	<b>configure service ies string redundant-interface string ipv4 primary address string</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix-length *number*

Synopsis	IPv4 address prefix length
Context	<b>configure service ies string redundant-interface string ipv4 primary prefix-length number</b>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.

Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-ip** *string*

Synopsis Remote IP address for the interface  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [ipv4](#) [primary](#) [remote-ip](#) *string*  
 Tree [remote-ip](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string*  
 Tree [spoke-sdp](#)  
 Max. Instances 1  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[sdp-bind-id]** *string*

Synopsis SDP binding ID  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string*  
 Tree [spoke-sdp](#)  
 String Length 3 to 16  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the SDP binding to the service  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [admin-state](#) *keyword*

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**control-word** *boolean*

Synopsis	Use the control word as preferred
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>control-word</b> <i>boolean</i>
Tree	<a href="#">control-word</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>egress</b>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <a href="#">reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <a href="#">number</a>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress filter ip reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vc-label number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end  
 Context **configure** [service ies](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress vc-label number](#)  
 Tree [vc-label](#)  
 Range 1 to 1048575  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">service-id</a> <i>number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**subscriber-interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>subscriber-interface</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i>
Tree	<a href="#">subscriber-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[interface-name]** *string*

Synopsis	Subscriber interface name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i>
Tree	<a href="#">subscriber-interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the subscriber interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **fwd-service** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding service name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">fwd-service</a> <i>reference</i>
Tree	<a href="#">fwd-service</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **fwd-subscriber-interface** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding subscriber interface name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">fwd-subscriber-interface</a> <i>reference</i>
Tree	<a href="#">fwd-subscriber-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i>



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface** [[group-interface-name](#)] *string*

Synopsis Enter the **group-interface** list instance  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string*  
 Tree [group-interface](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[group-interface-name]** *string*

Synopsis Group interface name  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string*  
 Tree [group-interface](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the interface  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bonding-parameters**

Synopsis Enter the **bonding-parameters** context

Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>bonding-parameters</b>
Tree	<b>bonding-parameters</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of ESM connection bonding
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>bonding-parameters</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **connection** [**connection-index**] *number*

Synopsis	Enter the <b>connection</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>bonding-parameters</b> <b>connection</b> <i>number</i>
Tree	<b>connection</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[connection-index]** *number*

Synopsis	Bonding connection index
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>bonding-parameters</b> <b>connection</b> <i>number</i>
Tree	<b>connection</b>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**service string**

Synopsis	Connection service
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">bonding-parameters</a> <a href="#">connection</a> <a href="#">number</a> <a href="#">service</a> <a href="#">string</a>
Tree	<a href="#">service</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fpe reference****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FPE that provisions bonding functionality
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">bonding-parameters</a> <a href="#">fpe</a> <a href="#">reference</a>
Tree	<a href="#">fpe</a>
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <a href="#">number</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**multicast**

Synopsis	Enter the <b>multicast</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">bonding-parameters</a> <a href="#">multicast</a>
Tree	<a href="#">multicast</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**connection** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multicast connection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">bonding-parameters</a> <a href="#">multicast</a> <b>connection</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">connection</a>
Range	1 to 2
Options	use-incoming
Default	use-incoming
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**brg**

Synopsis	Enter the <b>brg</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <b>brg</b>
Tree	<a href="#">brg</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of BRG
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <b>brg</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authenticated-brg-only** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow BRGs that have been pre-authenticated
Context	<b>configure</b> <i>service ies string subscriber-interface string group-interface string</i> <b>brg</b> <b>authenticated-brg-only</b> <i>boolean</i>
Tree	<b>authenticated-brg-only</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-brg-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile for new BRGs
Context	<b>configure</b> <i>service ies string subscriber-interface string group-interface string</i> <b>brg</b> <b>default-brg-profile</b> <i>reference</i>
Tree	<b>default-brg-profile</b>
Reference	<b>configure</b> <i>subscriber-mgmt vrgw</i> <b>brg-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cflowd-parameters**

Synopsis	Enter the <b>cflowd-parameters</b> context
Context	<b>configure</b> <i>service ies string subscriber-interface string group-interface string</i> <b>cflowd-parameters</b>
Tree	<b>cflowd-parameters</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sampling** [[sampling-type](#)] *keyword*

Synopsis	Enter the <b>sampling</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i>
Tree	<a href="#">sampling</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[sampling-type]** *keyword*

Synopsis	Traffic sampling type
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i>
Tree	<a href="#">sampling</a>
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sample-profile** (*keyword | number*)

Synopsis	Sample profile ID
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> <b>sample-profile</b> ( <i>keyword   number</i> )
Tree	<b>sample-profile</b>
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Type of cflowd analysis
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters</b> <b>sampling</b> <i>keyword</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**data-trigger**

Synopsis	Enter the <b>data-trigger</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>data-trigger</b>
Tree	<b>data-trigger</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accept-ipv6-link-local-address** *boolean*

Synopsis	Enable IPv6 Link Local Address to start authentication
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>data-trigger accept-ipv6-link-local-address</b> <i>boolean</i>
Tree	<a href="#">accept-ipv6-link-local-address</a>
Description	<p>When configured to <b>true</b>, the system triggers authentication of the subscriber based on an IPv6 packet with a source IP Link Local Address (LLA). The authentication trigger only occurs if the anti-spoof is type nh-mac. If the anti-spoof is not nh-mac, the packet with an IPv6 LLA is ignored.</p> <p>When configured to <b>false</b>, the system ignores all IPv6 packets with a LLA as a source IP address.</p>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of data-triggered host creation
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>data-trigger admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dynamic-routes-track-srrp**

Synopsis	Enable the <b>dynamic-routes-track-srrp</b> context
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Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>dynamic-routes-track-srrp</i>
Tree	<a href="#">dynamic-routes-track-srrp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-time** *number*

Synopsis	Time before route state updated after SRRP transition
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>dynamic-routes-track-srrp hold-time number</i>
Tree	<a href="#">hold-time</a>
Range	1 to 50
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gtp-parameters**

Synopsis	Enter the <b>gtp-parameters</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>gtp-parameters</i>
Tree	<a href="#">gtp-parameters</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of GTP access
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>gtp-parameters admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## fpe reference

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PE that provisions the GTP user interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gtp-parameters</a> <a href="#">fpe</a> <i>reference</i>
Tree	<a href="#">fpe</a>
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gx-policy reference

Synopsis	Diameter application policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gx-policy</a> <i>reference</i>
Tree	<a href="#">gx-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policy-accounting reference

Synopsis	Ingress policy accounting template name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress</a> <a href="#">policy-accounting</a> <i>reference</i>

Tree	<a href="#">policy-accounting</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s

### **ingress-stats** *boolean*

Synopsis	Collect ingress interface statistics
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>ingress-stats</b> <i>boolean</i>
Tree	<a href="#">ingress-stats</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis	Interface IP MTU
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>ip-mtu</b> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-linking**

Synopsis	Enter the <b>ipoe-linking</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>ipoe-linking</b>
Tree	<a href="#">ipoe-linking</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of IPoE host linking
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipoe-linking</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gratuitous-router-advertisement** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipoe-linking</a> <a href="#">gratuitous-router-advertisement</a> <i>boolean</i>
Tree	<a href="#">gratuitous-router-advertisement</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**shared-circuit-id** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable circuit ID in DHCPv4 Option82 to validate DHCPv6
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipoe-linking</a> <a href="#">shared-circuit-id</a> <i>boolean</i>
Tree	<a href="#">shared-circuit-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-session

Synopsis	Enter the <b>ipoe-session</b> context
Context	<b>configure service ies string subscriber-interface string group-interface string ipoe-session</b>
Tree	<a href="#">ipoe-session</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of IPoE session management
Context	<b>configure service ies string subscriber-interface string group-interface string ipoe-session admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
Context	<b>configure service ies string subscriber-interface string group-interface string ipoe-session description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## force-auth

Synopsis	Enter the <b>force-auth</b> context
Context	<b>configure service ies string subscriber-interface string group-interface string ipoe-session force-auth</b>
Tree	<a href="#">force-auth</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cid-change** *boolean*

Synopsis Ignore min-auth-interval when circuit ID changed

Context **configure** *service ies string subscriber-interface string group-interface string ipoe-session force-auth cid-change boolean*

Tree [cid-change](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rid-change** *boolean*

Synopsis Ignore min-auth-interval when remote ID changed

Context **configure** *service ies string subscriber-interface string group-interface string ipoe-session force-auth rid-change boolean*

Tree [rid-change](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-session-policy** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPoE Session policy to be used for new sessions

Context **configure** *service ies string subscriber-interface string group-interface string ipoe-session ipoe-session-policy reference*

Tree [ipoe-session-policy](#)

Reference **configure** *subscriber-mgmt ipoe-session-policy string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-auth-interval** (*keyword | number*)

Synopsis Minimum time between two authentication attempts

Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session min-auth-interval</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>min-auth-interval</b>
Range	1 to 32000000
Units	seconds
Options	infinite, always-reauthenticate
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-session-timeout** *keyword*

Synopsis	Session timeout attribute to be interpreted
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session radius-session-timeout</b> <i>keyword</i>
Tree	<b>radius-session-timeout</b>
Options	absolute, ignore, backwards-compatible
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-session-limit** *number*

Synopsis	Maximum number of sessions per SAP
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session sap-session-limit</b> <i>number</i>
Tree	<b>sap-session-limit</b>
Range	1 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** *number*

Synopsis	Maximum number of sessions on this group interface
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session session-limit</b> <i>number</i>
Tree	<b>session-limit</b>

Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stateless-redundancy** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">stateless-redundancy</a> <i>boolean</i>
Tree	<a href="#">stateless-redundancy</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for IPoE session authentication
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arp-host

Synopsis	Enter the <b>arp-host</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">arp-host</a>
Tree	<a href="#">arp-host</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of ARP hosts
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">arp-host</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-limit *number*

Synopsis	Maximum number of ARP hosts
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">arp-host</a> <a href="#">host-limit</a> <i>number</i>
Tree	<a href="#">host-limit</a>
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## min-auth-interval *number*

Synopsis	Minimum authentication interval
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">arp-host</a> <a href="#">min-auth-interval</a> <i>number</i>

Tree	<a href="#">min-auth-interval</a>
Range	1 to 6000
Units	minutes
Default	15
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-host-limit** *number*

Synopsis	Maximum number of ARP hosts per SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">arp-host</a> <b>sap-host-limit</b> <i>number</i>
Tree	<a href="#">sap-host-limit</a>
Range	1 to 131071
Default	1
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp**

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>dhcp</b>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of DHCP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>dhcp</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp client-applications</b>
Tree	<b>client-applications</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp client-applications dhcp boolean</b>
Tree	<b>dhcp</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp boolean

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	<b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp client-applications ppp boolean</b>
Tree	<b>ppp</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
Context	<b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp description string</b>
Tree	<b>description</b>
String Length	1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter reference**

Synopsis	DHCP filter ID for the group interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp filter reference</a>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">filter dhcp-filter</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gi-address string**

Synopsis	GI address for the DHCP relay
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp gi-address</a> <i>string</i>
Tree	<a href="#">gi-address</a>
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-populate**

Synopsis	Enter the <b>lease-populate</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp lease-populate</a>
Tree	<a href="#">lease-populate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## I2-header

Synopsis	Enable the <b>I2-header</b> context
Context	<b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp lease-populate I2-header</b>
Tree	<b>I2-header</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac string

Synopsis	IEEE address used in anti-spoofing entries for the SAP
Context	<b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp lease-populate I2-header mac string</b>
Tree	<b>mac</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## max-leases number

Synopsis	Maximum number of DHCPv4 leases
Context	<b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp lease-populate max-leases number</b>
Tree	<b>max-leases</b>
Range	1 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## match-circuit-id boolean

Synopsis	Enable Option 82 circuit ID on relayed DHCP packets
Context	<b>configure service ies string subscriber-interface string group-interface string ipv4 dhcp match-circuit-id boolean</b>
Tree	<b>match-circuit-id</b>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## offer-selection

Synopsis Enter the **offer-selection** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 dhcp offer-selection**

Tree [offer-selection](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-mac

Synopsis Enter the **client-mac** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 dhcp offer-selection client-mac**

Tree [client-mac](#)

Notes The following elements are part of a choice: **client-mac** or **server**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## discover-delay *number*

Synopsis Delay before sending DHCP Discover messages

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 dhcp offer-selection client-mac discover-delay** *number*

Tree [discover-delay](#)

Description This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.

Range 1 to 100

Units deciseconds

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac-address** *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>offer-selection</b> <b>client-mac</b> <b>mac-address</b> <i>keyword</i>
Tree	<b>mac-address</b>
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**discover-delay** *number*

Synopsis	Delay before sending DHCP Discover messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>offer-selection</b> <b>discover-delay</b> <i>number</i>
Tree	<b>discover-delay</b>
Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server** [*ipv4-address*] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>offer-selection</b> <b>server</b> <i>string</i>
Tree	<b>server</b>
Max. Instances	8
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ipv4-address] string**

Synopsis	IP address of the DHCP server
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">offer-selection</a> <a href="#">server</a> <a href="#">string</a>
Tree	<a href="#">server</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**discover-delay number**

Synopsis	Delay before sending DHCP Discover messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">offer-selection</a> <a href="#">server</a> <a href="#">string</a> <a href="#">discover-delay</a> <a href="#">number</a>
Tree	<a href="#">discover-delay</a>
Description	This command configures the time to delay DHCP Discover messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option-82**

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a>
Tree	<a href="#">option-82</a>
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**action keyword**

Synopsis	Action to take with received DHCP Option 82
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Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 action keyword</i>
Tree	<a href="#">action</a>
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### circuit-id

Synopsis	Enter the <b>circuit-id</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 circuit-id</i>
Tree	<a href="#">circuit-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 circuit-id ascii-tuple</i>
Tree	<a href="#">ascii-tuple</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ifindex

Synopsis	Use the interface index for the circuit ID
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 circuit-id ifindex</i>
Tree	<a href="#">ifindex</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## none

Synopsis Do not include the circuit ID

Context **configure** *service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 circuit-id none*

Tree *none*

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-id

Synopsis Use the SAP ID

Context **configure** *service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 circuit-id sap-id*

Tree *sap-id*

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vlan-ascii-tuple

Synopsis Include the VLAN ID and dot1p bits in the ASCII tuple

Context **configure** *service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 circuit-id vlan-ascii-tuple*

Tree *vlan-ascii-tuple*

Description When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.

Notes The following elements are part of a choice: **ascii-tuple**, **ifindex**, **none**, **sap-id**, or **vlan-ascii-tuple**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## remote-id

Synopsis Enter the **remote-id** context

Context **configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 remote-id**

Tree **remote-id**

Description Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string string

Synopsis User-defined ASCII string for the remote ID

Context **configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 remote-id ascii-string string**

Tree **ascii-string**

String Length 1 to 32

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac

Synopsis Use the MAC address for the remote ID

Context **configure service ies string subscriber-interface string group-interface string ipv4 dhcp option-82 remote-id mac**

Tree **mac**

Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**none**

Synopsis	Do not include the remote ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">remote-id</a> <b>none</b>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor-specific-option**

Synopsis	Enter the <b>vendor-specific-option</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a>
Tree	<a href="#">vendor-specific-option</a>
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-mac-address** *boolean*

Synopsis	Send the MAC address in the VSO
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">client-mac-address</a> <i>boolean</i>
Tree	<a href="#">client-mac-address</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool-name** *boolean*

Synopsis	Send the pool name in the VSO
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">pool-name</a> <i>boolean</i>
Tree	<a href="#">pool-name</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-id** *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option sap-id</b> <i>boolean</i>
Tree	<a href="#">sap-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-id** *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option service-id</b> <i>boolean</i>
Tree	<a href="#">service-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	User-defined ASCII string for the VSO
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option string</b> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**system-id** *boolean*

Synopsis	Send the system ID in the VSO
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option system-id</b> <i>boolean</i>
Tree	<b>system-id</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**proxy-server**

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server</b>
Tree	<b>proxy-server</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**emulated-server** *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server emulated-server</b> <i>string</i>
Tree	<b>emulated-server</b>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-time

Synopsis Enter the **lease-time** context

Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *ipv4 dhcp proxy-server lease-time*

Tree [lease-time](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## radius-override *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *ipv4 dhcp proxy-server lease-time radius-override* *boolean*

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis DHCP lease time

Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *ipv4 dhcp proxy-server lease-time value* *number*

Tree [value](#)

Range 300 to 315446399

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## python-policy *reference*

Synopsis Python policy name

Context **configure service ies** *string* *subscriber-interface* *string* *group-interface* *string* *ipv4 dhcp python-policy* *reference*

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Tree	<a href="#">python-policy</a>
Description	This command associates a Python policy name with the interface.
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## relay-proxy

Synopsis	Enable the <b>relay-proxy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a>
Tree	<a href="#">relay-proxy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## release-update-src-ip *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> <a href="#">release-update-src-ip</a> <i>boolean</i>
Tree	<a href="#">release-update-src-ip</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## siaddr-override *string*

Synopsis	DHCP server IP address for address hiding function
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> <a href="#">siaddr-override</a> <i>string</i>
Tree	<a href="#">siaddr-override</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**release-include-gi-address** *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>release-include-gi-address</b> <i>boolean</i>
Tree	<b>release-include-gi-address</b>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server** *string*

Synopsis	IP addresses for DHCP server requests
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>server</b> <i>string</i>
Tree	<b>server</b>
Description	This command configures a list of servers that this interface forwards requests to.  The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**src-ip-addr** *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>src-ip-addr</b> <i>keyword</i>
Tree	<b>src-ip-addr</b>
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**trusted boolean**

Synopsis	Relay untrusted packets
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">trusted</a> <i>boolean</i>
Tree	<a href="#">trusted</a>
Description	<p>When configured to <b>true</b>, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-db reference****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mask-reply** *boolean*

Synopsis Allow responses to ICMP mask requests on the interface

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 icmp mask-reply** *boolean*

Tree [mask-reply](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **param-problem**

Synopsis Enter the **param-problem** context

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 icmp param-problem**

Tree [param-problem](#)

Description Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of sent Parameter Problem messages

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **ipv4 icmp param-problem admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**number** *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>param-problem</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**seconds** *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>param-problem</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**redirects**

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>redirects</b>
Tree	<b>redirects</b>
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>redirects</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**number** *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>redirects</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**seconds** *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>icmp</b> <b>redirects</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ttl-expired**

Synopsis	Enter the <b>ttl-expired</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired</b>
Tree	<b>ttl-expired</b>
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **number** *number*

Synopsis	Maximum number of TTL expired messages to send
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis	Time used to limit the number of TTL expired messages
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired seconds</b> <i>number</i>
Tree	<b>seconds</b>

Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-matching-address** *boolean*

Synopsis	Use the subscriber interface address as source address
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired use-matching-address</b> <i>boolean</i>
Tree	<a href="#">use-matching-address</a>
Description	<p>When configured to <b>true</b>, the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message.</p> <p>For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address.</p> <p>When configured to <b>false</b>, the system uses the first configured address.</p>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **unreachables**

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b>
Tree	<a href="#">unreachables</a>
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **number** *number*

Synopsis	Maximum number of unreachable messages to send
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachable</a> <i>number</i> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachable</a> <i>seconds</i> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-df-bit** *boolean*

Synopsis	Ignore DF bit in the IPv4 header when fragmenting
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 ignore-df-bit</a> <i>boolean</i>
Tree	<a href="#">ignore-df-bit</a>



Description	When configured to <b>true</b> , fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented.  When configured to <b>false</b> , the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1.
Default	false
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b>
Tree	<b>neighbor-discovery</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b> <b>local-proxy-arp</b> <i>boolean</i>
Tree	<b>local-proxy-arp</b>
Description	When configured to <b>true</b> , the router enables local proxy ARP on the interface.  When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## populate *boolean*

Synopsis	Allow population of static and dynamic hosts
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>neighbor-discovery</b> <b>populate</b> <i>boolean</i>
Tree	<b>populate</b>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy-arp-policy** *reference*

Synopsis Proxy ARP policy name

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 neighbor-discovery proxy-arp-policy](#) *reference*

Tree [proxy-arp-policy](#)

Reference **configure** [policy-options policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-proxy-arp** *boolean*

Synopsis Enable remote proxy ARP on the interface

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 neighbor-discovery remote-proxy-arp](#) *boolean*

Tree [remote-proxy-arp](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Timeout for an ARP entry learned on the interface

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 neighbor-discovery timeout](#) *number*

Tree [timeout](#)

Range 0 to 65535

Units seconds

Default 14400

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **qos-route-lookup** *keyword*

Synopsis	QoS route lookup
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>qos-route-lookup</b> <i>keyword</i>
Tree	<a href="#">qos-route-lookup</a>
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>urpf-check</b>
Tree	<a href="#">urpf-check</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mode** *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>urpf-check</b> <i>mode</i> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6**

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-multiple-wan-addresses** *boolean*

Synopsis Allow multiple WAN addresses

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 allow-multiple-wan-addresses](#) *boolean*

Tree [allow-multiple-wan-addresses](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **auto-reply**

Synopsis Enter the **auto-reply** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 auto-reply](#)

Tree [auto-reply](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **neighbor-solicitation** *boolean*

Synopsis Enable auto-reply for NS

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 auto-reply neighbor-solicitation](#) *boolean*

Tree [neighbor-solicitation](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-solicitation** *boolean*

Synopsis Enable auto-reply for RS

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv6 auto-reply router-solicitation](#) *boolean*

Tree [router-solicitation](#)

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp6

Synopsis	Enter the <b>dhcp6</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6</a>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## allow-client-id-change *boolean*

Synopsis	Allow changes to the client ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6</a> <a href="#">allow-client-id-change</a> <i>boolean</i>
Tree	<a href="#">allow-client-id-change</a>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter *reference*

Synopsis	DHCPv6 filter
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6</a> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">filter dhcp6-filter</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option

Synopsis	Enter the <b>option</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option</b>
Tree	<b>option</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## interface-id

Synopsis	Enter the <b>interface-id</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option interface-id</b>
Tree	<b>interface-id</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option interface-id ascii-tuple</b>
Tree	<b>ascii-tuple</b>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option interface-id if-index</b>
Tree	<b>if-index</b>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-id**

Synopsis	Use SAP ID in interface ID option in relay packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6 dhcp6 option interface-id</a> <a href="#">sap-id</a>
Tree	<a href="#">sap-id</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6 dhcp6 option interface-id</a> <a href="#">string</a> <a href="#">string</a>
Tree	<a href="#">string</a>
String Length	1 to 80
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-id** *boolean*

Synopsis	Send remote ID option in the DHCPv6 relay packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6 dhcp6 option remote-id</a> <a href="#">boolean</a>
Tree	<a href="#">remote-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**override-slaac** *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6 dhcp6 override-slaac</a> <a href="#">boolean</a>

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Tree	<a href="#">override-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pd-managed-route

Synopsis	Enable the <b>pd-managed-route</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">pd-managed-route</a>
Tree	<a href="#">pd-managed-route</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## next-hop *keyword*

Synopsis	Next hop type
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">pd-managed-route</a> <a href="#">next-hop</a> <i>keyword</i>
Tree	<a href="#">next-hop</a>
Options	ipv4, ipv6
Default	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## proxy-server

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">proxy-server</a>
Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**admin-state** *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-applications**

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>client-applications</b>
Tree	<b>client-applications</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp** *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>client-applications</b> <b>dhcp</b> <i>boolean</i>
Tree	<b>dhcp</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp** *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>client-applications</b> <b>ppp</b> <i>boolean</i>
Tree	<b>ppp</b>
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** (*number* | *keyword*)

Synopsis	Time for prefix to remain preferred on this interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rebind-timer** *number*

Synopsis	Rebind timer (T2) for this interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server rebind-timer</b> <i>number</i>
Tree	<a href="#">rebind-timer</a>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **renew-timer** *number*

Synopsis	Renew timer (T1)
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server renew-timer</b> <i>number</i>
Tree	<a href="#">renew-timer</a>
Range	0 to 604800
Units	seconds

Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### server-id

Synopsis	Enter the <b>server-id</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 proxy-server server-id</i>
Tree	<a href="#">server-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 proxy-server server-id duid-en-ascii</i> <i>string</i>
Tree	<a href="#">duid-en-ascii</a>
String Length	1 to 58
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 proxy-server server-id duid-en-hex</i> <i>string</i>
Tree	<a href="#">duid-en-hex</a>
String Length	1 to 118
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## duid-ll

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server server-id</a> <a href="#">duid-ll</a>
Tree	<a href="#">duid-ll</a>
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## valid-lifetime (*number* | *keyword*)

Synopsis	Time for prefix to remain valid on this interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a> <a href="#">valid-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## python-policy *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## relay

Synopsis	Enter the <b>relay</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay</b>
Tree	<b>relay</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **advertise-selection**

Synopsis	Enter the <b>advertise-selection</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection</b>
Tree	<b>advertise-selection</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **client-mac**

Synopsis	Enter the <b>client-mac</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac</b>
Tree	<b>client-mac</b>
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac-address** *keyword*

Synopsis	Designated client MAC addresses for Advertise selection
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>client-mac</b> <b>mac-address</b> <i>keyword</i>
Tree	<a href="#">mac-address</a>
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference-option**

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>client-mac</b> <b>preference-option</b>
Tree	<a href="#">preference-option</a>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value** *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>client-mac</b> <b>preference-option</b> <b>value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**solicit-delay** *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>client-mac</b> <b>solicit-delay</b> <i>number</i>
Tree	<a href="#">solicit-delay</a>

Description	This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## preference-option

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 relay advertise-selection preference-option</i>
Tree	<a href="#">preference-option</a>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 relay advertise-selection preference-option value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## server [*ipv6-address*] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>ipv6 dhcp6 relay advertise-selection server</i> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	8
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [**ipv6-address**] *string*

Synopsis	IP address of the DHCPv6 server
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>server</b> <i>string</i>
Tree	<b>server</b>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference-option**

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>server</b> <i>string</i> <b>preference-option</b>
Tree	<b>preference-option</b>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **value** *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>server</b> <i>string</i> <b>preference-option</b> <b>value</b> <i>number</i>
Tree	<b>value</b>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**solicit-delay** *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>solicit-delay</b> <i>number</i>
Tree	<b>solicit-delay</b>
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**solicit-delay** *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection</b> <b>solicit-delay</b> <i>number</i>
Tree	<b>solicit-delay</b>
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the <b>server</b> instance or the <b>client-mac</b> context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-applications**

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay</b> <b>client-applications</b>
Tree	<b>client-applications</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp boolean**

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>client-applications</b> <b>dhcp</b> <b>boolean</b>
Tree	<b>dhcp</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp boolean**

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>client-applications</b> <b>ppp</b> <b>boolean</b>
Tree	<b>ppp</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lease-split**

Synopsis	Enter the <b>lease-split</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>lease-split</b>
Tree	<b>lease-split</b>
Description	Commands in this context configure DHCPv6 lease split.

DHCPv6 lease split is active when administratively enabled and for all IA\_NA and IA\_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:

- the renew time T1 committed by the server (long renew time)
- half of the preferred lifetime committed by the server when T1 committed by the server equals zero

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of DHCPv6 lease split

Context **configure** *service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay lease-split admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** *number*

Synopsis DHCPv6 lease split valid lifetime (short lease time)

Context **configure** *service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay lease-split valid-lifetime number*

Tree [valid-lifetime](#)

Range 300 to 315446399

Units seconds

Default 3600

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **link-address** *string*

Synopsis Link address for the DHCPv6 relay messages

Context **configure** *service ies string subscriber-interface string group-interface string ipv6 dhcp6 relay link-address string*

Tree	<a href="#">link-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server string**

Synopsis	DHCP6 servers to which the DHCP6 requests are forwarded
Context	<b>configure</b> <a href="#">service ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6 dhcp6 relay server</a> <a href="#">string</a>
Tree	<a href="#">server</a>
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-address string**

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	<b>configure</b> <a href="#">service ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6 dhcp6 relay source-address</a> <a href="#">string</a>
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **snooping**

Synopsis	Enter the <b>snooping</b> context
Context	<b>configure</b> <a href="#">service ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6 dhcp6 snooping</a>
Tree	<a href="#">snooping</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**admin-state** *keyword*

Synopsis	Administrative state of DHCPv6 snooping
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 snooping</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**user-db** *reference*

Synopsis	Local user database for authentication
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-ident** *keyword*

Synopsis	DHCP6 user identification for this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 user-ident</a> <i>keyword</i>
Tree	<a href="#">user-ident</a>
Options	mac, mac-interface-id
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe-bridged-mode** *boolean*

Synopsis	Enable IPv6 IPoE bridged mode
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 ipoe-bridged-mode</a> <i>boolean</i>

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Tree	<a href="#">ipoe-bridged-mode</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dad-snooping *boolean*

Synopsis	Populate table via duplicate address detection packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">dad-snooping</a> <i>boolean</i>
Tree	<a href="#">dad-snooping</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## neighbor-limit *number*

Synopsis	Maximum neighbor entries learned per SLAAC host
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">neighbor-limit</a> <i>number</i>
Tree	<a href="#">neighbor-limit</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**qos-route-lookup** *keyword*

Synopsis	QoS route lookup
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">qos-route-lookup</a> <i>keyword</i>
Tree	<a href="#">qos-route-lookup</a>
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**router-advertisements**

Synopsis	Enter the <b>router-advertisements</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a>
Tree	<a href="#">router-advertisements</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of router advertisements
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**force-mcast** *keyword*

Synopsis	Protocol with forced multicast
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">force-mcast</a> <i>keyword</i>
Tree	<a href="#">force-mcast</a>
Options	ip, ip-mac

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-advertisement-interval** *number*

Synopsis	Maximum advertisement interval
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <b>max-advertisement-interval</b> <i>number</i>
Tree	<a href="#">max-advertisement-interval</a>
Range	900 to 1800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-advertisement-interval** *number*

Synopsis	Minimum advertisement interval
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <b>min-advertisement-interval</b> <i>number</i>
Tree	<a href="#">min-advertisement-interval</a>
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <b>options</b>
Tree	<a href="#">options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**current-hop-limit** *number*

Synopsis	Hop limit to be advertised
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options</a> <b>current-hop-limit</b> <i>number</i>
Tree	<a href="#">current-hop-limit</a>
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dns**

Synopsis	Enter the <b>dns</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options</a> <b>dns</b>
Tree	<a href="#">dns</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**include-rdnss** *boolean*

Synopsis	Include the RDNSS server option 25
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options</a> <a href="#">dns</a> <b>include-rdnss</b> <i>boolean</i>
Tree	<a href="#">include-rdnss</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rdnss-lifetime** (*number* | *keyword*)

Synopsis	Maximum time for the RDNSS address to remain valid
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options</a> <a href="#">dns</a> <b>rdnss-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rdnss-lifetime</a>

Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-configuration** *boolean*

Synopsis	Managed address configuration flag
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>managed-configuration</b> <i>boolean</i>
Tree	<a href="#">managed-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mtu** (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>mtu</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mtu</a>
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **other-stateful-configuration** *boolean*

Synopsis	Other stateful configuration flag
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>other-stateful-configuration</b> <i>boolean</i>
Tree	<a href="#">other-stateful-configuration</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reachable-time** *number*

Synopsis	Reachable time for advertisements
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>reachable-time</b> <i>number</i>
Tree	<a href="#">reachable-time</a>
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retransmit-timer** *number*

Synopsis	Retransmit time in router advertisements from interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>retransmit-timer</b> <i>number</i>
Tree	<a href="#">retransmit-timer</a>
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-lifetime** (*number* | *keyword*)

Synopsis	Router lifetime
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>router-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">router-lifetime</a>
Range	2700 to 9000
Units	seconds

Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix-options

Synopsis	Enter the <b>prefix-options</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>prefix-options</b>
Tree	<b>prefix-options</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## autonomous *boolean*

Synopsis	Value of the autonomous flag
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>prefix-options</b> <b>autonomous</b> <i>boolean</i>
Tree	<b>autonomous</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>prefix-options</b> <b>on-link</b> <i>boolean</i>
Tree	<b>on-link</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain preferred
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>prefix-options</b> <b>preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>prefix-options</b> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-solicit**

Synopsis	Enter the <b>router-solicit</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-solicit</b>
Tree	<a href="#">router-solicit</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of router-solicit authentication
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-solicit</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**inactivity-timer** (*number* | *keyword*)

Synopsis	Time before an inactive host is removed
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-solicit</b> <b>inactivity-timer</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>inactivity-timer</b>
Range	1 to 31536000
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**min-auth-interval** *number*

Synopsis	Minimum time between successive authentication attempts
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-solicit</b> <b>min-auth-interval</b> <i>number</i>
Tree	<b>min-auth-interval</b>
Range	1 to 360000
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-db** *reference*

Synopsis	Local user database used for authentication
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-solicit</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 urpf-check</a>
Tree	<a href="#">urpf-check</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mode** *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 urpf-check mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-address-assignment**

Synopsis	Enter the <b>local-address-assignment</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">local-address-assignment</a>
Tree	<a href="#">local-address-assignment</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of Local Address Assignment

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4**

Synopsis Enter the **ipv4** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) **ipv4**

Tree [ipv4](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **client-applications**

Synopsis Enter the **client-applications** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) **client-applications**

Tree [client-applications](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe** *boolean*

Synopsis Request local addresses for non-DHCP/managed IPoE hosts

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv4](#) [client-applications](#) **ipoe** *boolean*

Tree [ipoe](#)



Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp boolean**

Synopsis	Request local addresses for PPP IPCP hosts
Context	<b>configure</b> <a href="#">service ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">client-applications</a> <a href="#">ppp</a> <a href="#">boolean</a>
Tree	<a href="#">ppp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-pool string**

Synopsis	Default pools
Context	<b>configure</b> <a href="#">service ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">default-pool</a> <a href="#">string</a>
Tree	<a href="#">default-pool</a>
String Length	1 to 32
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server reference**

Synopsis	Local DHCPv4 server for local pools management
Context	<b>configure</b> <a href="#">service ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">server</a> <a href="#">reference</a>
Tree	<a href="#">server</a>
Reference	<b>configure</b> <a href="#">router</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>local-address-assignment ipv6</i>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-applications**

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>local-address-assignment ipv6 client-applications</i>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe-slaac** *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>local-address-assignment ipv6 client-applications ipoe-slaac</i> <i>boolean</i>
Tree	<a href="#">ipoe-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe-wan** *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>local-address-assignment ipv6 client-applications ipoe-wan</i> <i>boolean</i>
Tree	<a href="#">ipoe-wan</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-slaac** *boolean*

Synopsis Request local addresses for PPP SLAAC hosts

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv6](#) [client-applications](#) [ppp-slaac](#) *boolean*

Tree [ppp-slaac](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *reference*

Synopsis Local DHCPv6 server for local pools management

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment](#) [ipv6](#) [server](#) *reference*

Tree [server](#)

Reference **configure** [router](#) *string* [dhcp-server](#) [dhcpv6](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac** *string*

Synopsis MAC address for the interface

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [mac](#) *string*

Tree [mac](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nasreq-auth-policy** *reference*

Synopsis Diameter NASREQ application policy to use for authentication

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [nasreq-auth-policy](#) *reference*

Tree [nasreq-auth-policy](#)

Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **oper-up-while-empty** *boolean*

Synopsis	Enable this group interface without any active SAPs
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>oper-up-while-empty</b> <i>boolean</i>
Tree	<a href="#">oper-up-while-empty</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe**

Synopsis	Enter the <b>pppoe</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>pppoe</b>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of PPPoE
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>pppoe</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **anti-spoof** *keyword*

Synopsis	PPPoE anti-spoof filtering
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>pppoe anti-spoof</b> <i>keyword</i>
Tree	<b>anti-spoof</b>
Options	mac-sid, mac-sid-ip
Default	mac-sid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>pppoe description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-client**

Synopsis	Enter the <b>dhcp-client</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>pppoe dhcp-client</b>
Tree	<b>dhcp-client</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **client-id** *keyword*

Synopsis	Type of information that DHCP option 61 contains
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>pppoe dhcp-client client-id</b> <i>keyword</i>
Tree	<b>client-id</b>
Options	mac-pppoe-session-id
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy reference**

Synopsis	PPPoE policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">policy reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**python-policy reference**

Synopsis	Python policy used to modify PPPoE packets
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">python-policy reference</a>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-session-limit number**

Synopsis	Maximum PPPoE sessions per SAP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">sap-session-limit</a> <i>number</i>
Tree	<a href="#">sap-session-limit</a>
Range	1 to 131071
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-limit number**

Synopsis	Maximum PPPoE sessions
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">session-limit</a> <i>number</i>

Tree	<a href="#">session-limit</a>
Range	1 to 333823
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *reference*

Synopsis	RADIUS authentication policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">radius-auth-policy</a> <i>reference</i>
Tree	<a href="#">radius-auth-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **redundant-interface** *reference*

Synopsis	Redundant interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">redundant-interface</a> <i>reference</i>
Tree	<a href="#">redundant-interface</a>

Reference	<b>configure service ies string redundant-interface string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap [sap-id] string**

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure service ies string subscriber-interface string group-interface string sap string</b>
Tree	<b>sap</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[sap-id] string**

Synopsis	SAP ID
Context	<b>configure service ies string subscriber-interface string group-interface string sap string</b>
Tree	<b>sap</b>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy reference**

Synopsis	Accounting policy
Context	<b>configure service ies string subscriber-interface string group-interface string sap string accounting-policy reference</b>
Tree	<b>accounting-policy</b>
Reference	<b>configure log accounting-policy number</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state keyword**

Synopsis	Administrative state of the SAP
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **anti-spoof** *keyword*

Synopsis	Type of anti-spoof filtering
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>anti-spoof</b> <i>keyword</i>
Tree	<b>anti-spoof</b>
Options	source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>app-profile</b> <i>reference</i>
Tree	<b>app-profile</b>
Reference	<b>configure application-assurance</b> <i>group</i> <i>number</i> <b>partition</b> <i>number</i> <b>policy</b> <b>app-profile</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **calling-station-id** *string*

Synopsis	Calling station ID
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>calling-station-id</b> <i>string</i>
Tree	<b>calling-station-id</b>
String Length	1 to 64
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis Collect accounting statistics

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **collect-stats** *boolean*

Tree [collect-stats](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cpu-protection**

Synopsis Enter the **cpu-protection** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* **cpu-protection**

Tree [cpu-protection](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

### **eth-cfm-monitoring**

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [cpu-protection](#) **eth-cfm-monitoring**

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring**, **ip-src-monitoring**, or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

### **aggregate**

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [cpu-protection](#) [eth-cfm-monitoring](#) **aggregate**

Tree	<a href="#">aggregate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">car</a>
Tree	<a href="#">car</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a>
Tree	<a href="#">ip-src-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

**policy-id** *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <i>service ies string subscriber-interface string group-interface string sap string cpu-protection policy-id reference</i>
Tree	<i>policy-id</i>
Reference	<b>configure</b> <i>system security cpu-protection policy number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

**default-host**

Synopsis	Enter the <b>default-host</b> context
Context	<b>configure</b> <i>service ies string subscriber-interface string group-interface string sap string default-host</i>
Tree	<i>default-host</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**ipv4** [*address*] *reference prefix-length number*

Synopsis	Enter the <b>ipv4</b> list instance
Context	<b>configure</b> <i>service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number</i>
Tree	<i>ipv4</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**[address]** *reference*

Synopsis	IPv4 default host address
Context	<b>configure</b> <i>service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number</i>
Tree	<i>ipv4</i>
Reference	<b>configure</b> <i>service ies string subscriber-interface string ipv4 address string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **prefix-length** *number*

Synopsis IPv4 address prefix length

Context **configure** *service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number*

Tree [ipv4](#)

Range 0 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **next-hop** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Next hop IP address

Context **configure** *service ies string subscriber-interface string group-interface string sap string default-host ipv4 reference prefix-length number next-hop string*

Tree [next-hop](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **ipv6** [*address*] *string prefix-length number*

Synopsis Enter the **ipv6** list instance

Context **configure** *service ies string subscriber-interface string group-interface string sap string default-host ipv6 string prefix-length number*

Tree [ipv6](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**[address]** *string*

Synopsis	IPv6 default host address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host</b> <b>ipv6</b> <i>string</i> <b>prefix-length</b> <i>number</i>
Tree	<b>ipv6</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**prefix-length** *number*

Synopsis	IPv6 address prefix length
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host</b> <b>ipv6</b> <i>string</i> <b>prefix-length</b> <i>number</i>
Tree	<b>ipv6</b>
Range	0 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**next-hop** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next hop IP address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host</b> <b>ipv6</b> <i>string</i> <b>prefix-length</b> <i>number</i> <b>next-hop</b> <i>string</i>
Tree	<b>next-hop</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dist-cpu-protection** *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <i>policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**agg-rate**

Synopsis	Enter the <b>agg-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a>
Tree	<a href="#">agg-rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**adaptation-rule** *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>adaptation-rule</b> <i>keyword</i>
Tree	<b>adaptation-rule</b>
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**burst-limit** (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>burst-limit</b>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**limit-unused-bandwidth** *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>limit-unused-bandwidth</b> <i>boolean</i>
Tree	<b>limit-unused-bandwidth</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**queue-frame-based-accounting** *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">queue-frame-based-accounting</a> <i>boolean</i>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rate** *number*

Synopsis	Enforced aggregate rate for all queues
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">rate</a> <i>number</i>
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip** *reference*

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6** *reference*

Synopsis IPv6 filter policy name  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress filter](#) [ipv6](#) *reference*  
 Tree [ipv6](#)  
 Reference **configure** [filter](#) [ipv6-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **qos**

Synopsis Enter the **qos** context  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#)  
 Tree [qos](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer-control-policy**

Synopsis Enter the **policer-control-policy** context  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#)  
 Tree [policer-control-policy](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis Policer control policy name  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#) [qos](#) [policer-control-policy](#) [policy-name](#) *reference*

Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qinq-mark-top-only** *boolean*

Synopsis	Mark top Q-tags
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos qinq-mark-top-only</a> <i>boolean</i>
Tree	<a href="#">qinq-mark-top-only</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress</a>
Tree	<a href="#">sap-egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## scheduler-policy

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policy-name *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## virtual-port

Synopsis	Enter the <b>virtual-port</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">virtual-port</a>
Tree	<a href="#">virtual-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vport-name *reference*

Synopsis	Virtual port assigned to the SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">vport-name</a> <i>reference</i>
Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port</a> <a href="#">string</a> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">string</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**collect-lmm-fc-stats**

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a>
Tree	<a href="#">collect-lmm-fc-stats</a>
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**fc keyword**

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc</a> <a href="#">keyword</a>
Tree	<a href="#">fc</a>
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fc-in-profile** *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <b>fc-in-profile</b> <i>keyword</i>
Tree	<a href="#">fc-in-profile</a>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-stats</a> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **mep** *md-admin-name reference* *ma-admin-name reference* *mep-id number*

Synopsis Enter the **mep** list instance  
 Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*  
 Tree **mep**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **md-admin-name** *reference*

Synopsis Maintenance Domain (MD) name  
 Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*  
 Tree **mep**  
 Reference **configure** *eth-cfm domain string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **ma-admin-name** *reference*

Synopsis Maintenance Association (MA) name  
 Context **configure** *service ies string subscriber-interface string group-interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number*  
 Tree **mep**  
 Reference **configure** *eth-cfm domain string association string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**mep-id number**

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number</a>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**admin-state keyword**

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**ais boolean**

Synopsis	Enable the generation and the reception of AIS messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number</a> <a href="#">ais</a> <i>boolean</i>
Tree	<a href="#">ais</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification</b>
Tree	<b>alarm-notification</b>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification fng-alarm-time</b> <i>number</i>
Tree	<b>fng-alarm-time</b>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification fng-reset-time</b> <i>number</i>
Tree	<b>fng-reset-time</b>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**ccm boolean**

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm</a> <a href="#">boolean</a>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**ccm-ltm-priority number**

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm-ltm-priority</a> <a href="#">number</a>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**ccm-padding-size number**

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm-padding-size</a> <a href="#">number</a>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## csf

Synopsis Enable the **csf** context

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **csf**

Tree **csf**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## multiplier *decimal-number*

Synopsis Multiplication factor used to clear the CSF condition

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **csf** **multiplier** *decimal-number*

Tree **multiplier**

Range 0.0 | 2.0 to 30.0

Default 3.5

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## description *string*

Synopsis Text description

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm** **mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number* **description** *string*

Tree **description**

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## eth-test

Synopsis Enable the **eth-test** context

Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b>
Tree	<b>eth-test</b>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test bit-error-threshold</b> <i>number</i>
Tree	<b>bit-error-threshold</b>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **test-pattern**

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test test-pattern</b>
Tree	<b>test-pattern</b>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **crc-tlv** *boolean*

Synopsis	Generate a CRC checksum
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Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">crc-tlv</a> <a href="#">boolean</a>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <a href="#">keyword</a>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fault-propagation** *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">fault-propagation</a> <a href="#">keyword</a>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **grace**

Synopsis	Enter the <b>grace</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace</b>
Tree	<b>grace</b>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## eth-ed

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed</b>
Tree	<b>eth-ed</b>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed max-rx-defect-window</b> <i>number</i>
Tree	<b>max-rx-defect-window</b>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed priority</b> <i>number</i>

Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">rx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">grace</a> <a href="#">eth-vsm-grace</a> <a href="#">tx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.  The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).  When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s



**low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**squelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>squelch-ingress-levels</b> <i>number</i>
Tree	<a href="#">squelch-ingress-levels</a>
Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## **fwd-wholesale**

Synopsis	Enter the <b>fwd-wholesale</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fwd-wholesale</a>
Tree	<a href="#">fwd-wholesale</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **pppoe-service** *reference*

Synopsis	PPPoE service name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fwd-wholesale</a> <a href="#">pppoe-service</a> <i>reference</i>
Tree	<a href="#">pppoe-service</a>
Reference	<b>configure</b> <a href="#">service epipe</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **host-admin-state** *keyword*

Synopsis	Administrative state of the hosts
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">host-admin-state</a> <i>keyword</i>
Tree	<a href="#">host-admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-lockout-policy** *reference*

Synopsis Host lockout policy

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [host-lockout-policy](#) *reference*

Tree [host-lockout-policy](#)

Reference **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **igmp-host-tracking**

Synopsis Enter the **igmp-host-tracking** context

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [igmp-host-tracking](#)

Tree [igmp-host-tracking](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **expiry-time** *number*

Synopsis Time that the system continues to track inactive hosts

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [igmp-host-tracking](#) [expiry-time](#) *number*

Tree [expiry-time](#)

Range 1 to 65535

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy that filters IGMP packets

Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of multicast groups to track per group
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-alert-check** *boolean*

Synopsis	Enable IGMP router alert check option
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress filter</a> <a href="#">ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ipv6 reference

Synopsis IPv6 filter policy name

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **ingress filter ipv6** *reference*

Tree [ipv6](#)

Reference **configure filter ipv6-filter** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### qos

Synopsis Enter the **qos** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **ingress qos**

Tree [qos](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### match-qinq-dot1p keyword

Synopsis Ingress match QinQ Dot1p

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **ingress qos match-qinq-dot1p** *keyword*

Tree [match-qinq-dot1p](#)

Options top, bottom

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### policer-control-policy

Synopsis Enter the **policer-control-policy** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **ingress qos policer-control-policy**

Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <i>policy-name</i> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sap-ingress**

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">sap-ingress</a>
Tree	<a href="#">sap-ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis	Policy ID
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">sap-ingress</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **queuing-type** *keyword*

Synopsis	Queuing type
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress queuing-type</b> <i>keyword</i>
Tree	<b>queuing-type</b>
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

## **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b>
Tree	<b>scheduler-policy</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b> <b>policy-name</b> <i>reference</i>
Tree	<b>policy-name</b>
Reference	<b>configure qos scheduler-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **lag**

Synopsis	Enter the <b>lag</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag</b>
Tree	<b>lag</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**link-map-profile** *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag</b> <b>link-map-profile</b> <i>number</i>
Tree	<b>link-map-profile</b>
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.  If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**per-link-hash**

Synopsis	Enter the <b>per-link-hash</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag</b> <b>per-link-hash</b>
Tree	<b>per-link-hash</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**class** *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag</b> <b>per-link-hash</b> <b>class</b> <i>number</i>
Tree	<b>class</b>
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**weight number**

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**monitor-oper-group reference**

Synopsis	Monitor operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">monitor-oper-group</a> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**multi-service-site reference**

Synopsis	Multi service site name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">multi-service-site</a> <i>reference</i>
Tree	<a href="#">multi-service-site</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**oper-group reference**

Synopsis	Operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">oper-group</a> <i>reference</i>

Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## static-host

Synopsis	Enter the <b>static-host</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a>
Tree	<a href="#">static-host</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4 [[ip](#)] *string* [mac](#) *string*

Synopsis	Enter the <b>ipv4</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[ip](#)] *string*

Synopsis	IPv4 address used by the static host
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv4</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac string**

Synopsis	MAC address used by the static host
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a>
Tree	<a href="#">ipv4</a>
MD-CLI Default	00:00:00:00:00:00
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the static host
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ancc-string string**

Synopsis	ANCP string
Context	<b>configure</b> <a href="#">service ies string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">ancc-string string</a>
Tree	<a href="#">ancc-string</a>
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile**

Synopsis	Enter the <b>app-profile</b> context
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Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string app-profile</i>
Tree	<a href="#">app-profile</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** *reference*

Synopsis	Application profile used by the static host
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string app-profile profile reference</i>
Tree	<a href="#">profile</a>
Reference	<b>configure application-assurance group number partition number policy app-profile string</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scope** *keyword*

Synopsis	Scope of the static host application profile
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string app-profile scope keyword</i>
Tree	<a href="#">scope</a>
Options	subscriber, mac
Default	subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id** *string*

Synopsis	Intermediate destination ID
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv4 string mac string int-dest-id string</i>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**managed-route** [[prefix](#)] *string*

Synopsis	Enter the <b>managed-route</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>managed-route</b> <i>string</i>
Tree	<a href="#">managed-route</a>
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[prefix]** *string*

Synopsis	Managed route prefix associated with IPv4 static host
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>managed-route</b> <i>string</i>
Tree	<a href="#">managed-route</a>
Description	This command configures the managed route prefix. The prefix length must be in the range of 1 to 32.
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cpe-check**

Synopsis	Enable the <b>cpe-check</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <b>cpe-check</b>
Tree	<a href="#">cpe-check</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destination-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>destination-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>destination-ip-address</b>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failed-action**

Synopsis	Enter the <b>failed-action</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b>
Tree	<b>failed-action</b>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric** *number*

Synopsis	Metric associated with the provisioned managed route
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Max. Range	0 to 4294967295
Default	0

Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference number**

Synopsis	Preference associated to the provisioned managed route
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	0 to 255
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tag number**

Synopsis	Route tag used if CPE check fails
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **withdraw boolean**

Synopsis	Withdraw the route when the CPE check fails
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b> <b>withdraw</b> <i>boolean</i>
Tree	<b>withdraw</b>
Default	false



Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 255
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>log</b> <i>boolean</i>
Tree	<b>log</b>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>padding-size</b> <i>number</i>
Tree	<b>padding-size</b>
Range	0 to 16384
Units	bytes
Default	56
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Source IP address used in the ICMP messages

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **managed-route** *string* **cpe-check** **source-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Tree [source-ip-address](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Time interval determining that a ping is missed

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **managed-route** *string* **cpe-check** **timeout** *number*

Tree [timeout](#)

Range 1 to 10

Units seconds

Default 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric** *number*

Synopsis Metric associated with the managed route

Context **configure** **service ies** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host ipv4** *string* **mac** *string* **managed-route** *string* **metric** *number*

Tree [metric](#)

Max. Range 0 to 4294967295

Default 0

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference number**

Synopsis	Preference associated with the managed route
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">managed-route</a> <a href="#">string</a> <a href="#">preference</a> <a href="#">number</a>
Tree	<a href="#">preference</a>
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tag number**

Synopsis	Route tag associated with the managed route
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">managed-route</a> <a href="#">string</a> <a href="#">tag</a> <a href="#">number</a>
Tree	<a href="#">tag</a>
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rip-policy reference**

Synopsis	RIP policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">rip-policy</a> <a href="#">reference</a>
Tree	<a href="#">rip-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">rip-policy</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**shcv**

Synopsis	Enter the <b>shcv</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv4</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">shcv</a>

Tree	<a href="#">shcv</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile** *reference*

Synopsis	SLA profile name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Sub-profile name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id**

Synopsis	Enter the <b>subscriber-id</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a>
Tree	<a href="#">subscriber-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis	Subscriber identification
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> <i>string</i> <i>string</i>
Tree	<i>string</i>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-sap-id**

Synopsis	Use the SAP id as subscriber ID
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> <b>use-sap-id</b>
Tree	<i>use-sap-id</i>
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6** [**prefix**] *string* **mac** *string*

Synopsis	Enter the <b>ipv6</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i>
Tree	<i>ipv6</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [**prefix**] *string*

Synopsis	IPv6 prefix
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i>
Tree	<i>ipv6</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac string**

Synopsis	MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <b>mac</b> <i>string</i>
Tree	<a href="#">ipv6</a>
MD-CLI Default	00:00:00:00:00:00
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the static host
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <b>mac</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**anccp-string string**

Synopsis	ANCP string
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <b>mac</b> <i>string</i> <b>anccp-string</b> <i>string</i>
Tree	<a href="#">anccp-string</a>
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile**

Synopsis	Enter the <b>app-profile</b> context
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Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string app-profile</i>
Tree	<a href="#">app-profile</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** *reference*

Synopsis	Application profile used by the static host
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string app-profile profile reference</i>
Tree	<a href="#">profile</a>
Reference	<b>configure application-assurance group number partition number policy app-profile string</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scope** *keyword*

Synopsis	Scope of the static host application profile
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string app-profile scope keyword</i>
Tree	<a href="#">scope</a>
Options	subscriber, mac
Default	subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id** *string*

Synopsis	Intermediate destination ID
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string int-dest-id string</i>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac-linking** *string*

Synopsis	IPv6 host linked with IPv4 host via learned MAC address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>mac-linking</b> <i>string</i>
Tree	<b>mac-linking</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**managed-route** [**ipv6-prefix**] *string*

Synopsis	Enter the <b>managed-route</b> list instance
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i>
Tree	<b>managed-route</b>
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ipv6-prefix]** *string*

Synopsis	Managed route prefix associated with IPv6 static host
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i>
Tree	<b>managed-route</b>
Description	This command configures the managed route prefix. The prefix length must be in the range of 1 to 128.
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cpe-check**

Synopsis	Enable the <b>cpe-check</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b>



Tree	<a href="#">cpe-check</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destination-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">destination-ip-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">destination-ip-address</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">drop-count</a> <i>number</i>
Tree	<a href="#">drop-count</a>
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failed-action**

Synopsis	Enter the <b>failed-action</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a>
Tree	<a href="#">failed-action</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**metric number**

Synopsis	Metric associated with the provisioned managed route
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">metric number</a>
Tree	<a href="#">metric</a>
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference number**

Synopsis	Preference associated to the provisioned managed route
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">preference number</a>
Tree	<a href="#">preference</a>
Range	0 to 255
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tag number**

Synopsis	Route tag used if CPE check fails
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">tag number</a>
Tree	<a href="#">tag</a>
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **withdraw** *boolean*

Synopsis Withdraw the route when the CPE check fails

Context **configure** *service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check failed-action withdraw boolean*

Tree [withdraw](#)

Default false

Notes The following elements are part of a choice: (**metric**, **preference**, and **tag**) or **withdraw**.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis Interval between ICMP pings to target CPE IP address

Context **configure** *service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check interval number*

Tree [interval](#)

Range 1 to 255

Units seconds

Default 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **log** *boolean*

Synopsis Log CPE connectivity checks transitions

Context **configure** *service ies string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check log boolean*

Tree [log](#)

Default false

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">padding-size</a> <i>number</i>
Tree	<a href="#">padding-size</a>
Range	0 to 16384
Units	bytes
Default	56
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address used in the ICMP messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout** *number*

Synopsis	Time interval determining that a ping is missed
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**metric** *number*

Synopsis	Metric associated with the managed route
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Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference** *number*

Synopsis	Preference associated with the managed route
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tag** *number*

Synopsis	Route tag associated with the managed route
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retail-svc-id** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Retail service ID
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>retail-svc-id</b> <i>number</i>
Tree	<a href="#">retail-svc-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## shcv

Synopsis	Enter the <b>shcv</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>shcv</b>
Tree	<a href="#">shcv</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sla-profile *reference*

Synopsis	SLA profile name
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>sla-profile</b> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure subscriber-mgmt sla-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-profile *reference*

Synopsis	Sub-profile name
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>sub-profile</b> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure subscriber-mgmt sub-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis	Enter the <b>subscriber-id</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">subscriber-id</a>
Tree	<a href="#">subscriber-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string *string*

Synopsis	Subscriber identification
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">subscriber-id</a> <a href="#">string</a> <a href="#">string</a>
Tree	<a href="#">string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">ipv6</a> <a href="#">string</a> <a href="#">mac</a> <a href="#">string</a> <a href="#">subscriber-id</a> <a href="#">use-sap-id</a>
Tree	<a href="#">use-sap-id</a>
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac-learning

Synopsis	Enter the <b>mac-learning</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">static-host</a> <a href="#">mac-learning</a>
Tree	<a href="#">mac-learning</a>

Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **data-triggered** *boolean*

Synopsis Enable learning of MAC addresses from data packets  
 Context **configure** *service ies string subscriber-interface string group-interface string sap string static-host mac-learning data-triggered boolean*  
 Tree [data-triggered](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **single-mac** *boolean*

Synopsis Enforce single MAC address and subscriber for the SAP  
 Context **configure** *service ies string subscriber-interface string group-interface string sap string static-host mac-learning single-mac boolean*  
 Tree [single-mac](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-sla-mgmt**

Synopsis Enter the **sub-sla-mgmt** context  
 Context **configure** *service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt*  
 Tree [sub-sla-mgmt](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of SAP subscriber management  
 Context **configure** *service ies string subscriber-interface string group-interface string sap string sub-sla-mgmt admin-state keyword*



Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## defaults

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt defaults</a>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## app-profile *reference*

Synopsis	Default application profile name for this SAP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt defaults app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## int-dest-id

Synopsis	Enter the <b>int-dest-id</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt defaults int-dest-id</a>
Tree	<a href="#">int-dest-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	Use the configured string
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">int-dest-id</a> <a href="#">string</a> <a href="#">string</a>
Tree	<a href="#">string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**top-q-tag**

Synopsis	Use the top Q-tag of this SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">int-dest-id</a> <a href="#">top-q-tag</a>
Tree	<a href="#">top-q-tag</a>
Notes	The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	Default SLA profile for hosts on this SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sla-profile</a> <a href="#">reference</a>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-profile** *reference*

Synopsis	Default subscriber profile for the SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sub-profile</a> <a href="#">reference</a>
Tree	<a href="#">sub-profile</a>

Reference	<b>configure subscriber-mgmt sub-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis	Enter the <b>subscriber-id</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults subscriber-id</b>
Tree	<b>subscriber-id</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-id

Synopsis	Use auto-generated subscriber identification string
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults subscriber-id auto-id</b>
Tree	<b>auto-id</b>
Notes	The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-id

Synopsis	Use SAP ID as default subscriber identification string
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults subscriber-id sap-id</b>
Tree	<b>sap-id</b>
Notes	The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string *string*

Synopsis	Default subscriber identification string for the SAP
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Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt defaults subscriber-id string string</i>
Tree	<a href="#">string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### single-sub-parameters

Synopsis	Enter the <b>single-sub-parameters</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt single-sub-parameters</i>
Tree	<a href="#">single-sub-parameters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### non-sub-traffic

Synopsis	Enable the <b>non-sub-traffic</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt single-sub-parameters non-sub-traffic</i>
Tree	<a href="#">non-sub-traffic</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### app-profile *reference*

Synopsis	Application profile name for all non-subscriber traffic
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>sap string</i> <i>sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure application-assurance group</b> <i>number</i> <i>partition number</i> <i>policy app-profile string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-profile** *reference*

Synopsis	Subscriber profile all non-subscriber traffic
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-id** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subscriber ID applied for all non-subscriber traffic
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">subscriber-id</a> <i>string</i>
Tree	<a href="#">subscriber-id</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**profiled-traffic-only** *boolean*

Synopsis	Include all traffic in subscriber profile
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">profiled-traffic-only</a> <i>boolean</i>
Tree	<a href="#">profiled-traffic-only</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-ident-policy** *reference*

Synopsis	Subscriber identification policy used on this SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">sub-ident-policy</a> <i>reference</i>
Tree	<a href="#">sub-ident-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-limit** (*keyword* | *number*)

Synopsis	Maximum number of subscribers on this SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">subscriber-limit</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">subscriber-limit</a>
Range	1 to 131071
Options	no-limit
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-parameters**

Synopsis	Enter the <b>sap-parameters</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a>

Tree	<a href="#">sap-parameters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **anti-spoof** *keyword*

Synopsis	Anti-spoof type of the SAP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a> <b>anti-spoof</b> <i>keyword</i>
Tree	<a href="#">anti-spoof</a>
Options	ip-mac, nh-mac
Default	ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-sla-mgmt**

Synopsis	Enter the <b>sub-sla-mgmt</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a> <b>sub-sla-mgmt</b>
Tree	<a href="#">sub-sla-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**defaults**

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Default application profile name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <a href="#">number</a> <a href="#">partition</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">app-profile</a> <a href="#">string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	Default SLA profile
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-profile** *reference*

Synopsis	Default subscriber profile
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <a href="#">string</a>
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis Enter the **subscriber-id** context

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *sap-parameters sub-sla-mgmt defaults subscriber-id*

Tree [subscriber-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-id

Synopsis Subscriber ID that is autogenerated

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *sap-parameters sub-sla-mgmt defaults subscriber-id auto-id*

Tree [auto-id](#)

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string *string*

Synopsis String to be used as default subscriber ID

Context **configure service ies** *string* *subscriber-interface string* *group-interface string* *sap-parameters sub-sla-mgmt defaults subscriber-id string string*

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-ident-policy *reference*

Synopsis Subscriber identification policy

Context	<b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a> <a href="#">sub-sla-mgmt</a> <a href="#">sub-ident-policy</a> <i>reference</i>
Tree	<a href="#">sub-ident-policy</a>
Reference	<b>configure subscriber-mgmt</b> <a href="#">sub-ident-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy** *reference*

Synopsis	SHCV policy for IPv4 and IPv6 subscriber hosts
Context	<b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">shcv-policy</a> <i>reference</i>
Tree	<a href="#">shcv-policy</a>
Reference	<b>configure subscriber-mgmt</b> <a href="#">shcv-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy-ipv4** *reference*

Synopsis	SHCV for IPv4 subscriber hosts
Context	<b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">shcv-policy-ipv4</a> <i>reference</i>
Tree	<a href="#">shcv-policy-ipv4</a>
Reference	<b>configure subscriber-mgmt</b> <a href="#">shcv-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy-ipv6** *reference*

Synopsis	SHCV for IPv6 subscriber hosts
Context	<b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">shcv-policy-ipv6</a> <i>reference</i>
Tree	<a href="#">shcv-policy-ipv6</a>
Reference	<b>configure subscriber-mgmt</b> <a href="#">shcv-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**srrp** [**srrp-id**] *number*

Synopsis	Enter the <b>srrp</b> list instance
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i>
Tree	<b>srrp</b>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[srrp-id]** *number*

Synopsis	SRRP instance ID
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i>
Tree	<b>srrp</b>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of SRRP
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dest-ip** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IPv4 prefix
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i>
Tree	<b>dest-ip</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i>
Tree	<b>interface-name</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <a href="#">bfd-liveness</a> <a href="#">service-name</a> <a href="#">string</a>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gw-mac** *string*

Synopsis	Gateway MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <a href="#">gw-mac</a> <a href="#">string</a>
Tree	<a href="#">gw-mac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**keep-alive-interval** *number*

Synopsis	Interval between SRRP advertisements
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <a href="#">keep-alive-interval</a> <a href="#">number</a>

Tree	<a href="#">keep-alive-interval</a>
Range	1 to 100
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### message-path *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to use as the SRRP message path
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">message-path</a> <i>reference</i>
Tree	<a href="#">message-path</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### monitor-oper-group

Synopsis	Enter the <b>monitor-oper-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a>
Tree	<a href="#">monitor-oper-group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### group-name *reference*

Synopsis	Operational group name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **priority-step** *number*

Synopsis	Step value to change priority of SRRP instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <a href="#">monitor-oper-group</a> <a href="#">priority-step</a> <a href="#">number</a>
Tree	<a href="#">priority-step</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **one-garp-per-sap** *boolean*

Synopsis	Send one gratuitous ARP to each SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <a href="#">one-garp-per-sap</a> <a href="#">boolean</a>
Tree	<a href="#">one-garp-per-sap</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	VRRP priority control policy associated with the SRRP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">srrp</a> <a href="#">number</a> <a href="#">policy</a> <a href="#">reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">vrrp</a> <a href="#">policy</a> <a href="#">number</a>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preempt** *boolean*

Synopsis	Allow the SRRP instance to override an existing master
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">preempt</a> <i>boolean</i>
Tree	<a href="#">preempt</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**priority** *number*

Synopsis	Priority for this interface at this level
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 254
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**send-fib-population-packets** *keyword*

Synopsis	Mode used to send FIB population packets on switchover
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">send-fib-population-packets</a> <i>keyword</i>
Tree	<a href="#">send-fib-population-packets</a>
Options	all, outer-tag-only
Default	all
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**suppress-aa-sub** *boolean*

Synopsis	Enable application assurance suppression for ESM subscribers
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>suppress-aa-sub</b> <i>boolean</i>
Tree	<b>suppress-aa-sub</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tos-marking-state** *keyword*

Synopsis	TOS marking state
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>tos-marking-state</b> <i>keyword</i>
Tree	<b>tos-marking-state</b>
Options	trusted, untrusted
Default	untrusted
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Group interface type
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	plain, lns, wlan-gw, gtp, bonding
Default	plain
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw**

Synopsis	Enter the <b>wlan-gw</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b>

Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of WLAN Gateway
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gateway-address** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>gateway-address</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">gateway-address</a>
Max. Instances	10
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Gateway endpoint address of the WLAN Gateway tunnel
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <b>gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">gateway-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## purpose

Synopsis	Enter the <b>purpose</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>purpose</b>
Tree	<b>purpose</b>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## xconnect *boolean*

Synopsis	Use tunnel IP address for crosse-connect traffic
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>purpose xconnect boolean</b>
Tree	<b>xconnect</b>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gateway-router *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Routing instance the WLAN-GW endpoint resides in
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw gateway-router</b> <i>string</i>
Tree	<b>gateway-router</b>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## group-encryption

Synopsis	Enter the <b>group-encryption</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw group-encryption</b>

Tree	<a href="#">group-encryption</a>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encryption-keygroup-inbound** *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">group-encryption</a> <a href="#">encryption-keygroup-inbound</a> <i>reference</i>
Tree	<a href="#">encryption-keygroup-inbound</a>
Reference	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encryption-keygroup-outbound** *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">group-encryption</a> <a href="#">encryption-keygroup-outbound</a> <i>reference</i>
Tree	<a href="#">encryption-keygroup-outbound</a>
Reference	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **l2-ap**

Synopsis	Enter the <b>l2-ap</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">l2-ap</a>
Tree	<a href="#">l2-ap</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **access-point** [[sap-id](#)] *string*

Synopsis	Enter the <b>access-point</b> list instance
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap access-point</b> <i>string</i>
Tree	<b>access-point</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sap-id]** *string*

Synopsis	SAP ID for the Layer 2 access point
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap access-point</b> <i>string</i>
Tree	<b>access-point</b>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the L2 access points
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap access-point</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**encap-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service encapsulation type of this access point
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap access-point</b> <i>string</i> <b>encap-type</b> <i>keyword</i>

Tree	<a href="#">encap-type</a>
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **epipe-sap-template** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Parameters template for the L2 access point SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">l2-ap</a> <a href="#">access-point</a> <i>string</i> <a href="#">epipe-sap-template</a> <i>reference</i>
Tree	<a href="#">epipe-sap-template</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **auto-sub-id-fmt** *keyword*

Synopsis	Format of the auto-generated subscriber ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">l2-ap</a> <a href="#">auto-sub-id-fmt</a> <i>keyword</i>
Tree	<a href="#">auto-sub-id-fmt</a>
Options	include-ap-tags, sap-only
Default	include-ap-tags
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-encap-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default encapsulation type for Layer 2 access points
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap default-encap-type</b> <i>keyword</i>
Tree	<b>default-encap-type</b>
Options	null, dot1q, qinq
Default	null
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lanext



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>lanext</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw lanext</b>
Tree	<b>lanext</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-bd *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of bridge domains
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw lanext max-bd</b> <i>number</i>
Tree	<b>max-bd</b>
Range	1 to 131071
Default	131071
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## learn-ap-mac

Synopsis	Enable the <b>learn-ap-mac</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">learn-ap-mac</a>
Tree	<a href="#">learn-ap-mac</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## delay-auth *boolean*

Synopsis	Delay AP-MAC until after ARP/ND authentication response
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">learn-ap-mac</a> <a href="#">delay-auth</a> <i>boolean</i>
Tree	<a href="#">delay-auth</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mcs-peer

Synopsis	Enable the <b>mcs-peer</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">mcs-peer</a>
Tree	<a href="#">mcs-peer</a>
Description	Commands in this context configure a multi-chassis synchronization peer.
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the MCS peer
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mcs-peer</b> <b>address</b> <i>reference</i>
Tree	<b>address</b>
Description	This command configures the IPv4 address or the global IPv6 unicast address for a multi-chassis synchronization peer.
Reference	<b>configure</b> <b>redundancy</b> <b>multi-chassis peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sync-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag shared by MCS peers
Context	<b>configure</b> <b>service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mcs-peer</b> <b>sync-tag</b> <i>string</i>
Tree	<b>sync-tag</b>
Description	This command configures the synchronization tag for synchronization of ESM and the tunnel state for ESM over soft-GRE with an MCS peer.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mobility

Synopsis	Enter the <b>mobility</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">mobility</a>
Tree	<a href="#">mobility</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## hold-time *number*

Synopsis	Minimum time between two mobility events for single UE
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">mobility</a> <a href="#">hold-time</a> <i>number</i>
Tree	<a href="#">hold-time</a>
Range	0 to 255
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inter-tunnel-type *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable mobility between terminating tunnel types
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">mobility</a> <a href="#">inter-tunnel-type</a> <i>boolean</i>
Tree	<a href="#">inter-tunnel-type</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inter-vlan *boolean*

Synopsis	Allow mobility within different VLANs of the same range
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Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string group-interface string wlan-gw mobility inter-vlan boolean</i>
Tree	<a href="#">inter-vlan</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## trigger

Synopsis	Enter the <b>trigger</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string group-interface string wlan-gw mobility trigger</i>
Tree	<a href="#">trigger</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## control *boolean*

Synopsis	Use control traffic as a mobility trigger
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string group-interface string wlan-gw mobility trigger control boolean</i>
Tree	<a href="#">control</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## data *boolean*

Synopsis	Use data traffic as mobility trigger
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface string group-interface string wlan-gw mobility trigger data boolean</i>
Tree	<a href="#">data</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**iapp** *boolean*

Synopsis	Use IAPP messages as a mobility trigger
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mobility trigger</b> <b>iapp</b> <i>boolean</i>
Tree	<b>iapp</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**oper-down-on-group-degrade** *boolean*

Synopsis	Bring interface down when the ISA WLAN Gateway degraded
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>oper-down-on-group-degrade</b> <i>boolean</i>
Tree	<b>oper-down-on-group-degrade</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**promiscuous-mode** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable promiscuous mode for this group interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>promiscuous-mode</b> <i>boolean</i>
Tree	<b>promiscuous-mode</b>
Description	When configured to <b>true</b> , the router accepts all traffic, including traffic that is not destined for a WLAN gateway group interface MAC or virtual MAC address for ESM processing.  When configured to <b>false</b> , the router only accepts traffic that is destined for a WLAN gateway group interface MAC or virtual MAC address for ESM processing.
Default	false
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-mss-adjust** *number*

Synopsis	TCP Maximum Segment Size (MSS) adjustment for gateway
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tcp-mss-adjust</a> <i>number</i>
Tree	<a href="#">tcp-mss-adjust</a>
Range	160 to 10240
Units	bytes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tunnel-egress-qos**

Synopsis	Enter the <b>tunnel-egress-qos</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a>
Tree	<a href="#">tunnel-egress-qos</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of egress QoS for WLAN-GW tunnels
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**agg-rate-limit** (*number* | *keyword*)

Synopsis	HQoS aggregate rate limit
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tunnel-egress-qos</b> <b>agg-rate-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>agg-rate-limit</b>
Range	1 to 100000000
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**granularity** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Granularity of the egress shaping for WLAN Gateway
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tunnel-egress-qos</b> <b>granularity</b> <i>keyword</i>
Tree	<b>granularity</b>
Options	per-tunnel – Applied to each tunnel per-retailer – Applied to each retailer Mobile Network Operator's fraction of the tunnel payload
Default	per-tunnel
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hold-time** (*number* | *keyword*)

Synopsis	Minimum time to hold egress shaping resources
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tunnel-egress-qos</b> <b>hold-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>hold-time</b>
Range	1 to 86400
Units	seconds
Options	infinite

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-client-only** *boolean*

Synopsis Allow shaping for tunnel traffic for multiple UEs  
 Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)  
[tunnel-egress-qos](#) **multi-client-only** *boolean*  
 Tree [multi-client-only](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qos** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Egress QoS policy linked with each interface tunnel  
 Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)  
[tunnel-egress-qos](#) **qos** *reference*  
 Tree [qos](#)  
 Reference **configure** [qos sap-egress](#) *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler-policy** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Egress scheduler policy linked with each tunnel  
 Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)  
[tunnel-egress-qos](#) **scheduler-policy** *reference*  
 Tree [scheduler-policy](#)

Reference	<b>configure qos scheduler-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tunnel-encaps

Synopsis	Enter the <b>tunnel-encaps</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw tunnel-encaps</b>
Tree	<b>tunnel-encaps</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## learn-l2tp-cookie (*keyword* | *hex-string*)

Synopsis	System that learns the cookie from L2TP tunnels terminating on this interface
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw tunnel-encaps learn-l2tp-cookie</b> ( <i>keyword</i>   <i>hex-string</i> )
Tree	<b>learn-l2tp-cookie</b>
String Length	6
Options	never – Never interpret the cookie always – Interpret cookie regardless of first two octets value
Default	never
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vlan-range [*range*] *string*

Synopsis	Enter the <b>vlan-range</b> list instance
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw vlan-range</b> <i>string</i>
Tree	<b>vlan-range</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[range] string**

Synopsis	IEEE 802.1q VLAN tag range
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a>
Tree	<a href="#">vlan-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**authentication**

Synopsis	Enter the <b>authentication</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">authentication</a>
Tree	<a href="#">authentication</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hold-time number**

Synopsis	Minimum time UE held down after failed authentication
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">authentication</a> <a href="#">hold-time</a> <a href="#">number</a>
Tree	<a href="#">hold-time</a>
Range	0 to 3600
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local**

Synopsis	Enable the <b>local</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">authentication</a> <a href="#">local</a>
Tree	<a href="#">local</a>

Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **coa-policy** *reference*

Synopsis RADIUS ISA policy applied to CoA or disconnect messages  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [authentication](#) [local](#) [coa-policy](#) [reference](#)  
 Tree [coa-policy](#)  
 Reference **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#)  
 Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-ue-state** *keyword*

Synopsis UE state accepted for immediate authentication  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [authentication](#) [local](#) [default-ue-state](#) [keyword](#)  
 Tree [default-ue-state](#)  
 Options portal – Portal redirect UE using the http-redirect-policy  
 dsm – DSM UE using DSM parameters  
 Notes This element is mandatory.  
 Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **on-control-plane** *boolean*

Synopsis Allow authentication on first control plane packet  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [authentication](#) [on-control-plane](#) [boolean](#)  
 Tree [on-control-plane](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy reference**

Synopsis	RADIUS policy for authentication
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">authentication</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vlan-mismatch-timeout *number***

Synopsis	Timeout if packet received with a non-matching VLAN tag
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">authentication</a> <a href="#">vlan-mismatch-timeout</a> <i>number</i>
Tree	<a href="#">vlan-mismatch-timeout</a>
Range	5 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**data-triggered-ue-creation**

Synopsis	Enter the <b>data-triggered-ue-creation</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a>
Tree	<a href="#">data-triggered-ue-creation</a>
Description	Commands in this context configure data-triggered subscriber creation for Wi-Fi subscribers. Data-triggered UE creation only works upon receipt of TCP and UDP packets.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state *keyword***

Synopsis	Administrative state of data-triggered UE creation
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**arp** *boolean*

Synopsis	Authenticate ARP packets received from an unknown UE
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <b>arp</b> <i>boolean</i>
Tree	<a href="#">arp</a>
Default	false
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**create-proxy-cache-entry**

Synopsis	Enter the <b>create-proxy-cache-entry</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <b>create-proxy-cache-entry</b>
Tree	<a href="#">create-proxy-cache-entry</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mac-format** *string*

Synopsis	MAC address format
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <b>mac-format</b> <i>string</i>
Tree	<a href="#">mac-format</a>
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-server**

Synopsis	Enable the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">proxy-server</a>
Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name** *string*

Synopsis	RADIUS Proxy server name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">proxy-server</a> <a href="#">name</a> <a href="#">string</a>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string*

Synopsis	Router instance of the RADIUS proxy server
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">proxy-server</a> <a href="#">router-instance</a> <a href="#">string</a>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ospf** *boolean*

Synopsis	Authenticate OSPF packets received from an unknown UE
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">ospf</a> <a href="#">boolean</a>

Tree	<a href="#">ospf</a>
Description	When configured to <b>true</b> , the system triggers UE authentication based on OSPFv2 or OSPFv3 packets. These packets are used with the dynamic VPLS service.
Default	false
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp4

Synopsis	Enter the <b>dhcp4</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <b>dhcp4</b>
Tree	<a href="#">dhcp4</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of DHCPv4
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <b>dhcp4</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dns *string*

Synopsis	DNS servers signaled in DHCP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <b>dhcp4</b> <b>dns</b> <i>string</i>
Tree	<a href="#">dns</a>
Max. Instances	2
Notes	This element is ordered by the user.

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2-aware-ip-address** (*ipv4-unicast-address* | *keyword*)

Synopsis L2-Aware NAT inside IP address  
 Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw  
 vlan-range string dhcp4 I2-aware-ip-address (ipv4-unicast-address | keyword)*  
 Tree [I2-aware-ip-address](#)  
 Options from-pool – IP address allocated from a pool  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lease-time**

Synopsis Enter the **lease-time** context  
 Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw  
 vlan-range string dhcp4 lease-time*  
 Tree [lease-time](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active number**

Synopsis Lease time an authenticated user  
 Context **configure** *service ies string subscriber-interface string group-interface string wlan-gw  
 vlan-range string dhcp4 lease-time active number*  
 Tree [active](#)  
 Range 300 to 3600  
 Units seconds  
 Default 600  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**initial number**

Synopsis	Lease time for migrant user (unauthenticated)
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4</a> <a href="#">lease-time</a> <b>initial</b> <i>number</i>
Tree	<a href="#">initial</a>
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nbns string**

Synopsis	NetBIOS servers signaled in DHCP
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4</a> <b>nbns</b> <i>string</i>
Tree	<a href="#">nbns</a>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dhcp6**

Synopsis	Enter the <b>dhcp6</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>dhcp6</b>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the protocol
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Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp6 admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### preferred-lifetime

Synopsis	Enter the <b>preferred-lifetime</b> context
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp6 preferred-lifetime</i>
Tree	<a href="#">preferred-lifetime</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### active number

Synopsis	Preferred signaled lifetime after full authentication
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp6 preferred-lifetime active number</i>
Tree	<a href="#">active</a>
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### initial number

Synopsis	Signaled preferred lifetime after full authentication
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dhcp6 preferred-lifetime initial number</i>
Tree	<a href="#">initial</a>
Range	300 to 3600

Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime**

Synopsis	Enter the <b>valid-lifetime</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <b>valid-lifetime</b>
Tree	<a href="#">valid-lifetime</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active number**

Synopsis	Signaled valid lifetime after full authentication
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">valid-lifetime</a> <b>active</b> <i>number</i>
Tree	<a href="#">active</a>
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial number**

Synopsis	Valid signaled lifetime UE is not fully authenticated
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">valid-lifetime</a> <b>initial</b> <i>number</i>
Tree	<a href="#">initial</a>
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dsm

Synopsis Enter the **dsm** context

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) **dsm**

Tree [dsm](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-policy *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis ISA Radius Policy for accounting

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) **accounting-policy** *reference*

Tree [accounting-policy](#)

Reference **configure** [aaa](#) [radius](#) [isa-policy](#) [string](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-update

Synopsis Enable the **accounting-update** context

Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) **accounting-update**

Tree [accounting-update](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## interval *number*

Synopsis Interim accounting update messages interval

Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dsm</b> <b>accounting-update interval</b> <i>number</i>
Tree	<a href="#">interval</a>
Range	5 to 259200
Units	minutes
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of DSM
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dsm</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **application-assurance**

Synopsis	Enter the <b>application-assurance</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dsm</b> <b>application-assurance</b>
Tree	<a href="#">application-assurance</a>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-statistics** *boolean*

Synopsis	Collect AA statistics
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dsm</b> <b>application-assurance</b> <b>accounting-statistics</b> <i>boolean</i>
Tree	<a href="#">accounting-statistics</a>
Default	false

Introduced 21.10.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** *reference*

Synopsis AA application profile used for portal authentication  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [application-assurance](#) [profile](#) [reference](#)  
 Tree [profile](#)  
 Reference **configure** [application-assurance](#) [group](#) [number](#) [partition](#) [number](#) [policy](#) [app-profile](#) [string](#)  
 Introduced 21.10.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-parameter** *string*

Synopsis AA URL parameter included for HTTP portal redirect  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [application-assurance](#) [url-parameter](#) [string](#)  
 Tree [url-parameter](#)  
 String Length 1 to 247  
 Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **egress**

Synopsis Enter the **egress** context  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [group-interface](#) [string](#) [wlan-gw](#) [vlan-range](#) [string](#) [dsm](#) [egress](#)  
 Tree [egress](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** *reference*

Synopsis Policer for egress traffic

Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dsm egress policer reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure subscriber-mgmt isa-policer</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dsm ingress</i>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-filter reference

Synopsis	Filter for ingress traffic
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dsm ingress ip-filter reference</i>
Tree	<a href="#">ip-filter</a>
Reference	<b>configure subscriber-mgmt isa-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policer reference

Synopsis	Policer for ingress traffic
Context	<b>configure service ies</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string dsm ingress policer reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure subscriber-mgmt isa-policer</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**soft-quota-exhausted-filter** *reference*

Synopsis	Filter applied when soft volume quota is reached
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm ingress</a> <a href="#">soft-quota-exhausted-filter</a> <i>reference</i>
Tree	<a href="#">soft-quota-exhausted-filter</a>
Description	This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the <b>ip-filter</b> command in the <b>configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter</b> context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs.
Reference	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i>
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**one-time-redirect**

Synopsis	Enter the <b>one-time-redirect</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm one-time-redirect</a>
Tree	<a href="#">one-time-redirect</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port** *number*

Synopsis	Destination port of packets for HTTP redirect
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm one-time-redirect</a> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65535
Default	80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**url string**

Synopsis	URL for redirected HTTP protocol packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">one-time-redirect</a> <a href="#">url</a> <a href="#">string</a>
Tree	<a href="#">url</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**volume-quota-direction keyword**

Synopsis	Volume quota direction for WLAN GW
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dsm</a> <a href="#">volume-quota-direction</a> <a href="#">keyword</a>
Tree	<a href="#">volume-quota-direction</a>
Description	This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs.
Options	both – Both directions ingress – Ingress direction (upstream) egress – Egress direction (downstream)
Default	both
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dynamic-service boolean**

Synopsis	Dynamically assign WLAN-GW subscriber to a VPLS service
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">dynamic-service</a> <a href="#">boolean</a>
Tree	<a href="#">dynamic-service</a>
Description	When configured to <b>true</b> , the WLAN-GW subscriber is dynamically assigned to a VPLS service, based on RADIUS authentication reply attributes. This feature is used in conjunction with the <b>configure service vpls wlan-gw wlan-gw-group</b> command.  See "Dynamic VPLS service" in the <i>7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide</i> for more information about the dynamic VPLS service feature.
Default	false
Introduced	23.3.R1



Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **extension** [[extension-range](#)] *string*

Synopsis Add a list entry for **extension**

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **extension** *string*

Tree [extension](#)

Introduced 21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[extension-range]** *string*

Synopsis VLAN tag range used for matching

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **extension** *string*

Tree [extension](#)

Description This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility.

Notes This element is part of a list key.

Introduced 21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect-policy** *reference*

Synopsis Default HTTP redirect policy for portal authentication

Context **configure** [service ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **http-redirect-policy** *reference*

Tree [http-redirect-policy](#)

Reference **configure** [subscriber-mgmt](#) **http-redirect-policy** *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **idle-timeout-action** *keyword*

Synopsis Action to perform when the idle timeout expires

Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>idle-timeout-action</b> <i>keyword</i>
Tree	<b>idle-timeout-action</b>
Options	remove, shcv
Default	remove
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## I2-service

Synopsis	Enable the <b>I2-service</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b>
Tree	<b>I2-service</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of Layer 2 service for VLAN range
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service** *reference*

Synopsis Layer 2 service associated with the range

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [l2-service](#) [service](#) *reference*

Tree [service](#)

Reference **configure** [service](#) [vpls](#) *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** *reference*

Synopsis NAT policy for DSM and ISA portal authentication

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [nat-policy](#) *reference*

Tree [nat-policy](#)

Reference **configure** [service](#) [nat](#) [nat-policy](#) *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **retail-service** *string*

Synopsis Default retail service for new UEs in this range

Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [retail-service](#) *string*

Tree [retail-service](#)

String Length 1 to 64

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **slaac**

Synopsis Enter the **slaac** context

Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>slaac</i>
Tree	<a href="#">slaac</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the protocol
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>slaac</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime**

Synopsis	Enter the <b>preferred-lifetime</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>slaac</i> <b>preferred-lifetime</b>
Tree	<a href="#">preferred-lifetime</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active** *number*

Synopsis	Preferred signaled lifetime after full authentication
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>group-interface</i> <i>string</i> <i>wlan-gw</i> <i>vlan-range</i> <i>string</i> <i>slaac</i> <b>preferred-lifetime</b> <b>active</b> <i>number</i>
Tree	<a href="#">active</a>
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial number**

Synopsis Signaled preferred lifetime after full authentication

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **slaac preferred-lifetime initial number**

Tree **initial**

Range 300 to 3600

Units seconds

Default 300

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime**

Synopsis Enter the **valid-lifetime** context

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **slaac valid-lifetime**

Tree **valid-lifetime**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active number**

Synopsis Signaled valid lifetime after full authentication

Context **configure service ies** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **slaac valid-lifetime active number**

Tree **active**

Range 300 to 3600

Units seconds

Default 600

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**initial number**

Synopsis	Valid signaled lifetime UE is not fully authenticated
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac</b> <b>valid-lifetime</b> <b>initial</b> <i>number</i>
Tree	<b>initial</b>
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vrgw**

Synopsis	Enter the <b>vrgw</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b>
Tree	<b>vrgw</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of vRGW
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**brg**

Synopsis	Enter the <b>brg</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>brg</b>

Tree	<a href="#">brg</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authenticated-brg-only** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Only allow hosts from BRGs pre-authenticated using the radius-proxy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw</a> <a href="#">brg</a> <a href="#">authenticated-brg-only</a> <i>boolean</i>
Tree	<a href="#">authenticated-brg-only</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-brg-profile** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile to use if the AAA server does not specify one
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw</a> <a href="#">brg</a> <a href="#">default-brg-profile</a> <i>reference</i>
Tree	<a href="#">default-brg-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext**

Synopsis	Enter the <b>lanext</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw</a> <a href="#">lanext</a>
Tree	<a href="#">lanext</a>

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## access



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>access</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <b>access</b>
Tree	<a href="#">access</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-mac number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on access side
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">access</a> <b>max-mac</b> <i>number</i>
Tree	<a href="#">max-mac</a>
Range	1 to 256
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## multi-access *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow multiple access points
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <i>string</i> <b>vlan-range</b> <i>string</i> <b>vrgw lanext access multi-access</b> <i>boolean</i>
Tree	<b>multi-access</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress home traffic
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <i>string</i> <b>vlan-range</b> <i>string</i> <b>vrgw lanext access policer</b> <i>reference</i>
Tree	<b>policer</b>
Reference	<b>configure subscriber-mgmt isa-policer</b> <i>string</i>
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of HLE
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <i>string</i> <b>vlan-range</b> <i>string</i> <b>vrgw lanext admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **assistive-address-resolution** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA assists in address resolution
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>lanext</b> <b>assistive-address-resolution</b> <i>boolean</i>
Tree	<b>assistive-address-resolution</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bd-mac-prefix** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Prefix of the HLE BD MAC address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>lanext</b> <b>bd-mac-prefix</b> <i>string</i>
Tree	<b>bd-mac-prefix</b>
String Length	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-translation** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow MAC address translation for HLE services
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>lanext</b> <b>mac-translation</b> <i>boolean</i>
Tree	<b>mac-translation</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## network



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>network</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw lanext network</b>
Tree	<b>network</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the HLE network
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw lanext network admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-mac *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on network side
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw lanext network max-mac</b> <i>number</i>
Tree	<b>max-mac</b>
Range	1 to 64

Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress data center traffic
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">vrgw</a> <a href="#">lanext</a> <a href="#">network</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-policer</a> <a href="#">string</a>
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect**

Synopsis	Enter the <b>xconnect</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a>
Tree	<a href="#">xconnect</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting**

Synopsis	Enter the <b>accounting</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">accounting</a>
Tree	<a href="#">accounting</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mobility-updates** *boolean*

Synopsis	Accounting updates triggered by mobility
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">mobility-updates</a> <a href="#">boolean</a>
Tree	<a href="#">mobility-updates</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS accounting policy for cross-connected UEs
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">policy</a> <a href="#">reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**update-interval** *number*

Synopsis	Time between successive interim accounting updates
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">group-interface</a> <a href="#">string</a> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <a href="#">string</a> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">update-interval</a> <a href="#">number</a>
Tree	<a href="#">update-interval</a>
Range	5 to 259200
Units	minutes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the cross-connect
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>xconnect admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### wlan-gw-group *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ID of WLAN Gateway ISA group that gateway binds to
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>wlan-gw-group</b> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure isa</b> <b>wlan-gw-group</b> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### wpp

Synopsis	Enable the <b>wpp</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp</b>
Tree	<a href="#">wpp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### admin-state *keyword*

Synopsis	Administrative state of WPP
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## initial

Synopsis	Enter the <b>initial</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp initial</a>
Tree	<a href="#">initial</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## app-profile *reference*

Synopsis	Initial application profile name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp initial</a> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sla-profile *reference*

Synopsis	Initial SLA profile
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp initial</a> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-profile *reference*

Synopsis	Initial subscriber profile
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp initial sub-profile</b> <i>reference</i>
Tree	<b>sub-profile</b>
Reference	<b>configure subscriber-mgmt sub-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### lease-time *number*

Synopsis	Lease time
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp lease-time</b> <i>number</i>
Tree	<b>lease-time</b>
Range	10 to 315446399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### portal

Synopsis	Enter the <b>portal</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp portal</b>
Tree	<b>portal</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### name *string*

Synopsis	Web portal server name
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp portal name</b> <i>string</i>
Tree	<b>name</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **portal-group** *reference*

Synopsis	WPP portal group for this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <a href="#">portal</a> <a href="#">portal-group</a> <i>reference</i>
Tree	<a href="#">portal-group</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">wpp</a> <a href="#">portal-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Virtual router instance of WPP portal for interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <a href="#">portal</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **restore-to-initial-on-disconnect** *boolean*

Synopsis	Restore initial profiles after a host has disconnected
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <a href="#">restore-to-initial-on-disconnect</a> <i>boolean</i>
Tree	<a href="#">restore-to-initial-on-disconnect</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**triggered-hosts** *boolean*

Synopsis	Enable/disable triggered hosts
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <a href="#">triggered-hosts</a> <i>boolean</i>
Tree	<a href="#">triggered-hosts</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-db** *reference*

Synopsis	User database
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <b>down</b>
Tree	<a href="#">down</a>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <b>down</b> <b>init-only</b> <i>boolean</i>
Tree	<a href="#">init-only</a>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## seconds *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <b>down</b> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## up

Synopsis	Enter the <b>up</b> context
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Context	<b>configure service ies string subscriber-interface string hold-time ipv4 up</b>
Tree	<b>up</b>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds number**

Synopsis	Up hold time for the IP interface
Context	<b>configure service ies string subscriber-interface string hold-time ipv4 up seconds number</b>
Tree	<b>seconds</b>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure service ies string subscriber-interface string hold-time ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **down**

Synopsis	Enter the <b>down</b> context
Context	<b>configure service ies string subscriber-interface string hold-time ipv6 down</b>
Tree	<b>down</b>
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **init-only** *boolean*

Synopsis Apply delay only at interface configuration or reboot

Context **configure** *service ies string subscriber-interface string hold-time ipv6 down init-only boolean*

Tree [init-only](#)

Description When configured to **true**, the system applies a delay only when the IP interface is first configured or after a system reboot.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis Down hold time for the IP interface

Context **configure** *service ies string subscriber-interface string hold-time ipv6 down seconds number*

Tree [seconds](#)

Range 1 to 1200

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **up**

Synopsis Enter the **up** context

Context **configure** *service ies string subscriber-interface string hold-time ipv6 up*

Tree [up](#)

Description Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-linking**

Synopsis	Enter the <b>ipoe-linking</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-linking</a>
Tree	<a href="#">ipoe-linking</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gratuitous-router-advertisement** *boolean*

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-linking</a> <a href="#">gratuitous-router-advertisement</a> <i>boolean</i>
Tree	<a href="#">gratuitous-router-advertisement</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-session**

Synopsis	Enter the <b>ipoe-session</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-session</a>
Tree	<a href="#">ipoe-session</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-limit** *number*

Synopsis	Maximum number of sessions on this group interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">session-limit</a> <i>number</i>
Tree	<a href="#">session-limit</a>
Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**address** [[ipv4-address](#)] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[[ipv4-address](#)]** *string*

Synopsis	IP address associated with the subscriber subnet
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gateway string**

Synopsis	Gateway IP address within the subnet for SRRP routing
Context	<b>configure service ies string subscriber-interface string ipv4 address string gateway string</b>
Tree	<a href="#">gateway</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **holdup-time number**

Synopsis	Wait time before accepting new state attribute
Context	<b>configure service ies string subscriber-interface string ipv4 address string holdup-time number</b>
Tree	<a href="#">holdup-time</a>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **populate-host-routes boolean**

Synopsis	Populate subscriber host routes in local FIB
Context	<b>configure service ies string subscriber-interface string ipv4 address string populate-host-routes boolean</b>
Tree	<a href="#">populate-host-routes</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length number**

Synopsis	IPv4 address prefix length
Context	<b>configure service ies string subscriber-interface string ipv4 address string prefix-length number</b>
Tree	<a href="#">prefix-length</a>
Range	0 to 32



Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>address</b> <i>string</i> <b>track-srrp</b> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-unmatching-subnets** *boolean*

Synopsis	Allow subscriber hosts without a matching subnet
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>allow-unmatching-subnets</b> <i>boolean</i>
Tree	<a href="#">allow-unmatching-subnets</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-dns** *string*

Synopsis	Default DNS server addresses
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>default-dns</b> <i>string</i>
Tree	<a href="#">default-dns</a>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure service ies string subscriber-interface string ipv4 dhcp</b>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state keyword

Synopsis	Administrative state of DHCP
Context	<b>configure service ies string subscriber-interface string ipv4 dhcp admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service ies string subscriber-interface string ipv4 dhcp client-applications</b>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure service ies string subscriber-interface string ipv4 dhcp client-applications dhcp boolean</b>
Tree	<a href="#">dhcp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp boolean**

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp client-applications</a> <a href="#">ppp boolean</a>
Tree	<a href="#">ppp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gi-address string**

Synopsis	GI address for the DHCP relay
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp gi-address</a> <i>string</i>
Tree	<a href="#">gi-address</a>
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lease-populate**

Synopsis	Enter the <b>lease-populate</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate</b>
Tree	<a href="#">lease-populate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-leases** *number*

Synopsis	Maximum number of DHCPv4 leases
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate max-leases</b> <i>number</i>
Tree	<a href="#">max-leases</a>
Range	0 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option-82**

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp option-82</b>
Tree	<a href="#">option-82</a>
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor-specific-option**

Synopsis	Enter the <b>vendor-specific-option</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp option-82 vendor-specific-option</b>
Tree	<a href="#">vendor-specific-option</a>
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-mac-address** *boolean*

Synopsis	Send the MAC address in the VSO
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>client-mac-address</b> <i>boolean</i>
Tree	<b>client-mac-address</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-id** *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>sap-id</b> <i>boolean</i>
Tree	<b>sap-id</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-id** *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>service-id</b> <i>boolean</i>
Tree	<b>service-id</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	User-defined ASCII string for the VSO
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>vendor-specific-option</b> <b>string</b> <i>string</i>
Tree	<b>string</b>

String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **system-id** *boolean*

Synopsis Send the system ID in the VSO  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [ipv4](#) [dhcp](#) [option-82](#) [vendor-specific-option](#) [system-id](#) *boolean*  
 Tree [system-id](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy-server**

Synopsis Enter the **proxy-server** context  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [ipv4](#) [dhcp](#) [proxy-server](#)  
 Tree [proxy-server](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the DHCP proxy server  
 Context **configure** [service](#) [ies](#) [string](#) [subscriber-interface](#) [string](#) [ipv4](#) [dhcp](#) [proxy-server](#) [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **emulated-server** *string*

Synopsis IP address used as DHCP server address in SAP context

Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server emulated-server</b> <i>string</i>
Tree	<b>emulated-server</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-time

Synopsis	Enter the <b>lease-time</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time</b>
Tree	<b>lease-time</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## radius-override *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time radius-override</b> <i>boolean</i>
Tree	<b>radius-override</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis	DHCP lease time
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time value</b> <i>number</i>
Tree	<b>value</b>
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">python-policy</a> <a href="#">reference</a>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **relay-proxy**

Synopsis	Enable the <b>relay-proxy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a>
Tree	<a href="#">relay-proxy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **release-update-src-ip** *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> <a href="#">release-update-src-ip</a> <a href="#">boolean</a>
Tree	<a href="#">release-update-src-ip</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **siaddr-override** *string*

Synopsis	DHCP server IP address for address hiding function
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">subscriber-interface</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">relay-proxy</a> <a href="#">siaddr-override</a> <a href="#">string</a>
Tree	<a href="#">siaddr-override</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**release-include-gi-address** *boolean*

Synopsis	Include the GI address in DHCP relay messages
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">release-include-gi-address</a> <i>boolean</i>
Tree	<a href="#">release-include-gi-address</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server** *string*

Synopsis	DHCP server IP addresses
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">server</a> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**src-ip-addr** *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">src-ip-addr</a> <i>keyword</i>
Tree	<a href="#">src-ip-addr</a>
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**virtual-subnet** *boolean*

Synopsis	Enable a virtual subnet for DHCPv4 hosts
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">virtual-subnet</a> <i>boolean</i>
Tree	<a href="#">virtual-subnet</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **export-host-routes** *boolean*

Synopsis	Allow export of subscriber management host routes
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>export-host-routes</b> <i>boolean</i>
Tree	<a href="#">export-host-routes</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **unnumbered**

Synopsis	Enter the <b>unnumbered</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b>
Tree	<a href="#">unnumbered</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis	IP address for the subscriber interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b> <b>ip-address</b> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-int-name** *string*

Synopsis	Interface name from which an IPv4 address is borrowed
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b> <b>ip-int-name</b> <i>string</i>

Tree	<a href="#">ip-int-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address [[ipv6-address](#)] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[ipv6-address](#)] *string*

Synopsis	IPv6 address for the subscriber interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>address</b> <i>string</i> <b>host-type</b> <i>keyword</i>
Tree	<b>host-type</b>
Options	pd – IPv6 ESM hosts for DHCPv6 prefix-delegation wan – ESM hosts for DHCPv6 addresses or by WAN interface pd-wan – Both prefix-delegation and ESM hosts
Default	pd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-length** *number*

Synopsis	IPv6 address prefix length
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>address</b> <i>string</i> <b>prefix-length</b> <i>number</i>
Tree	<b>prefix-length</b>
Range	0 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**allow-multiple-wan-addresses** *boolean*

Synopsis	Allow multiple WAN addresses
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>allow-multiple-wan-addresses</b> <i>boolean</i>
Tree	<b>allow-multiple-wan-addresses</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**allow-unmatching-prefixes** *boolean*

Synopsis	Allow subscriber hosts without a matching prefix
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">allow-unmatching-prefixes</a> <i>boolean</i>
Tree	<a href="#">allow-unmatching-prefixes</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-dns** *string*

Synopsis	Default DNS server addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">default-dns</a> <i>string</i>
Tree	<a href="#">default-dns</a>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**delegated-prefix-length** (*number* | *keyword*)

Synopsis	IPv6 delegated prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">delegated-prefix-length</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">delegated-prefix-length</a>
Range	48 to 64
Options	variable
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp6**

Synopsis	Enter the <b>dhcp6</b> context
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6</b>
Tree	<b>dhcp6</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-client-id-change** *boolean*

Synopsis	Allow changes to the client ID
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 allow-client-id-change</b> <i>boolean</i>
Tree	<b>allow-client-id-change</b>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **override-slaac** *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 override-slaac</b> <i>boolean</i>
Tree	<b>override-slaac</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pd-managed-route**

Synopsis	Enable the <b>pd-managed-route</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 pd-managed-route</b>
Tree	<b>pd-managed-route</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **next-hop** *keyword*

Synopsis	Next hop type
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>pd-managed-route</b> <b>next-hop</b> <i>keyword</i>
Tree	<b>next-hop</b>
Options	ipv4, ipv6
Default	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy-server**

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b>
Tree	<b>proxy-server</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **client-applications**

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>client-applications</b>
Tree	<b>client-applications</b>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp boolean**

Synopsis Enable IPoE clients to use DHCP relay or proxy server

Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean](#)

Tree [dhcp](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp boolean**

Synopsis Allow PPPoE clients to use DHCP relay functionality

Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server client-applications ppp boolean](#)

Tree [ppp](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime (number | keyword)**

Synopsis Time for prefix to remain preferred on this interface

Context **configure** [service ies string subscriber-interface string ipv6 dhcp6 proxy-server preferred-lifetime \(number | keyword\)](#)

Tree [preferred-lifetime](#)

Range 300 to 4294967294

Units seconds

Options infinite

Default 3600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**rebind-timer** *number*

Synopsis	Rebind timer (T2) for this interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>rebind-timer</b> <i>number</i>
Tree	<a href="#">rebind-timer</a>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**renew-timer** *number*

Synopsis	Renew timer (T1)
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>renew-timer</b> <i>number</i>
Tree	<a href="#">renew-timer</a>
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server-id**

Synopsis	Enter the <b>server-id</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>server-id</b>
Tree	<a href="#">server-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duid-en-ascii** *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
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Context	<b>configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-en-ascii string</b>
Tree	<a href="#">duid-en-ascii</a>
String Length	1 to 58
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duid-en-hex string**

Synopsis	DUID system ID in hexadecimal format
Context	<b>configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-en-hex string</b>
Tree	<a href="#">duid-en-hex</a>
String Length	1 to 118
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duid-ll**

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	<b>configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server server-id duid-ll</b>
Tree	<a href="#">duid-ll</a>
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime (number | keyword)**

Synopsis	Time for prefix to remain valid on this interface
Context	<b>configure service ies string subscriber-interface string ipv6 dhcp6 proxy-server valid-lifetime (number   keyword)</b>
Tree	<a href="#">valid-lifetime</a>
Range	300 to 4294967294

Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **relay**

Synopsis	Enter the <b>relay</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a>
Tree	<a href="#">relay</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications</b>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications dhcp boolean</b>
Tree	<a href="#">dhcp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp boolean

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	<b>configure service ies string subscriber-interface string ipv6 dhcp6 relay client-applications ppp boolean</b>
Tree	<a href="#">ppp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
Context	<b>configure service ies string subscriber-interface string ipv6 dhcp6 relay description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-split

Synopsis Enter the **lease-split** context

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split**

Tree [lease-split](#)

Description Commands in this context configure DHCPv6 lease split.

DHCPv6 lease split is active when administratively enabled and for all IA\_NA and IA\_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:

- the renew time T1 committed by the server (long renew time)
- half of the preferred lifetime committed by the server when T1 committed by the server equals zero

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of DHCPv6 lease split

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## valid-lifetime *number*

Synopsis DHCPv6 lease split valid lifetime (short lease time)

Context **configure service ies string subscriber-interface string ipv6 dhcp6 relay lease-split valid-lifetime number**

Tree [valid-lifetime](#)

Range 300 to 315446399

Units seconds

Default 3600

Introduced 21.2.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **link-address** *string*

Synopsis Link address for the DHCPv6 relay messages  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [link-address](#) *string*  
 Tree [link-address](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *string*

Synopsis DHCP6 servers to which the DHCP6 requests are forwarded  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [server](#) *string*  
 Tree [server](#)  
 Max. Instances 8  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-address** *string*

Synopsis Source IPv6 address for the DHCPv6 relay messages  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [source-address](#) *string*  
 Tree [source-address](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-bridged-mode** *boolean*

Synopsis Enable IPv6 IPoE bridged mode  
 Context **configure** [service](#) [ies](#) *string* [subscriber-interface](#) *string* [ipv6](#) [ipoe-bridged-mode](#) *boolean*

Tree	<a href="#">ipoe-bridged-mode</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## link-local-address

Synopsis	Enter the <b>link-local-address</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a>
Tree	<a href="#">link-local-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address *string*

Synopsis	IPv6 link local address
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix [[ipv6-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[ipv6-prefix](#)] *string*

Synopsis	IPv6 address for a router interface
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### holdup-time *number*

Synopsis	Time to wait before route accepts new state attribute
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>prefix</b> <i>string</i> <b>holdup-time</b> <i>number</i>
Tree	<b>holdup-time</b>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### host-type *keyword*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>prefix</b> <i>string</i> <b>host-type</b> <i>keyword</i>
Tree	<b>host-type</b>
Options	pd – IPv6 ESM hosts for DHCPv6 prefix-delegation wan – ESM hosts for DHCPv6 addresses or by WAN interface pd-wan – Both prefix-delegation and ESM hosts
Default	pd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### track-srrp *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>prefix</b> <i>string</i> <b>track-srrp</b> <i>number</i>



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Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## router-advertisements

Synopsis	Enter the <b>router-advertisements</b> context
Context	<b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a>
Tree	<a href="#">router-advertisements</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	<b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	<b>configure service ies</b> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">force-mcast</a> <i>keyword</i>
Tree	<a href="#">force-mcast</a>
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-advertisement-interval** *number*

Synopsis	Maximum advertisement interval
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>max-advertisement-interval</b> <i>number</i>
Tree	<b>max-advertisement-interval</b>
Range	900 to 1800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-advertisement-interval** *number*

Synopsis	Minimum advertisement interval
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>min-advertisement-interval</b> <i>number</i>
Tree	<b>min-advertisement-interval</b>
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b>
Tree	<b>options</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **current-hop-limit** *number*

Synopsis	Hop limit to be advertised
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>current-hop-limit</b> <i>number</i>
Tree	<b>current-hop-limit</b>
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dns

Synopsis	Enter the <b>dns</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>dns</b>
Tree	<b>dns</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## include-rdnss *boolean*

Synopsis	Include the RDNSS server option 25
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>dns</b> <b>include-rdnss</b> <i>boolean</i>
Tree	<b>include-rdnss</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rdnss-lifetime (*number* | *keyword*)

Synopsis	Maximum time for the RDNSS address to remain valid
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>dns</b> <b>rdnss-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>rdnss-lifetime</b>
Range	900 to 3600
Units	seconds
Options	infinite

Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-configuration** *boolean*

Synopsis	Managed address configuration flag
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>managed-configuration</b> <i>boolean</i>
Tree	<a href="#">managed-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mtu** (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>mtu</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mtu</a>
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **other-stateful-configuration** *boolean*

Synopsis	Other stateful configuration flag
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>other-stateful-configuration</b> <i>boolean</i>
Tree	<a href="#">other-stateful-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**reachable-time** *number*

Synopsis	Reachable time for advertisements
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>reachable-time</b> <i>number</i>
Tree	<b>reachable-time</b>
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retransmit-timer** *number*

Synopsis	Retransmit time in router advertisements from interface
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>retransmit-timer</b> <i>number</i>
Tree	<b>retransmit-timer</b>
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-lifetime** (*number* | *keyword*)

Synopsis	Router lifetime
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>router-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>router-lifetime</b>
Range	2700 to 9000
Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-options**

Synopsis	Enter the <b>prefix-options</b> context
Context	<b>configure service ies string subscriber-interface string ipv6 router-advertisements prefix-options</b>
Tree	<a href="#">prefix-options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**autonomous *boolean***

Synopsis	Value of the autonomous flag
Context	<b>configure service ies string subscriber-interface string ipv6 router-advertisements prefix-options autonomous boolean</b>
Tree	<a href="#">autonomous</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**on-link *boolean***

Synopsis	Assign the prefix to an interface on the specified link
Context	<b>configure service ies string subscriber-interface string ipv6 router-advertisements prefix-options on-link boolean</b>
Tree	<a href="#">on-link</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime (*number* | *keyword*)**

Synopsis	Time for a prefix to remain preferred
Context	<b>configure service ies string subscriber-interface string ipv6 router-advertisements prefix-options preferred-lifetime (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">preferred-lifetime</a>
Range	0 to 4294967294

Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>prefix-options</b> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>valid-lifetime</b>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-solicit**

Synopsis	Enter the <b>router-solicit</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-solicit</b>
Tree	<b>router-solicit</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **inactivity-timer** (*number* | *keyword*)

Synopsis	Time before an inactive host is removed
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-solicit</b> <b>inactivity-timer</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>inactivity-timer</b>
Range	1 to 31536000
Units	seconds
Options	infinite

Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-address-assignment

Synopsis	Enter the <b>local-address-assignment</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a>
Tree	<a href="#">local-address-assignment</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">client-applications</a>



Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp boolean**

Synopsis	Request local addresses for PPP IPCP hosts
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">client-applications</a> <a href="#">ppp</a> <i>boolean</i>
Tree	<a href="#">ppp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-pool string**

Synopsis	Default pools
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">default-pool</a> <i>string</i>
Tree	<a href="#">default-pool</a>
String Length	1 to 32
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server reference**

Synopsis	Local DHCPv4 server for local pools management
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv4</a> <a href="#">server</a> <i>reference</i>
Tree	<a href="#">server</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>local-address-assignment</i> <b>ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>local-address-assignment</i> <b>ipv6</b> <b>client-applications</b>
Tree	<b>client-applications</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>local-address-assignment</i> <b>ipv6</b> <b>client-applications ipoe-slaac</b> <i>boolean</i>
Tree	<b>ipoe-slaac</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>local-address-assignment</i> <b>ipv6</b> <b>client-applications ipoe-wan</b> <i>boolean</i>
Tree	<b>ipoe-wan</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp-slaac** *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">client-applications</a> <a href="#">ppp-slaac</a> <i>boolean</i>
Tree	<a href="#">ppp-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server** *reference*

Synopsis	Local DHCPv6 server for local pools management
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">server</a> <i>reference</i>
Tree	<a href="#">server</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe**

Synopsis	Enter the <b>pppoe</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">pppoe</a>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** *number*

Synopsis Maximum PPPoE sessions  
 Context **configure service ies** *string subscriber-interface string pppoe session-limit number*  
 Tree [session-limit](#)  
 Range 1 to 333823  
 Default 1  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-mode** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Mode of operation for hosts with /128 WAN IPv6 address  
 Context **configure service ies** *string subscriber-interface string wan-mode keyword*  
 Tree [wan-mode](#)  
 Options mode64, mode128  
 Default mode64  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw**

Synopsis Enable the **wlan-gw** context  
 Context **configure service ies** *string subscriber-interface string wlan-gw*  
 Tree [wlan-gw](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pool-manager

Synopsis	Enter the <b>pool-manager</b> context
Context	<b>configure service ies string subscriber-interface string wlan-gw pool-manager</b>
Tree	<a href="#">pool-manager</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp6-client

Synopsis	Enter the <b>dhcp6-client</b> context
Context	<b>configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client</b>
Tree	<a href="#">dhcp6-client</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcpv4-nat

Synopsis	Enter the <b>dhcpv4-nat</b> context
Context	<b>configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat</b>
Tree	<a href="#">dhcpv4-nat</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	<b>configure service ies string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**link-address** *string*

Synopsis	IPv6 address in the link address field of relay header
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">dhcpv4-nat</a> <a href="#">link-address</a> <i>string</i>
Tree	<a href="#">link-address</a>
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pool-name** *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">dhcpv4-nat</a> <a href="#">pool-name</a> <i>string</i>
Tree	<a href="#">pool-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ia-na**

Synopsis	Enter the <b>ia-na</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">ia-na</a>
Tree	<a href="#">ia-na</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">ia-na</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **link-address** *string*

Synopsis	IPv6 address in the link address field of relay header
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw</b> <b>pool-manager</b> <b>dhcp6-client</b> <b>ia-na</b> <b>link-address</b> <i>string</i>
Tree	<a href="#">link-address</a>
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pool-name** *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw</b> <b>pool-manager</b> <b>dhcp6-client</b> <b>ia-na</b> <b>pool-name</b> <i>string</i>
Tree	<a href="#">pool-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lease-query**

Synopsis	Enable the <b>lease-query</b> context
Context	<b>configure</b> <b>service</b> <b>ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw</b> <b>pool-manager</b> <b>dhcp6-client</b> <b>lease-query</b>
Tree	<a href="#">lease-query</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-retries** *number*

Synopsis	Retries before lease query assumes no allocated subnets
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Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client lease-query max-retries</b> <i>number</i>
Tree	<a href="#">max-retries</a>
Range	0 to 10
Default	2
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **servers** *string*

Synopsis	DHCPv6 servers that are used for requesting addresses
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client servers</b> <i>string</i>
Tree	<a href="#">servers</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **slaac**

Synopsis	Enter the <b>slaac</b> context
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client slaac</b>
Tree	<a href="#">slaac</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	<b>configure service ies</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client slaac admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1



Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **link-address** *string*

Synopsis IPv6 address in the link address field of relay header

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **slaac** **link-address** *string*

Tree [link-address](#)

Default ::

Introduced 16.0.R4

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pool-name** *string*

Synopsis Pool name to be sent in the DHCPv6 messages

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **slaac** **pool-name** *string*

Tree [pool-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-ip** (*keyword* | *ipv6-address*)

Synopsis Source IP address that is used by the DHCPv6 client

Context **configure** **service** **ies** *string* **subscriber-interface** *string* **wlan-gw** **pool-manager** **dhcp6-client** **source-ip** (*keyword* | *ipv6-address*)

Tree [source-ip](#)

Options use-interface-ip

Default use-interface-ip

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **watermarks**

Synopsis Enter the **watermarks** context

Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager watermarks</i>
Tree	<a href="#">watermarks</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high** *number*

Synopsis	High watermark when new prefix is allocated
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager watermarks high number</i>
Tree	<a href="#">high</a>
Range	51 to 99
Default	95
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low** *number*

Synopsis	Low watermark when unused prefix is released
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager watermarks low number</i>
Tree	<a href="#">low</a>
Range	50 to 98
Default	90
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*

Synopsis	ID of WLAN gateway group where prefixes are installed
Context	<b>configure service ies</b> <i>string</i> <i>subscriber-interface</i> <i>string</i> <i>wlan-gw pool-manager wlan-gw-group reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure isa</b> <i>wlan-gw-group number</i>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## redundancy

Synopsis Enter the **redundancy** context

Context **configure service ies string subscriber-interface string wlan-gw redundancy**

Tree [redundancy](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state keyword

Synopsis Administrative state of WLAN-GW redundancy

Context **configure service ies string subscriber-interface string wlan-gw redundancy admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## export string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Route to export to peer

Context **configure service ies string subscriber-interface string wlan-gw redundancy export string**

Tree [export](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**monitor string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Peer route to monitor
Context	<b>configure service ies string subscriber-interface string wlan-gw redundancy monitor string</b>
Tree	<b>monitor</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure service ies string subscriber-mgmt</b>
Tree	<b>subscriber-mgmt</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**multi-chassis-shunt-id number**

Synopsis	Shunt ID for a pair of resilient nodes
Context	<b>configure service ies string subscriber-mgmt multi-chassis-shunt-id number</b>
Tree	<b>multi-chassis-shunt-id</b>
Description	<p>This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node.</p> <p>This configuration is required for inter-BNG-UP resiliency shunting, but not for non-BNG-UP shunting. However, when configured, it is also used for shunting non-BNG-UP sessions in the same service.</p>
Range	1 to 8191
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## up-resiliency

Synopsis	Enter the <b>up-resiliency</b> context
Context	<b>configure service ies string subscriber-mgmt up-resiliency</b>
Tree	<a href="#">up-resiliency</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## monitor-oper-group [[oper-group](#)] *reference*

Synopsis	Enter the <b>monitor-oper-group</b> list instance
Context	<b>configure service ies string subscriber-mgmt up-resiliency monitor-oper-group <i>reference</i></b>
Tree	<a href="#">monitor-oper-group</a>
Description	<p>Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).</p> <p><b>Note:</b> The following is only applicable for the <b>configure service vpls capture-sap</b> context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.</p>
Max. Instances	2
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[oper-group](#)] *reference*

Synopsis	Operational group name
Context	<b>configure service ies string subscriber-mgmt up-resiliency monitor-oper-group <i>reference</i></b>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure service oper-group string</b>
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**health-drop** *number*

Synopsis	Number subtracted from the health value per failure
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">subscriber-mgmt up-resiliency monitor-oper-group reference</a> <a href="#">health-drop</a> <i>number</i>
Tree	<a href="#">health-drop</a>
Description	This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0.
Range	1 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**video-interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>video-interface</b> list instance
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i>
Tree	<a href="#">video-interface</a>
Max. Instances	9
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[interface-name]** *string*

Synopsis	Video interface name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i>
Tree	<a href="#">video-interface</a>
String Length	1 to 29
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**accounting-policy** *reference*

Synopsis	Accounting Policy
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Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>accounting-policy</b> <i>reference</i>
Tree	<b>accounting-policy</b>
Reference	<b>configure log accounting-policy</b> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **address** [**ip-address**] *string*

Synopsis	Add a list entry for <b>address</b>
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>address</b> <i>string</i>
Tree	<b>address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[ip-address]** *string*

Synopsis	IPv4 address for the video interface within the service
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>address</b> <i>string</i>
Tree	<b>address</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **admin-state** *keyword*

Synopsis	Administrative state of the video interface
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**channel** [*mcast-address*] *string source string*

Synopsis	Enter the <b>channel</b> list instance
Context	<b>configure service ies string video-interface string channel string source string</b>
Tree	<b>channel</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[mcast-address]** *string*

Synopsis	Multicast channel address
Context	<b>configure service ies string video-interface string channel string source string</b>
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source** *string*

Synopsis	Unicast source address
Context	<b>configure service ies string video-interface string channel string source string</b>
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**channel-name** *string*

Synopsis	Channel name
Context	<b>configure service ies string video-interface string channel string source string channel-name string</b>
Tree	<b>channel-name</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">video-interface</a> <a href="#">string</a> <a href="#">channel</a> <a href="#">string</a> <a href="#">source</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**scte35-action** *keyword*

Synopsis	Enable downstream forwarding of SCTE 35 cue avails
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">video-interface</a> <a href="#">string</a> <a href="#">channel</a> <a href="#">string</a> <a href="#">source</a> <a href="#">string</a> <a href="#">scte35-action</a> <a href="#">keyword</a>
Tree	<a href="#">scte35-action</a>
Options	forward, drop
Default	forward
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**zone-channel** [[zone-mcast-address](#)] [string](#) [zone-source](#) [string](#)

Synopsis	Enter the <b>zone-channel</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">video-interface</a> <a href="#">string</a> <a href="#">channel</a> <a href="#">string</a> <a href="#">source</a> <a href="#">string</a> <a href="#">zone-channel</a> <a href="#">string</a> <a href="#">zone-source</a> <a href="#">string</a>
Tree	<a href="#">zone-channel</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[zone-mcast-address]** [string](#)

Synopsis	Multicast zone channel address
Context	<b>configure</b> <a href="#">service</a> <a href="#">ies</a> <a href="#">string</a> <a href="#">video-interface</a> <a href="#">string</a> <a href="#">channel</a> <a href="#">string</a> <a href="#">source</a> <a href="#">string</a> <a href="#">zone-channel</a> <a href="#">string</a> <a href="#">zone-source</a> <a href="#">string</a>
Tree	<a href="#">zone-channel</a>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **zone-source** *string*

Synopsis	Unicast source address
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <b>zone-source</b> <i>string</i>
Tree	<a href="#">zone-channel</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **adi-channel-name** *string*

Synopsis	Zone channel name
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <a href="#">zone-source</a> <i>string</i> <b>adi-channel-name</b> <i>string</i>
Tree	<a href="#">adi-channel-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **cpu-protection** *reference*

Synopsis	CPU protection policy
Context	<b>configure</b> <a href="#">service ies</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">cpu-protection</a> <i>reference</i>
Tree	<a href="#">cpu-protection</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">cpu-protection</a> <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis	Text description
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Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **multicast-service** *number*

Synopsis	Associated multicast service ID
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>multicast-service</b> <i>number</i>
Tree	<b>multicast-service</b>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **output-format** *keyword*

Synopsis	Output format
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>output-format</b> <i>keyword</i>
Tree	<b>output-format</b>
Options	udp, rtp-udp
Default	rtp-udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **video-sap**

Synopsis	Enable the <b>video-sap</b> context
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap</b>
Tree	<b>video-sap</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure service ies string video-interface string video-sap egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service ies string video-interface string video-sap egress filter</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure service ies string video-interface string video-sap egress filter ip reference</b>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service ies string video-interface string video-sap egress qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## policy-name reference

Synopsis	SAP egress QoS policy ID
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Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap egress qos policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos sap-egress</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap ingress filter</b>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure service ies</b> <i>string</i> <b>video-interface</b> <i>string</i> <b>video-sap ingress filter ip</b> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## qos

Synopsis	Enter the <b>qos</b> context
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Context	<b>configure service ies string video-interface string video-sap ingress qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **policy-name** *reference*

Synopsis	SAP ingress QoS policy ID
Context	<b>configure service ies string video-interface string video-sap ingress qos policy-name reference</b>
Tree	<b>policy-name</b>
Reference	<b>configure qos sap-ingress string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **video-group-id** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Video group ID
Context	<b>configure service ies string video-interface string video-sap video-group-id reference</b>
Tree	<b>video-group-id</b>
Reference	<b>configure isa video-group number</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **vpn-id** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	<b>configure service ies string vpn-id number</b>

Tree	<a href="#">vpn-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

## ipfix

Synopsis	Enter the <b>ipfix</b> context
Context	<b>configure</b> <a href="#">service ipfix</a>
Tree	<a href="#">ipfix</a>
Introduced	16.0.R1
Platforms	All

## export-policy [[name](#)] *string*

Synopsis	Enter the <b>export-policy</b> list instance
Context	<b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i>
Tree	<a href="#">export-policy</a>
Introduced	16.0.R1
Platforms	All

## [[name](#)] *string*

Synopsis	IPFIX policy name
Context	<b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i>
Tree	<a href="#">export-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## collector [router-instance](#) *string* [ip-address](#) *string*

Synopsis	Enter the <b>collector</b> list instance
----------	--

Context	<b>configure service ipfix export-policy</b> <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i>
Tree	collector
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*

Synopsis	Router where the collector is reached
Context	<b>configure service ipfix export-policy</b> <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i>
Tree	collector
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **ip-address** *string*

Synopsis	IPv4 address of the external collector node
Context	<b>configure service ipfix export-policy</b> <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i>
Tree	collector
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the collector
Context	<b>configure service ipfix export-policy</b> <i>string</i> collector router-instance <i>string</i> ip-address <i>string</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All



**mtu number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum Transmission Unit
Context	<b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <a href="#">collector router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>mtu</b> <i>number</i>
Tree	<a href="#">mtu</a>
Range	512 to 9212
Units	octets
Default	1500
Introduced	16.0.R1
Platforms	All

**refresh-timeout number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPFIX template refresh time
Context	<b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <a href="#">collector router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>refresh-timeout</b> <i>number</i>
Tree	<a href="#">refresh-timeout</a>
Range	240 to 86400
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

**source-ip-address string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IP address from which UDP streams are sent
Context	<b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <a href="#">collector router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <a href="#">source-ip-address</a> <i>string</i>
Tree	<a href="#">source-ip-address</a>
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**template-format** *keyword*

Synopsis	Template format used by this IPFIX export policy
Context	<b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i> <a href="#">template-format</a> <i>keyword</i>
Tree	<a href="#">template-format</a>
Options	format1, format2
Default	format1
Introduced	16.0.R1
Platforms	All

**ipipe** [[service-name](#)] *string*

Synopsis	Enter the <b>ipipe</b> list instance
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string</i>
Tree	<a href="#">ipipe</a>
Introduced	20.10.R1
Platforms	All

**[service-name]** *string*

Synopsis	Administrative service name
Context	<b>configure service ipipe string</b>
Tree	<a href="#">ipipe</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the service
Context	<b>configure service ipipe string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

**ce-address-discovery**

Synopsis	Enable the <b>ce-address-discovery</b> context
Context	<b>configure service ipipe string ce-address-discovery</b>
Tree	<a href="#">ce-address-discovery</a>
Introduced	20.10.R1
Platforms	All

**customer** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	<b>configure service ipipe string customer reference</b>
Tree	<a href="#">customer</a>

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Reference	<b>configure service customer</b> <i>string</i>
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure service ipipe</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

**endpoint** [[name](#)] *string*

Synopsis	Enter the <b>endpoint</b> list instance
Context	<b>configure service ipipe</b> <i>string endpoint string</i>
Tree	<a href="#">endpoint</a>
Max. Instances	2
Introduced	20.10.R1
Platforms	All

**[name]** *string*

Synopsis	Service endpoint name
Context	<b>configure service ipipe</b> <i>string endpoint string</i>
Tree	<a href="#">endpoint</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">endpoint</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

**hold-time-active** *number*

Synopsis	Time before entering standby when MC-LAG SAP goes down
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">endpoint</a> <a href="#">string</a> <a href="#">hold-time-active</a> <a href="#">number</a>
Tree	<a href="#">hold-time-active</a>
Range	1 to 60
Units	deciseconds
Introduced	20.10.R1
Platforms	All

**revert-time** (*number* | *keyword*)

Synopsis	Time to wait before reverting to primary spoke SDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">endpoint</a> <a href="#">string</a> <a href="#">revert-time</a> ( <a href="#">number</a>   <a href="#">keyword</a> )
Tree	<a href="#">revert-time</a>
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	20.10.R1
Platforms	All

**standby-signaling** *keyword*

Synopsis	Endpoint behavior for status of sending PW standby bit
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">endpoint</a> <a href="#">string</a> <a href="#">standby-signaling</a> <a href="#">keyword</a>
Tree	<a href="#">standby-signaling</a>

Options	master
Introduced	20.10.R1
Platforms	All

**sap** [[sap-id](#)] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Introduced	20.10.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	All

### **app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth** *number*

Synopsis	SAP bandwidth
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">bandwidth</a> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	All

### **ce-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the CE device
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ce-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ce-address</a>
Introduced	20.10.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Collect accounting statistics
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	20.10.R1
Platforms	All

**cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a>
Tree	<a href="#">cpu-protection</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**mac-monitoring**

Synopsis	Monitor MAC for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**policy-id** *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS



### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	20.10.R1
Platforms	All

### **dist-cpu-protection** *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <i>policy</i> <i>string</i>
Introduced	20.10.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	All

### **agg-rate**

Synopsis	Enter the <b>agg-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a>
Tree	<a href="#">agg-rate</a>
Introduced	20.10.R1
Platforms	All

**adaptation-rule** *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">adaptation-rule</a> <i>keyword</i>
Tree	<a href="#">adaptation-rule</a>
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**burst-limit** (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">burst-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**limit-unused-bandwidth** *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">limit-unused-bandwidth</a> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	20.10.R1
Platforms	All

**rate** *number*

Synopsis	Enforced aggregate rate for all queues
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">rate</a> <i>number</i>

Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Introduced	20.10.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	20.10.R1
Platforms	All

## ip reference

Synopsis	MAC filter ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter identifier
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ipv6</a> <i>reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
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Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	20.10.R1
Platforms	All

## **policer-control-policy**

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **root**

Synopsis	Enter the <b>root</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a>
Tree	<a href="#">root</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 6400000000

Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### priority [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**qinq-mark-top-only** *boolean*

Synopsis	Mark top Q-tags
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">qinq-mark-top-only</a> <i>boolean</i>

Tree	<a href="#">qinq-mark-top-only</a>
Default	false
Introduced	20.10.R1
Platforms	All

## sap-egress

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a>
Tree	<a href="#">sap-egress</a>
Introduced	20.10.R1
Platforms	All

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	All

## hs-secondary-shaper *string*

Synopsis	HS Secondary Shaper
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-secondary-shaper</a> <i>string</i>
Tree	<a href="#">hs-secondary-shaper</a>
String Length	1 to 32
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

## hs-wrr-group [[group-id](#)] *reference*

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <i>reference</i>

Tree	<a href="#">hs-wrr-group</a>
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

### **[group-id]** *reference*

Synopsis	HS WRR group identifier
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <i>reference</i>
Tree	<a href="#">hs-wrr-group</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">hs-wrr-group</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis	Class weight override of the WRR group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <i>reference</i> <a href="#">hs-class-weight</a> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

### **percent-rate** *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <i>reference</i> <a href="#">percent-rate</a> <i>decimal-number</i>
Tree	<a href="#">percent-rate</a>
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e



**rate** (*number* | *keyword*)

Synopsis	Scheduling rate override applied to the HS WRR group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">hs-wrr-group</a> <i>reference</i> <a href="#">rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">rate</a>
Range	1 to 2000000000
Units	kilobps
Options	max
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

**policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS
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Context	<b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides policer</i> <i>reference cbs (number   keyword)</i>
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number | keyword*)

Synopsis	MBS
Context	<b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides policer</i> <i>reference mbs (number   keyword)</i>
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides policer</i> <i>reference packet-byte-offset number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides policer</i> <i>reference percent-rate</i>

Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">stat-mode</a> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	20.10.R1
Platforms	All

**[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	20.10.R1
Platforms	All

**cir** *keyword*

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	20.10.R1

Platforms All

### **pir** *keyword*

Synopsis Constraint used when deriving the operational PIR value

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [adaptation-rule](#) [pir](#) *keyword*

Tree [pir](#)

Options max, min, closest

Introduced 20.10.R1

Platforms All

### **avg-frame-overhead** *decimal-number*

Synopsis Average packet-to-frame encapsulation overhead

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [avg-frame-overhead](#) *decimal-number*

Tree [avg-frame-overhead](#)

Range 0.00 to 100.00

Introduced 20.10.R1

Platforms All

### **burst-limit** (*number* | *keyword*)

Synopsis Explicit shaping burst size for the queue

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) [burst-limit](#) (*number* | *keyword*)

Tree [burst-limit](#)

Range 1 to 14000000

Units bytes

Options auto

Introduced 20.10.R1

Platforms All

**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a>
Tree	<a href="#">drop-tail</a>
Introduced	20.10.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a>
Tree	<a href="#">low</a>
Introduced	20.10.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100

Options	auto
Introduced	20.10.R1
Platforms	All

### **hs-class-weight** *number*

Synopsis	Class weight override for the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>hs-class-weight</b> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

### **hs-wred-queue**

Synopsis	Enter the <b>hs-wred-queue</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>hs-wred-queue</b>
Tree	<a href="#">hs-wred-queue</a>
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

### **policy** *reference*

Synopsis	Slope policy applied to the HSQ queue group queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>hs-wred-queue</b> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">slope-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

### **hs-wrr-weight** *number*

Synopsis	WRR weight to parent with the queue into the scheduler
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Context	<b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides queue reference</i> <b>hs-wrr-weight</b> <i>number</i>
Tree	<b>hs-wrr-weight</b>
Range	1 to 127
Default	1
Introduced	20.10.R1
Platforms	7750 SR-7/12/12e

### **mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides queue reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mbs</b>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	All

### **monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides queue reference</i> <b>monitor-queue-depth</b>
Tree	<b>monitor-queue-depth</b>
Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	All

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure service ipipe</b> <i>string sap string egress qos sap-egress overrides queue reference</i> <b>monitor-queue-depth fast-polling</b> <i>boolean</i>
Tree	<b>fast-polling</b>

Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

### **violation-threshold** *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>violation-threshold</b> <i>decimal-number</i>
Tree	<a href="#">violation-threshold</a>
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

### **parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	20.10.R1
Platforms	All

### **cir-weight** *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	All

### **weight** *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	All

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	20.10.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i>
Tree	<a href="#">pir</a>

Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service ipipe string sap string egress qos sap-egress overrides queue reference rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	All

**cir (number | keyword)**

Synopsis	CIR rate
Context	<b>configure service ipipe string sap string egress qos sap-egress overrides queue reference rate cir (number   keyword)</b>
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

**pir (number | keyword)**

Synopsis	PIR rate
Context	<b>configure service ipipe string sap string egress qos sap-egress overrides queue reference rate pir (number   keyword)</b>
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1

Platforms All

### **policy-name** *reference*

Synopsis Policy ID to associate with SAP for mirrored service

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [sap-egress](#) *string*

Introduced 20.10.R1

Platforms All

### **port-redirect-group**

Synopsis Enter the **port-redirect-group** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 20.10.R1

Platforms All

### **group-name** *reference*

Synopsis Name of the queue group redirect list policy

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [port-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [egress](#) [queue-group](#) *string*

Introduced 20.10.R1

Platforms All

### **instance** *number*

Synopsis Instance of port queue group

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [sap-egress](#) [port-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 20.10.R1  
 Platforms All

## **scheduler-policy**

Synopsis Enter the **scheduler-policy** context  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#)  
 Tree [scheduler-policy](#)  
 Introduced 20.10.R1  
 Platforms All

## **overrides**

Synopsis Enter the **overrides** context  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#)  
 Tree [overrides](#)  
 Introduced 20.10.R1  
 Platforms All

## **scheduler** [[scheduler-name](#)] *string*

Synopsis Enter the **scheduler** list instance  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string*  
 Tree [scheduler](#)  
 Introduced 20.10.R1  
 Platforms All

## **[scheduler-name]** *string*

Synopsis Scheduler name  
 Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [egress](#) [qos](#) [scheduler-policy](#) [overrides](#) [scheduler](#) *string*  
 Tree [scheduler](#)  
 Description This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a

unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	20.10.R1
Platforms	All

## cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	All

## weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
----------	--

Context	<b>configure service ipipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string parent weight number</i>
Tree	<b>weight</b>
Range	0 to 100
Introduced	20.10.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service ipipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string rate</i>
Tree	<b>rate</b>
Introduced	20.10.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	<b>configure service ipipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string rate cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure service ipipe</b> <i>string sap string egress qos scheduler-policy overrides scheduler string rate pir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<b>pir</b>
Range	1 to 6400000000
Units	kilobps



Options	max
Introduced	20.10.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

### **virtual-port**

Synopsis	Enter the <b>virtual-port</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">virtual-port</a>
Tree	<a href="#">virtual-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vport-name** *reference*

Synopsis	Virtual port assigned to the SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">vport-name</a> <i>reference</i>
Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **endpoint** *reference*

Synopsis	Endpoint name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">endpoint</a> <i>reference</i>

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Tree	<a href="#">endpoint</a>
Reference	<b>configure service ipipe</b> <i>string endpoint string</i>
Introduced	20.10.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service ipipe</b> <i>string sap string ingress</i>
Tree	<a href="#">ingress</a>
Introduced	20.10.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service ipipe</b> <i>string sap string ingress filter</i>
Tree	<a href="#">filter</a>
Introduced	20.10.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure service ipipe</b> <i>string sap string ingress filter ip reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	20.10.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure service ipipe</b> <i>string sap string ingress filter ipv6 reference</i>
Tree	<a href="#">ipv6</a>

Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string sap string ingress qos</i>
Tree	<a href="#">qos</a>
Introduced	20.10.R1
Platforms	All

## match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string sap string ingress qos match-qinq-dot1p keyword</i>
Tree	<a href="#">match-qinq-dot1p</a>
Options	top, bottom
Introduced	20.10.R1
Platforms	All

## policer-control-policy

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string sap string ingress qos policer-control-policy</i>
Tree	<a href="#">policer-control-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string sap string ingress qos policer-control-policy overrides</i>
Tree	<a href="#">overrides</a>
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## root

Synopsis Enter the **root** context

Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root**

Tree **root**

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-rate (*number* | *keyword*)

Synopsis Maximum frame-based bandwidth limit

Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root max-rate (*number* | *keyword*)**

Tree **max-rate**

Range 1 to 6400000000

Options max

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis Enter the **priority-mbs-thresholds** context

Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds**

Tree **priority-mbs-thresholds**

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## min-thresh-separation (*number* | *keyword*)

Synopsis Minimum amount of separation buffer space

Context **configure service ipipe string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (*number* | *keyword*)**

Tree **min-thresh-separation**

Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority** [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis Policer control policy name

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [policer-control-policy](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [policer-control-policy](#) *string*

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **sap-ingress**

Synopsis Enter the **sap-ingress** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#)

Tree [sap-ingress](#)

Introduced 20.10.R1

Platforms All

### **fp-redirect-group**

Synopsis Enter the **fp-redirect-group** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#)

Tree [fp-redirect-group](#)

Introduced 20.10.R1

Platforms All

### **group-name** *reference*

Synopsis Queue group template name created on forwarding plane

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos](#) [queue-group-templates](#) [ingress](#) [queue-group](#) *string*

Introduced 20.10.R1

Platforms All

### **instance** *number*

Synopsis Queue group instance

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [fp-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range 1 to 65535

Introduced 20.10.R1

Platforms All

### **overrides**

Synopsis Enter the **overrides** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#)

Tree [overrides](#)

Introduced 20.10.R1

Platforms All

### **policer** [[policer-id](#)] *reference*

Synopsis Enter the **policer** list instance

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#) *reference*

Tree [policer](#)

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[policer-id]** *reference*

Synopsis Policer unique ID

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#) *reference*

Tree [policer](#)

Reference **configure** [qos](#) [sap-ingress](#) *string* [policer](#) *number*

Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">packet-byte-offset</a> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Introduced	20.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## percent-rate

Synopsis Enter the **percent-rate** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)  
*reference* [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## cir decimal-number

Synopsis CIR percent rate

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)  
*reference* [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## pir decimal-number

Synopsis PIR percent rate

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [policer](#)  
*reference* [percent-rate](#) [pir](#) *decimal-number*

Tree [pir](#)

Range 0.01 to 100.00

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## rate

Synopsis Enter the **rate** context

Context	<b>configure service ipipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference rate</i>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure service ipipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference rate cir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure service ipipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference rate pir</i> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure service ipipe</b> <i>string sap string ingress qos sap-ingress overrides policer reference stat-mode</i> <i>keyword</i>

Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	20.10.R1
Platforms	All

### **[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	20.10.R1
Platforms	All

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure service ipipe string sap string ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword</b>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	20.10.R1
Platforms	All

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure service ipipe string sap string ingress qos sap-ingress overrides queue reference adaptation-rule pir keyword</b>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	20.10.R1
Platforms	All

**cbs (number | keyword)**

Synopsis	CBS
Context	<b>configure service ipipe string sap string ingress qos sap-ingress overrides queue reference cbs (number   keyword)</b>
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	20.10.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure service ipipe string sap string ingress qos sap-ingress overrides queue reference drop-tail</b>

Tree	<a href="#">drop-tail</a>
Introduced	20.10.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a>
Tree	<a href="#">low</a>
Introduced	20.10.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">drop-tail</a> <a href="#">low</a> <a href="#">percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	20.10.R1
Platforms	All

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	20.10.R1
Platforms	All

## monitor-queue-depth

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a>
Tree	<a href="#">monitor-queue-depth</a>
Introduced	21.7.R1
Platforms	All

## fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <a href="#">fast-polling</a> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Default	false
Introduced	21.7.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a>
Tree	<a href="#">parent</a>
Introduced	20.10.R1
Platforms	All

## cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	20.10.R1

Platforms All

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [parent](#) **weight** *number*

Tree [weight](#)

Range 0 to 100

Introduced 20.10.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 20.10.R1

Platforms All

### **cir** *decimal-number*

Synopsis CIR percent rate

Context **configure** [service](#) [ipipe](#) *string* [sap](#) *string* [ingress](#) [qos](#) [sap-ingress](#) [overrides](#) [queue](#)  
*reference* [percent-rate](#) [cir](#) *decimal-number*

Tree [cir](#)

Range 0.00 to 100.00

Introduced 20.10.R1

Platforms All

### **pir** *decimal-number*

Synopsis PIR percent rate

Context	<b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference percent-rate pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	20.10.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	20.10.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference rate cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure service ipipe</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue reference rate pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000



Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Policy ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

### **queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">queuing-type</a> <i>keyword</i>
Tree	<a href="#">queuing-type</a>
Options	shared, multipoint-shared
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	20.10.R1
Platforms	All

### **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a>

Tree	<a href="#">overrides</a>
Introduced	20.10.R1
Platforms	All

### **scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<a href="#">configure</a> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Introduced	20.10.R1
Platforms	All

### **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<a href="#">configure</a> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (<a href="#">#</a>, <a href="#">\$</a>, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	20.10.R1
Platforms	All

**cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	All

**weight** *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	20.10.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b>
Tree	<a href="#">rate</a>
Introduced	20.10.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	20.10.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	20.10.R1
Platforms	All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

## lag

Synopsis	Enter the <b>lag</b> context
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string sap</i> <i>string lag</i>
Tree	<a href="#">lag</a>
Introduced	20.10.R1
Platforms	All

## link-map-profile *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string sap</i> <i>string lag</i> <a href="#">link-map-profile</a> <i>number</i>
Tree	<a href="#">link-map-profile</a>
Description	<p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p>
Range	1 to 64
Introduced	20.10.R1
Platforms	All

## per-link-hash

Synopsis	Enter the <b>per-link-hash</b> context
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string sap</i> <i>string lag</i> <a href="#">per-link-hash</a>
Tree	<a href="#">per-link-hash</a>
Introduced	20.10.R1
Platforms	All

## class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string sap</i> <i>string lag</i> <a href="#">per-link-hash</a> <a href="#">class</a> <i>number</i>
Tree	<a href="#">class</a>
Range	1 to 3

Default	1
Introduced	20.10.R1
Platforms	All

### **weight** *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a> <a href="#">per-link-hash</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	20.10.R1
Platforms	All

### **mac** *string*

Synopsis	MAC address of the Ipipe Ethernet SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>mac</b> <i>string</i>
Tree	<a href="#">mac</a>
Default	00:00:00:00:00:00
Introduced	20.10.R1
Platforms	All

### **mac-refresh** *number*

Synopsis	MAC refresh interval
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>mac-refresh</b> <i>number</i>
Tree	<a href="#">mac-refresh</a>
Range	0 to 65535
Default	14400
Introduced	20.10.R1
Platforms	All

**multi-service-site** *reference*

Synopsis	Multi service site name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">multi-service-site</a> <i>reference</i>
Tree	<a href="#">multi-service-site</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

**transit-policy**

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a>
Tree	<a href="#">transit-policy</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**use-broadcast-mac** *boolean*

Synopsis	Allow broadcast MAC on SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">use-broadcast-mac</a> <i>boolean</i>
Tree	<a href="#">use-broadcast-mac</a>

Default	false
Introduced	20.10.R1
Platforms	All

### **service-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure service ipipe</b> <i>string service-id number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	All

### **service-mtu** *number*

Synopsis	MTU size
Context	<b>configure service ipipe</b> <i>string service-mtu number</i>
Tree	<a href="#">service-mtu</a>
Description	This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.



If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipe bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range	1 to 9194
Introduced	20.10.R1
Platforms	All

### **spoke-sdp** [**sdp-bind-id**] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure service ipipe string spoke-sdp string</b>
Tree	<b>spoke-sdp</b>
Introduced	20.10.R1
Platforms	All

### **[sdp-bind-id]** *string*

Synopsis	SDP binding ID
Context	<b>configure service ipipe string spoke-sdp string</b>
Tree	<b>spoke-sdp</b>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **aarp**

Synopsis	Enable the <b>aarp</b> context
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Context	<b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a>
Tree	<a href="#">aarp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AARP instance ID
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>id</i> <i>reference</i>
Tree	<a href="#">id</a>
Reference	<b>configure</b> <a href="#">application-assurance aarp</a> <i>number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the SDP binding to the service
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Context	<b>configure service ipipe</b> <i>string spoke-sdp string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.10.R1
Platforms	All

### **app-profile** *reference*

Synopsis	Application profile name for this SDP
Context	<b>configure service ipipe</b> <i>string spoke-sdp string app-profile reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure application-assurance group</b> <i>number partition number policy app-profile string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth** (*number | keyword*)

Synopsis	Bandwidth that is reserved for this SDP binding
Context	<b>configure service ipipe</b> <i>string spoke-sdp string bandwidth (number   keyword)</i>
Tree	<a href="#">bandwidth</a>
Range	0 to 100000000
Units	kilobps
Options	max
Default	0
Introduced	20.10.R1
Platforms	All

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure service ipipe</b> <i>string spoke-sdp string bfd</i>
Tree	<a href="#">bfd</a>
Introduced	21.2.R1
Platforms	All

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	21.2.R1
Platforms	All

**encap** *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <a href="#">encap</a> <i>keyword</i>
Tree	<a href="#">encap</a>
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template associated with the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <i>string</i>
Introduced	21.2.R1
Platforms	All

**ce-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the CE device
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ce-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )

Tree	<a href="#">ce-address</a>
Introduced	20.10.R1
Platforms	All

**control-word** *boolean*

Synopsis	Use control word as part of packet encapsulation
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>control-word</b> <i>boolean</i>
Tree	<a href="#">control-word</a>
Default	false
Introduced	20.10.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>egress</b>
Tree	<a href="#">egress</a>
Introduced	20.10.R1
Platforms	All

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <b>filter</b>
Tree	<a href="#">filter</a>

Introduced 20.10.R1  
Platforms All

### **ip reference**

Synopsis IPv4 filter policy name  
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress filter ip reference](#)  
Tree [ip](#)  
Reference **configure** [filter ip-filter](#) *string*  
Introduced 20.10.R1  
Platforms All

### **ipv6 reference**

Synopsis IPv6 filter policy name  
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress filter ipv6 reference](#)  
Tree [ipv6](#)  
Reference **configure** [filter ipv6-filter](#) *string*  
Introduced 20.10.R1  
Platforms All

### **qos**

Synopsis Enter the **qos** context  
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos](#)  
Tree [qos](#)  
Introduced 20.10.R1  
Platforms All

### **network**

Synopsis Enter the **network** context  
Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#)  
Tree [network](#)  
Introduced 20.10.R1

Platforms All

### **policy-name** *reference*

Synopsis Network policy ID

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos network](#) *string*

Introduced 20.10.R1

Platforms All

### **port-redirect-group**

Synopsis Enter the **port-redirect-group** context

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#) [port-redirect-group](#)

Tree [port-redirect-group](#)

Introduced 20.10.R1

Platforms All

### **group-name** *reference*

Synopsis Name of the egress port queue group

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#) [port-redirect-group](#) [group-name](#) *reference*

Tree [group-name](#)

Reference **configure** [qos queue-group-templates](#) [egress queue-group](#) *string*

Introduced 20.10.R1

Platforms All

### **instance** *number*

Synopsis Queue-group instance ID

Context **configure** [service ipipe](#) *string* [spoke-sdp](#) *string* [egress qos network](#) [port-redirect-group](#) [instance](#) *number*

Tree [instance](#)

Range	1 to 65535
Introduced	20.10.R1
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	20.10.R1
Platforms	All

**endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a>
Tree	<a href="#">endpoint</a>
Introduced	20.10.R1
Platforms	All

**name** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Endpoint name to which SDP bind is attached
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a> <i>name</i> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Introduced	20.10.R1



Platforms All

### **precedence** (*number* | *keyword*)

Synopsis Precedence when multiple SDP binds are on one endpoint

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [endpoint](#) [precedence](#) (*number* | *keyword*)

Tree [precedence](#)

Range 1 to 4

Options primary

Default 4

Introduced 20.10.R1

Platforms All

### **entropy-label**

Synopsis Enable the use of entropy labels for spoke SDPs

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [entropy-label](#)

Tree [entropy-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 20.10.R1

Platforms All

### **hash-label**

Synopsis Enable the **hash-label** context

Context **configure** [service](#) [ipipe](#) *string* [spoke-sdp](#) *string* [hash-label](#)

Tree [hash-label](#)

Description Commands in this context configure the use of hash labels for egress datapaths.  
For information about hash-label handling, see the "Hash labels" section of the *7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide*.

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 20.10.R1

Platforms All

## signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">hash-label</a> <a href="#">signal-capability</a>
Tree	<a href="#">signal-capability</a>
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.  The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	20.10.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	20.10.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	20.10.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ipv6</a> <i>reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	20.10.R1
Platforms	All

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a>
Tree	<a href="#">network</a>
Introduced	20.10.R1
Platforms	All

## fp-redirect-group

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">fp-redirect-group</a>
Tree	<a href="#">fp-redirect-group</a>
Introduced	20.10.R1
Platforms	All

**group-name** *reference*

Synopsis	Name of the forwarding plane queue group template
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

**instance** *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">fp-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	20.10.R1
Platforms	All

**policy-name** *reference*

Synopsis	Network policy ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos network</a> <i>string</i>
Introduced	20.10.R1
Platforms	All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
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Context	<b>configure service ipipe</b> <i>string spoke-sdp string ingress vc-label number</i>
Tree	<a href="#">vc-label</a>
Range	1 to 1048575
Introduced	20.10.R1
Platforms	All

## transit-policy

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure service ipipe</b> <i>string spoke-sdp string transit-policy</i>
Tree	<a href="#">transit-policy</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure service ipipe</b> <i>string spoke-sdp string transit-policy prefix reference</i>
Tree	<a href="#">prefix</a>
Reference	<b>configure application-assurance group</b> <i>number partition number transit-prefix-policy number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vc-switching *boolean*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use PW switching signaling for spoke SDPs in service
Context	<b>configure service ipipe</b> <i>string vc-switching boolean</i>

Tree	<a href="#">vc-switching</a>
Default	false
Introduced	20.10.R1
Platforms	All

**vpn-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	<b>configure</b> <a href="#">service</a> <a href="#">ipipe</a> <i>string</i> <a href="#">vpn-id</a> <i>number</i>
Tree	<a href="#">vpn-id</a>
Range	1 to 2147483647
Introduced	20.10.R1
Platforms	All

**mac-list** [[name](#)] *string*

Synopsis	Enter the <b>mac-list</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i>
Tree	<a href="#">mac-list</a>
Description	Commands in this context specify the MAC addresses to be included in a MAC list to be used with the Auto-Learn MAC Protect (ALMP) functionality. The list is used to exclude certain MAC addresses from protection, for example, on SAPs or spoke SDPs configured with ALMP where certain MAC addresses (such as VRRP virtual MAC addresses) must be able to move to other objects.
Introduced	20.5.R1
Platforms	All

**[name]** *string*

Synopsis	MAC list name
Context	<b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i>
Tree	<a href="#">mac-list</a>
String Length	1 to 32

---

Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

**mac** [[address](#)] *string*

Synopsis	Enter the <b>mac</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Introduced	20.5.R1
Platforms	All

**[address]** *string*

Synopsis	MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**mask** *string*

Synopsis	Mask for the MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>

Default	ff:ff:ff:ff:ff
Introduced	20.5.R1
Platforms	All

## md-auto-id

Synopsis	Enter the <b>md-auto-id</b> context
Context	<b>configure service md-auto-id</b>
Tree	<a href="#">md-auto-id</a>
Introduced	16.0.R1
Platforms	All

## customer-id-range

Synopsis	Enable the <b>customer-id-range</b> context
Context	<b>configure service md-auto-id customer-id-range</b>
Tree	<a href="#">customer-id-range</a>
Introduced	16.0.R1
Platforms	All

## end *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the ID range
Context	<b>configure service md-auto-id customer-id-range end <i>number</i></b>
Tree	<a href="#">end</a>
Range	2 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All



**start number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the ID range
Context	<b>configure service md-auto-id customer-id-range start number</b>
Tree	<a href="#">start</a>
Range	2 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**pw-template-id-range**

Synopsis	Enable the <b>pw-template-id-range</b> context
Context	<b>configure service md-auto-id pw-template-id-range</b>
Tree	<a href="#">pw-template-id-range</a>
Introduced	16.0.R1
Platforms	All

**end number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the PW template ID range
Context	<b>configure service md-auto-id pw-template-id-range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## **start number**

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the PW template ID range
Context	<b>configure service md-auto-id pw-template-id-range start number</b>
Tree	<a href="#">start</a>
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## **service-id-range**

Synopsis	Enable the <b>service-id-range</b> context
Context	<b>configure service md-auto-id service-id-range</b>
Tree	<a href="#">service-id-range</a>
Introduced	16.0.R1
Platforms	All

## **end number**

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the service ID range
Context	<b>configure service md-auto-id service-id-range end number</b>
Tree	<a href="#">end</a>
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**start number****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the service ID range
Context	<b>configure service md-auto-id service-id-range start number</b>
Tree	<a href="#">start</a>
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**mrp**

Synopsis	Enter the <b>mrp</b> context
Context	<b>configure service mrp</b>
Tree	<a href="#">mrp</a>
Introduced	20.10.R1
Platforms	All

**policy [policy-name] string**

Synopsis	Enter the <b>policy</b> list instance
Context	<b>configure service mrp policy string</b>
Tree	<a href="#">policy</a>
Introduced	20.10.R1
Platforms	All

**[policy-name] string**

Synopsis	Specify the policy name associated with the MRP
Context	<b>configure service mrp policy string</b>
Tree	<a href="#">policy</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **default-action** *keyword*

Synopsis	Action for packets not matching any MRP policy entries
Context	<b>configure</b> <a href="#">service</a> <a href="#">mrp policy</a> <i>string</i> <b>default-action</b> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	block, allow
Default	allow
Introduced	20.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">mrp policy</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">mrp policy</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	20.10.R1
Platforms	All

### [[entry-id](#)] *number*

Synopsis	Specify an id for the MRP policy entry
Context	<b>configure</b> <a href="#">service</a> <a href="#">mrp policy</a> <i>string</i> <b>entry</b> <i>number</i>

---

Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

### **action** *keyword*

Synopsis	Action applied for matching packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	block, allow, end-station
Introduced	20.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">mrp</a> <a href="#">policy</a> <a href="#">string</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a>
Tree	<a href="#">match</a>
Introduced	20.10.R1
Platforms	All

### **isid** [[value](#)] *number*

Synopsis	Enter the <b>isid</b> list instance
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Context	<b>configure service mrp policy</b> <i>string entry number match isid number</i>
Tree	<a href="#">isid</a>
Introduced	20.10.R1
Platforms	All

**[value]** *number*

Synopsis	Lowest service instance ID to match the entry
Context	<b>configure service mrp policy</b> <i>string entry number match isid number</i>
Tree	<a href="#">isid</a>
Range	0 to 16777215
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**higher-value** *number*

Synopsis	Highest service instance ID to match the entry
Context	<b>configure service mrp policy</b> <i>string entry number match isid number higher-value number</i>
Tree	<a href="#">higher-value</a>
Range	0 to 16777215
Introduced	20.10.R1
Platforms	All

**scope** *keyword*

Synopsis	Specify the scope of the mrp-policy definition
Context	<b>configure service mrp policy</b> <i>string scope keyword</i>
Tree	<a href="#">scope</a>
Options	exclusive, template
Default	template
Introduced	20.10.R1
Platforms	All

## nat

Synopsis	Enter the <b>nat</b> context
Context	<b>configure service nat</b>
Tree	<a href="#">nat</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## classifier [[name](#)] *string*

Synopsis	Enter the <b>classifier</b> list instance
Context	<b>configure service nat classifier <i>string</i></b>
Tree	<a href="#">classifier</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [\[name\]](#) *string*

Synopsis	NAT classifier name
Context	<b>configure service nat classifier <i>string</i></b>
Tree	<a href="#">classifier</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default

Synopsis	Enter the <b>default</b> context
Context	<b>configure service nat classifier <i>string</i> default</b>
Tree	<a href="#">default</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## action

Synopsis	Enter the <b>action</b> context
Context	<b>configure service nat classifier</b> <i>string</i> <b>default action</b>
Tree	<b>action</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## destination-nat

Synopsis	Enable the <b>destination-nat</b> context
Context	<b>configure service nat classifier</b> <i>string</i> <b>default action destination-nat</b>
Tree	<b>destination-nat</b>
Notes	The following elements are part of a choice: ( <b>destination-nat</b> , <b>dnat</b> , and <b>dnat-ip-address</b> ) or <b>forward</b> .
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-address *string*

Synopsis	Substitute destination IP address of matching packets
Context	<b>configure service nat classifier</b> <i>string</i> <b>default action destination-nat ip-address</b> <i>string</i>
Tree	<b>ip-address</b>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## forward



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Forward mode of operation
Context	<b>configure service nat classifier</b> <i>string</i> <b>default action forward</b>
Tree	<b>forward</b>
Notes	The following elements are part of a choice: ( <b>destination-nat</b> , <b>dnat</b> , and <b>dnat-ip-address</b> ) or <b>forward</b> .



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dnat-ip-address** *string*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Default destination IP address for matching entries with dNAT action
Context	<b>configure</b> <a href="#">service nat classifier</a> <i>string</i> <b>default dnat-ip-address</b> <i>string</i>
Tree	<a href="#">dnat-ip-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service nat classifier</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">service nat classifier</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis	Classifier rule entry ID
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Context	<b>configure service nat classifier</b> <i>string entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 1000
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## action

Synopsis	Enter the <b>action</b> context
Context	<b>configure service nat classifier</b> <i>string entry number action</i>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## destination-nat

Synopsis	Enable the <b>destination-nat</b> context
Context	<b>configure service nat classifier</b> <i>string entry number action destination-nat</i>
Tree	<a href="#">destination-nat</a>
Notes	The following elements are part of a choice: ( <b>destination-nat</b> , <b>dnat</b> , and <b>dnat-ip-address</b> ) or <b>forward</b> .
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-address *string*

Synopsis	Replacement destination IP address for packets
Context	<b>configure service nat classifier</b> <i>string entry number action destination-nat ip-address string</i>
Tree	<a href="#">ip-address</a>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## forward



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Forward mode of operation
Context	<b>configure service nat classifier</b> <i>string entry number action forward</i>
Tree	<a href="#">forward</a>
Notes	The following elements are part of a choice: ( <b>destination-nat</b> , <b>dnat</b> , and <b>dnat-ip-address</b> ) or <b>forward</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
Context	<b>configure service nat classifier</b> <i>string entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure service nat classifier</b> <i>string entry number match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dst-port-range

Synopsis	Enter the <b>dst-port-range</b> context
Context	<b>configure service nat classifier</b> <i>string entry number match dst-port-range</i>
Tree	<a href="#">dst-port-range</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end number**



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Upper bound of the port range  
 Context **configure service nat classifier string entry number match dst-port-range end number**  
 Tree **end**  
 Range 0 | 1 to 65535  
 Default 65535  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start number**



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Lower bound of the port range  
 Context **configure service nat classifier string entry number match dst-port-range start number**  
 Tree **start**  
 Range 0 | 1 to 65535  
 Default 0  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **foreign-ip-address string**



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Foreign IP address as the match criterion  
 Context **configure service nat classifier string entry number match foreign-ip-address string**  
 Tree **foreign-ip-address**  
 Introduced 19.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **protocol** *keyword*



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis IP protocol to match  
 Context **configure** [service nat classifier](#) *string entry number match protocol keyword*  
 Tree [protocol](#)  
 Options tcp, udp  
 Default udp  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **deterministic-script**

Synopsis Enter the **deterministic-script** context  
 Context **configure** [service nat deterministic-script](#)  
 Tree [deterministic-script](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **location** *string*

Synopsis Remote location where Python script is exported  
 Context **configure** [service nat deterministic-script location](#) *string*  
 Tree [location](#)  
 String Length 1 to 180  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **firewall-policy** [[name](#)] *string*

Synopsis Enter the **firewall-policy** list instance  
 Context **configure** [service nat firewall-policy](#) *string*

Tree	<a href="#">firewall-policy</a>
Description	Commands in this context configure the attributes of the firewall policy, for use in contexts where basic protection from outside attack vectors is required. Firewall policies cannot be deleted if they are in use.
Max. Instances	2048
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Firewall policy name
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i>
Tree	<a href="#">firewall-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**alg**

Synopsis	Enter the <b>alg</b> context
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <b>alg</b>
Tree	<a href="#">alg</a>
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ftp** *boolean*

Synopsis	Use FTP ALG for the policy
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <b>alg ftp</b> <i>boolean</i>
Tree	<a href="#">ftp</a>
Default	true
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtsp** *boolean*

Synopsis Use RTSP ALG for the policy

Context **configure** [service nat firewall-policy](#) *string alg rtsp boolean*

Tree [rtsp](#)

Description When configured to **true**, Real-Time Streaming Protocol (RTSP) ALG is used for the policy.

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sip** *boolean*

Synopsis Use SIP ALG for the policy

Context **configure** [service nat firewall-policy](#) *string alg sip boolean*

Tree [sip](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [service nat firewall-policy](#) *string description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **domain**

Synopsis Enter the **domain** context

Context **configure** [service nat firewall-policy](#) *string domain*

Tree	<a href="#">domain</a>
Description	Commands in this context configure the attributes of the domain for the firewall policy. All associated traffic must be part of the prefixes specified by this domain.
Notes	The following elements are part of a choice: <b>domain</b> or <b>I2-outside</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name** *string*

Synopsis	Firewall domain name
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">domain name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string*

Synopsis	Router or VPRN service name
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">domain router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Description	This command specifies the router instance or VPRN service for this domain. All associated traffic must be part of the prefixes specified by this domain.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**filtering** *keyword*

Synopsis	Filtering method for inbound traffic for the policy
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">filtering</a> <i>keyword</i>
Tree	<a href="#">filtering</a>
Options	endpoint-independent, address-and-port-dependent
Default	endpoint-independent
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



## I2-outside

Synopsis	Use Layer 2 outside service address location
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">I2-outside</a>
Tree	<a href="#">I2-outside</a>
Description	This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service.
Notes	The following elements are part of a choice: <b>domain</b> or <b>I2-outside</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-limits

Synopsis	Enter the <b>port-limits</b> context
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">port-limits</a>
Tree	<a href="#">port-limits</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## forwarding *number*

Synopsis	Maximum number of port forwarding entries
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">port-limits forwarding</a> <i>number</i>
Tree	<a href="#">forwarding</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## priority-sessions

Synopsis	Enter the <b>priority-sessions</b> context
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions</a>
Tree	<a href="#">priority-sessions</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fc**

Synopsis	Enter the <b>fc</b> context
Context	<b>configure service nat firewall-policy string priority-sessions fc</b>
Tree	<b>fc</b>
Description	Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**af boolean**

Synopsis	Prioritize traffic from AF forwarding classes
Context	<b>configure service nat firewall-policy string priority-sessions fc af boolean</b>
Tree	<b>af</b>
Description	When configured to <b>true</b> , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to <b>false</b> , AF traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**be boolean**

Synopsis	Prioritize traffic from BE forwarding classes
Context	<b>configure service nat firewall-policy string priority-sessions fc be boolean</b>
Tree	<b>be</b>
Description	When configured to <b>true</b> , traffic from Best Effort (BE) FC sessions is prioritized. When configured to <b>false</b> , BE traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ef boolean**

Synopsis	Prioritize traffic from EF forwarding classes
Context	<b>configure service nat firewall-policy string priority-sessions fc ef boolean</b>

Tree	<a href="#">ef</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**h1 boolean**

Synopsis	Prioritize traffic from H1 forwarding classes
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions</a> <a href="#">fc h1 boolean</a>
Tree	<a href="#">h1</a>
Description	When configured to <b>true</b> , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**h2 boolean**

Synopsis	Prioritize traffic from H2 forwarding classes
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions</a> <a href="#">fc h2 boolean</a>
Tree	<a href="#">h2</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**l1 boolean**

Synopsis	Prioritize traffic from L1 forwarding classes
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">priority-sessions</a> <a href="#">fc l1 boolean</a>
Tree	<a href="#">l1</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ***l2 boolean***

Synopsis	Prioritize traffic from L2 forwarding classes
Context	<b>configure service nat firewall-policy string priority-sessions fc l2 boolean</b>
Tree	<a href="#">l2</a>
Description	When configured to <b>true</b> , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ***nc boolean***

Synopsis	Prioritize traffic from NC forwarding classes
Context	<b>configure service nat firewall-policy string priority-sessions fc nc boolean</b>
Tree	<a href="#">nc</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **session-limits**

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure service nat firewall-policy string session-limits</b>
Tree	<a href="#">session-limits</a>
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ***max number***

Synopsis	Maximum number of sessions per subscriber
Context	<b>configure service nat firewall-policy string session-limits max number</b>
Tree	<a href="#">max</a>
Range	1 to 65535
Default	65535

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reserved** *number*

Synopsis	Number of sessions reserved for prioritized sessions
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">session-limits reserved</a> <i>number</i>
Tree	<a href="#">reserved</a>
Description	This command configures the number of sessions per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **watermarks**

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">session-limits watermarks</a>
Tree	<a href="#">watermarks</a>
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high** *number*

Synopsis	High watermark percentage
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">session-limits watermarks high</a> <i>number</i>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis	Low watermark percentage
Context	<b>configure service nat firewall-policy string session-limits watermarks low number</b>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp**

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure service nat firewall-policy string tcp</b>
Tree	<a href="#">tcp</a>
Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mss-adjust number**

Synopsis	TCP MSS adjustment value
Context	<b>configure service nat firewall-policy string tcp mss-adjust number</b>
Tree	<a href="#">mss-adjust</a>
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## timeouts

Synopsis	Enter the <b>timeouts</b> context
Context	<b>configure service nat firewall-policy string timeouts</b>
Tree	<a href="#">timeouts</a>
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp6-query *number*

Synopsis	Timeout applied to an ICMPv6 Query session
Context	<b>configure service nat firewall-policy string timeouts icmp6-query number</b>
Tree	<a href="#">icmp6-query</a>
Range	60 to 240
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sip *number*

Synopsis	SIP inactive media timeout
Context	<b>configure service nat firewall-policy string timeouts sip number</b>
Tree	<a href="#">sip</a>
Range	10 to 7200
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tcp

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure service nat firewall-policy string timeouts tcp</b>
Tree	<a href="#">tcp</a>

Description	Commands in this context configure TCP timeout attributes.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **established** *number*

Synopsis	Idle timeout for TCP session in established state
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp established</a> <i>number</i>
Tree	<a href="#">established</a>
Range	60 to 86400
Units	seconds
Default	7440
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rst** *number*

Synopsis	Suspend time for TCP connection ports closed by RST
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp rst</a> <i>number</i>
Tree	<a href="#">rst</a>
Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **syn** *number*

Synopsis	TCP session timeout when synchronizing initial sequence
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp syn</a> <i>number</i>
Tree	<a href="#">syn</a>
Range	6 to 86400



Units	seconds
Default	15
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-wait** *number*

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp time-wait</a> <i>number</i>
Tree	<a href="#">time-wait</a>
Range	0 to 240
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transitory** *number*

Synopsis	Idle timeout for TCP session in transitory state
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts tcp transitory</a> <i>number</i>
Tree	<a href="#">transitory</a>
Range	60 to 86400
Units	seconds
Default	240
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **udp**

Synopsis	Enter the <b>udp</b> context
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts udp</a>
Tree	<a href="#">udp</a>
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	16.0.R1

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Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns number**

Synopsis Timeout applied to UDP session with destination port 53

Context **configure service nat firewall-policy string timeouts udp dns number**

Tree **dns**

Range 15 to 86400

Units seconds

Default 15

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial number**

Synopsis UDP mapping timeout applied to new sessions

Context **configure service nat firewall-policy string timeouts udp initial number**

Tree **initial**

Range 10 to 300

Units seconds

Default 15

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **normal number**

Synopsis UDP mapping timeout

Context **configure service nat firewall-policy string timeouts udp normal number**

Tree **normal**

Range 60 to 86400

Units seconds

Default 300

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**unknown-protocol** *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Timeout for flows with an unknown protocol
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">timeouts unknown-protocol</a> <i>number</i>
Tree	<a href="#">unknown-protocol</a>
Range	60 to 86400
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**udp**

Synopsis	Enter the <b>udp</b> context
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">udp</a>
Tree	<a href="#">udp</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inbound-refresh** *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	<b>configure</b> <a href="#">service nat firewall-policy</a> <i>string</i> <a href="#">udp inbound-refresh</a> <i>boolean</i>
Tree	<a href="#">inbound-refresh</a>
Description	When configured to <b>true</b> , this command extends the UDP session timeout on inbound traffic. When configured to <b>false</b> , the UDP session timeout is not extended.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## unknown-protocols

Synopsis	Enter the <b>unknown-protocols</b> context
Context	<b>configure</b> <a href="#">service nat firewall-policy string unknown-protocols</a>
Tree	<a href="#">unknown-protocols</a>
Description	Commands in this context configure the treatment of flows of unknown Layer 4 protocols that cannot be natively handled by the system.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Allow all protocols to create unknown flows
Context	<b>configure</b> <a href="#">service nat firewall-policy string unknown-protocols all</a>
Tree	<a href="#">all</a>
Description	This command specifies that all protocols are permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS are not treated as unknown protocols.
Notes	The following elements are part of a choice: <b>all</b> or <b>protocol</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## protocol *number*

Synopsis	IANA number of protocol allowed to create unknown flow
Context	<b>configure</b> <a href="#">service nat firewall-policy string unknown-protocols protocol number</a>
Tree	<a href="#">protocol</a>
Description	This command specifies the Internet Assigned Numbers Authority (IANA) number of a protocol that is permitted to create unknown flows. Protocol or IPv6 extension header values that are explicitly supported by SR OS can be configured but are not treated as unknown protocols.
Range	0 to 255
Max. Instances	8
Notes	The following elements are part of a choice: <b>all</b> or <b>protocol</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## map-t

Synopsis	Enter the <b>map-t</b> context
Context	<b>configure service nat map-t</b>
Tree	<a href="#">map-t</a>
Introduced	16.0.R4
Platforms	VSR

## domain [[name](#)] *string*

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure service nat map-t domain string</b>
Tree	<a href="#">domain</a>
Max. Instances	63
Introduced	16.0.R4
Platforms	VSR

## [\[name\]](#) *string*

Synopsis	MAP domain name
Context	<b>configure service nat map-t domain string</b>
Tree	<a href="#">domain</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR

## admin-state *keyword*

Synopsis	Administrative state of the MAP domain
Context	<b>configure service nat map-t domain string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R4  
 Platforms VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [service nat map-t domain](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R4  
 Platforms VSR

### **dmr-prefix** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis The Default Mapping Rule prefix  
 Context **configure** [service nat map-t domain](#) *string* [dmr-prefix](#) *string*  
 Tree [dmr-prefix](#)  
 Introduced 16.0.R4  
 Platforms VSR

### **ip-fragmentation**

Synopsis Enter the **ip-fragmentation** context  
 Context **configure** [service nat map-t domain](#) *string* [ip-fragmentation](#)  
 Tree [ip-fragmentation](#)  
 Introduced 16.0.R4  
 Platforms VSR

### **v6-frag-header** *boolean*

Synopsis Enable insertion of fragmentation header in IPv6 packet  
 Context **configure** [service nat map-t domain](#) *string* [ip-fragmentation](#) [v6-frag-header](#) *boolean*

Tree	<a href="#">v6-frag-header</a>
Default	false
Introduced	16.0.R4
Platforms	VSR

### **mapping-rule** [\[rule-name\]](#) *string*

Synopsis	Enter the <b>mapping-rule</b> list instance
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i>
Tree	<a href="#">mapping-rule</a>
Max. Instances	16383
Introduced	16.0.R4
Platforms	VSR

### **[rule-name]** *string*

Synopsis	The name that identifies this mapping rule
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i>
Tree	<a href="#">mapping-rule</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the MAP rule
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	VSR

**ea-length** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The length of the EA bits field in the End-user IPv6 prefix part of the IPv6 Map Address
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">ea-length</a> <i>number</i>
Tree	<a href="#">ea-length</a>
Range	0 to 48
Default	0
Introduced	16.0.R4
Platforms	VSR

**ipv4-prefix** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The IPv4 prefix
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">ipv4-prefix</a> <i>string</i>
Tree	<a href="#">ipv4-prefix</a>
Introduced	16.0.R4
Platforms	VSR



**psid-offset** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The offset of the Port Set ID (PSID) within a 16 bits wide port space
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">psid-offset</a> <i>number</i>
Tree	<a href="#">psid-offset</a>
Range	0 to 16
Default	6
Introduced	16.0.R4
Platforms	VSR

**rule-prefix** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	The IPv6 prefix
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mapping-rule</a> <i>string</i> <a href="#">rule-prefix</a> <i>string</i>
Tree	<a href="#">rule-prefix</a>
Introduced	16.0.R4
Platforms	VSR

**mtu** *number*

Synopsis	Configure the MTU
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <a href="#">mtu</a> <i>number</i>
Tree	<a href="#">mtu</a>
Range	160 to 8686
Default	8686
Introduced	16.0.R4
Platforms	VSR

**tcp-mss-adjust** *number*

Synopsis	The value to adjust the TCP Maximum Segment Size (MSS) option
Context	<b>configure</b> <a href="#">service nat map-t domain</a> <i>string</i> <b>tcp-mss-adjust</b> <i>number</i>
Tree	<a href="#">tcp-mss-adjust</a>
Range	0   160 to 8626
Default	0
Introduced	16.0.R4
Platforms	VSR

**nat-policy** [*name*] *string*

Synopsis	Enter the <b>nat-policy</b> list instance
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i>
Tree	<a href="#">nat-policy</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	NAT policy name
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i>
Tree	<a href="#">nat-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**alg**

Synopsis	Enter the <b>alg</b> context
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <b>alg</b>
Tree	<a href="#">alg</a>

Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ftp boolean**

Synopsis	Use FTP ALG for the policy
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string alg ftp boolean</i>
Tree	<a href="#">ftp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pptp boolean**

Synopsis	Use PPTP ALG for the policy
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string alg pptp boolean</i>
Tree	<a href="#">pptp</a>
Description	<p>When configured to <b>true</b>, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG.</p> <p>PPTP sessions can only be initiated from NAT inside.</p> <p>GRE traffic is allowed through NAT only if the corresponding mapping exists.</p> <p>There can be seven calls (GRE tunnels) per control session.</p> <p>When configured to <b>false</b>, PPTP ALG is not used.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rtsp boolean**

Synopsis	Use RTSP ALG for the policy
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string alg rtsp boolean</i>
Tree	<a href="#">rtsp</a>
Description	When configured to <b>true</b> , Real-Time Streaming Protocol (RTSP) ALG is used for the policy.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sip boolean**

Synopsis	Use SIP ALG for the policy
Context	<b>configure service nat nat-policy string alg sip boolean</b>
Tree	<b>sip</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**block-limit number**

Synopsis	Maximum number of port blocks per subscriber
Context	<b>configure service nat nat-policy string block-limit number</b>
Tree	<b>block-limit</b>
Range	1 to 40
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure service nat nat-policy string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dnat**

Synopsis	Enter the <b>dnat</b> context
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Context	<b>configure service nat nat-policy</b> <i>string</i> <b>dnat</b>
Tree	<b>dnat</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## classifier reference



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT classifier
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>dnat classifier</b> <i>reference</i>
Tree	<b>classifier</b>
Description	When configured within the NAT policy, this command references a NAT classifier that activates DNAT functionality. The configuration uses a filter-like approach to identify the traffic that is subjected to DNAT. It is required for translation of the destination IP address.
Reference	<b>configure service nat classifier</b> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dnat-only

Synopsis	Enable the <b>dnat-only</b> context
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>dnat-only</b>
Tree	<b>dnat-only</b>
Description	Commands in this context configure the attributes of DNAT-only. When DNAT-only is configured, no source or port NAT (SNAPT) is performed. Only the destination IP address (going from inside to outside) is translated; the source IP address and port are not translated.
Notes	The following elements are part of a choice: <b>dnat-only</b> , <b>l2-outside</b> , or <b>pool</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat-group *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">dnat-only nat-group</a> <i>reference</i>
Tree	<a href="#">nat-group</a>
Description	This command configures the NAT group in which DNAT translation takes place for the outside routing context.
Reference	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router-instance *string*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router name or VPRN service name
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">dnat-only router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## wlan-gw-group *reference*

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">dnat-only wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Description	This command configures the NAT WLAN Gateway (GW) group in which DNAT translation takes place for the outside routing context.
Reference	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**filtering** *keyword*

Synopsis	Filtering method for inbound traffic for the policy
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">filtering</a> <i>keyword</i>
Tree	<a href="#">filtering</a>
Options	endpoint-independent, address-and-port-dependent
Default	endpoint-independent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flow-log-policy**

Synopsis	Enter the <b>flow-log-policy</b> context
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">flow-log-policy</a>
Tree	<a href="#">flow-log-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipfix** *reference*

Synopsis	IPFIX export policy
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">flow-log-policy ipfix</a> <i>reference</i>

Tree	<a href="#">ipfix</a>
Description	This command specifies an IP flow information export policy for the flow-log policy.
Reference	<b>configure service ipfix export-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **syslog** *reference*

Synopsis	Syslog export policy name
Context	<b>configure service nat nat-policy</b> <i>string</i> <a href="#">flow-log-policy</a> <a href="#">syslog</a> <i>reference</i>
Tree	<a href="#">syslog</a>
Description	This command configures a syslog export policy with a set of transport parameters used to transmit NAT flow records in syslog format to an external collector node. The policy name is referenced from the NAT policy applied to an inside routing context.
Reference	<b>configure service nat syslog export-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2-outside**

Synopsis	Use Layer 2 outside service address location
Context	<b>configure service nat nat-policy</b> <i>string</i> <a href="#">I2-outside</a>
Tree	<a href="#">I2-outside</a>
Description	This command specifies Layer 2 outside service address location for the NAT policy instead of Layer 3 outside service.
Notes	The following elements are part of a choice: <b>dnat-only</b> , <b>I2-outside</b> , or <b>pool</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pool**

Synopsis	Enter the <b>pool</b> context
Context	<b>configure service nat nat-policy</b> <i>string</i> <a href="#">pool</a>
Tree	<a href="#">pool</a>
Notes	The following elements are part of a choice: <b>dnat-only</b> , <b>I2-outside</b> , or <b>pool</b> .



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name** *string***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT pool name
Context	<b>configure</b> <b>service nat nat-policy</b> <i>string</i> <b>pool name</b> <i>string</i>
Tree	<b>name</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Router or VPRN service name
Context	<b>configure</b> <b>service nat nat-policy</b> <i>string</i> <b>pool router-instance</b> <i>string</i>
Tree	<b>router-instance</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-forwarding-range-end** *number*

Synopsis	End of the port forwarding range
Context	<b>configure</b> <b>service nat nat-policy</b> <i>string</i> <b>port-forwarding-range-end</b> <i>number</i>
Tree	<b>port-forwarding-range-end</b>
Description	<p>This command specifies the end of the port range available for port forwarding. The start of the range is always equal to one.</p> <p>The number of ports that can be configured is half of the available block =&gt; <math>64512 / 2 = 32256</math>. In combination with the configured value for <b>port-forwarding-range-end</b>, the formulas are:</p> <p>max port-reservation blocks = <math>65535 - \text{port-forwarding-range-end}</math></p>

$\text{max port-reservation ports} = (65535 - \text{port-forwarding-range-end}) / 2$

If **port-reservation** is already configured, the following applies for the maximum port-forwarding-range-end:

$\text{max port-forwarding-range-end} = 65535 - \text{port-reservation blocks}$   
 $\text{max port-forwarding-range-end} = 65535 - (\text{port-reservation ports} * 2)$

Range	1023 to 65535
Default	1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### port-limits

Synopsis	Enter the <b>port-limits</b> context
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>port-limits</b>
Tree	<a href="#">port-limits</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### dynamic-ports *number*

Synopsis	Maximum number of dynamic ports per subscriber
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>port-limits dynamic-ports</b> <i>number</i>
Tree	<a href="#">dynamic-ports</a>
Description	This command limits the number of ports per protocol on an outside IP address for a subscriber regardless of the pool pairing mode. This command applies to LSN44 pools with flexible port allocation.
Range	1 to 65536
Default	65536
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### forwarding *number*

Synopsis	Maximum number of port forwarding entries
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>port-limits forwarding</b> <i>number</i>
Tree	<a href="#">forwarding</a>

Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reserved number**

Synopsis	Number of ports reserved for prioritized sessions
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>port-limits reserved number</b>
Tree	<a href="#">reserved</a>
Description	This command configures the number of ports per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **watermarks**

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>port-limits watermarks</b>
Tree	<a href="#">watermarks</a>
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high number**

Synopsis	High watermark percentage
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>port-limits watermarks high number</b>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis Low watermark percentage

Context **configure service nat nat-policy string port-limits watermarks low number**

Tree [low](#)

Description This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.

Range 0 to 100

Units percent

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority-sessions**

Synopsis Enter the **priority-sessions** context

Context **configure service nat nat-policy string priority-sessions**

Tree [priority-sessions](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fc**

Synopsis Enter the **fc** context

Context **configure service nat nat-policy string priority-sessions fc**

Tree [fc](#)

Description Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **af boolean**

Synopsis Prioritize traffic from AF forwarding classes

Context	<b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc af</b> <i>boolean</i>
Tree	<b>af</b>
Description	When configured to <b>true</b> , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to <b>false</b> , AF traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**be** *boolean*

Synopsis	Prioritize traffic from BE forwarding classes
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc be</b> <i>boolean</i>
Tree	<b>be</b>
Description	When configured to <b>true</b> , traffic from Best Effort (BE) FC sessions is prioritized. When configured to <b>false</b> , BE traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ef** *boolean*

Synopsis	Prioritize traffic from EF forwarding classes
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc ef</b> <i>boolean</i>
Tree	<b>ef</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**h1** *boolean*

Synopsis	Prioritize traffic from H1 forwarding classes
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc h1</b> <i>boolean</i>
Tree	<b>h1</b>
Description	When configured to <b>true</b> , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **h2** *boolean*

Synopsis	Prioritize traffic from H2 forwarding classes
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc h2</b> <i>boolean</i>
Tree	<a href="#">h2</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **l1** *boolean*

Synopsis	Prioritize traffic from L1 forwarding classes
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc l1</b> <i>boolean</i>
Tree	<a href="#">l1</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **l2** *boolean*

Synopsis	Prioritize traffic from L2 forwarding classes
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc l2</b> <i>boolean</i>
Tree	<a href="#">l2</a>
Description	When configured to <b>true</b> , traffic from L2 sessions is prioritized. When configured to <b>false</b> , L2 traffic is not prioritized.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **nc** *boolean*

Synopsis	Prioritize traffic from NC forwarding classes
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Context	<b>configure service nat nat-policy</b> <i>string</i> <b>priority-sessions fc nc</b> <i>boolean</i>
Tree	<b>nc</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## session-limits

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>session-limits</b>
Tree	<b>session-limits</b>
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max number

Synopsis	Maximum number of sessions per subscriber
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>session-limits max</b> <i>number</i>
Tree	<b>max</b>
Range	1 to 65535
Default	65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## reserved number

Synopsis	Number of sessions reserved for prioritized sessions
Context	<b>configure service nat nat-policy</b> <i>string</i> <b>session-limits reserved</b> <i>number</i>
Tree	<b>reserved</b>
Description	This command configures the number of sessions per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure service nat nat-policy string session-limits watermarks</b>
Tree	<b>watermarks</b>
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark percentage
Context	<b>configure service nat nat-policy string session-limits watermarks high number</b>
Tree	<b>high</b>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark percentage
Context	<b>configure service nat nat-policy string session-limits watermarks low number</b>
Tree	<b>low</b>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## tcp

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure service nat nat-policy string tcp</b>
Tree	<b>tcp</b>
Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mss-adjust *number*

Synopsis	TCP MSS adjustment value
Context	<b>configure service nat nat-policy string tcp mss-adjust number</b>
Tree	<b>mss-adjust</b>
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## reset-unknown *boolean*

Synopsis	Generate TCP reset for packets from unknown flows
Context	<b>configure service nat nat-policy string tcp reset-unknown boolean</b>
Tree	<b>reset-unknown</b>
Description	When configured to <b>true</b> , TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow. When configured to <b>false</b> , no TCP reset is generated.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## timeouts

Synopsis	Enter the <b>timeouts</b> context
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Context	<b>configure service nat nat-policy string timeouts</b>
Tree	<a href="#">timeouts</a>
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp-query number**

Synopsis	Timeout applied to an ICMP Query session
Context	<b>configure service nat nat-policy string timeouts icmp-query number</b>
Tree	<a href="#">icmp-query</a>
Range	60 to 240
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sip number**

Synopsis	SIP inactive media timeout
Context	<b>configure service nat nat-policy string timeouts sip number</b>
Tree	<a href="#">sip</a>
Range	10 to 7200
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-retention number**

Synopsis	IP address hold time after host and port blocks expire
Context	<b>configure service nat nat-policy string timeouts subscriber-retention number</b>
Tree	<a href="#">subscriber-retention</a>

Description	This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address.
Range	0 to 1440
Units	minutes
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tcp

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure service nat nat-policy string timeouts tcp</b>
Tree	<a href="#">tcp</a>
Description	Commands in this context configure TCP timeout attributes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## established *number*

Synopsis	Idle timeout for TCP session in established state
Context	<b>configure service nat nat-policy string timeouts tcp established number</b>
Tree	<a href="#">established</a>
Range	60 to 86400
Units	seconds
Default	7440
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rst *number*

Synopsis	Suspend time for TCP connection ports closed by RST
Context	<b>configure service nat nat-policy string timeouts tcp rst number</b>
Tree	<a href="#">rst</a>

Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**syn number**

Synopsis	TCP session timeout when synchronizing initial sequence
Context	<b>configure service nat nat-policy string timeouts tcp syn number</b>
Tree	<a href="#">syn</a>
Range	6 to 86400
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**time-wait number**

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	<b>configure service nat nat-policy string timeouts tcp time-wait number</b>
Tree	<a href="#">time-wait</a>
Range	0 to 240
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**transitory number**

Synopsis	Idle timeout for TCP session in transitory state
Context	<b>configure service nat nat-policy string timeouts tcp transitory number</b>

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Tree	<a href="#">transitory</a>
Range	60 to 86400
Units	seconds
Default	240
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## udp

Synopsis	Enter the <b>udp</b> context
Context	<b>configure service nat nat-policy string timeouts udp</b>
Tree	<a href="#">udp</a>
Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dns number

Synopsis	Timeout applied to UDP session with destination port 53
Context	<b>configure service nat nat-policy string timeouts udp dns number</b>
Tree	<a href="#">dns</a>
Range	15 to 86400
Units	seconds
Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## initial number

Synopsis	UDP mapping timeout applied to new sessions
Context	<b>configure service nat nat-policy string timeouts udp initial number</b>
Tree	<a href="#">initial</a>
Range	10 to 300
Units	seconds

Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**normal** *number*

Synopsis	UDP mapping timeout
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">timeouts udp normal</a> <i>number</i>
Tree	<a href="#">normal</a>
Range	60 to 86400
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**udp**

Synopsis	Enter the <b>udp</b> context
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">udp</a>
Tree	<a href="#">udp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**inbound-refresh** *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i> <a href="#">udp inbound-refresh</a> <i>boolean</i>
Tree	<a href="#">inbound-refresh</a>
Description	When configured to <b>true</b> , this command extends the UDP session timeout on inbound traffic. When configured to <b>false</b> , the UDP session timeout is not extended.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pcp-server-policy** [[name](#)] *string*

Synopsis	Enter the <b>pcp-server-policy</b> list instance
Context	<b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i>
Tree	<a href="#">pcp-server-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	PCP server policy name
Context	<b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i>
Tree	<a href="#">pcp-server-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lifetime**

Synopsis	Enter the <b>lifetime</b> context
Context	<b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">lifetime</a>
Tree	<a href="#">lifetime</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**maximum number**

Synopsis	Maximum lifetime of explicit mappings made by the PCP servers
Context	<b>configure service nat pcp-server-policy</b> <i>string lifetime maximum number</i>
Tree	<a href="#">maximum</a>
Range	61 to 86400
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**minimum number**

Synopsis	Minimum lifetime of explicit mappings made by the PCP servers
Context	<b>configure service nat pcp-server-policy</b> <i>string lifetime minimum number</i>
Tree	<a href="#">minimum</a>
Range	60 to 86399
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-description-size number**

Synopsis	Maximum length of mapping descriptions made by the PCP servers
Context	<b>configure service nat pcp-server-policy</b> <i>string max-description-size number</i>
Tree	<a href="#">max-description-size</a>
Range	1 to 64
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**opcode**

Synopsis	Enter the <b>opcode</b> context
Context	<b>configure service nat pcp-server-policy</b> <i>string opcode</i>
Tree	<a href="#">opcode</a>
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **announce** *boolean*

Synopsis Process the announce PCP requests  
Context **configure** [service nat pcp-server-policy](#) *string opcode announce boolean*  
Tree [announce](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **get** *boolean*

Synopsis Process the get PCP requests  
Context **configure** [service nat pcp-server-policy](#) *string opcode get boolean*  
Tree [get](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **map** *boolean*

Synopsis Process the map PCP requests  
Context **configure** [service nat pcp-server-policy](#) *string opcode map boolean*  
Tree [map](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **option**

Synopsis Enter the **option** context  
Context **configure** [service nat pcp-server-policy](#) *string option*  
Tree [option](#)  
Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *boolean*

Synopsis Text description  
Context **configure** [service nat pcp-server-policy](#) *string option description* *boolean*  
Tree [description](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **next** *boolean*

Synopsis Process the PCP requests that contain the next option  
Context **configure** [service nat pcp-server-policy](#) *string option next* *boolean*  
Tree [next](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-reservation** *boolean*

Synopsis Process the PCP requests that contain the prefer failure option  
Context **configure** [service nat pcp-server-policy](#) *string option port-reservation* *boolean*  
Tree [port-reservation](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-set** *boolean*

Synopsis Support the PORT\_SET option in PCP MAP requests  
Context **configure** [service nat pcp-server-policy](#) *string option port-set* *boolean*  
Tree [port-set](#)

Description	When configured to <b>true</b> , the PCP MAP option optimizes PCP performance for applications that require multiple sets of port forwards. A range of consecutive port forwards can be requested by the PCP client with a single PCP request.  When configured to <b>false</b> , the default behavior is applied, where a plain MAP option is used to allocate a single port in a single request.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefer-failure** *boolean*

Synopsis	Process the PCP requests that contain the port reservation option
Context	<b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">option prefer-failure</a> <i>boolean</i>
Tree	<a href="#">prefer-failure</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **third-party** *boolean*

Synopsis	Process the PCP requests that contain the third party option
Context	<b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">option third-party</a> <i>boolean</i>
Tree	<a href="#">third-party</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reuse-external-ip-address** *boolean*

Synopsis	Reuse external IP address for NAT subscriber
Context	<b>configure</b> <a href="#">service nat pcp-server-policy</a> <i>string</i> <a href="#">reuse-external-ip-address</a> <i>boolean</i>
Tree	<a href="#">reuse-external-ip-address</a>
Description	When configured to <b>true</b> , the system reuses the external IP address assigned to a subscriber when the requested well-known port or external IP mapping is not available.  When configured to <b>false</b> , a request for a well-known port is allocated as requested on a different external IP address if the port is already allocated to another subscriber sharing

the same external IP address. The existing external IP address is initially allocated to the subscriber as a result of the initial traffic flow.

This configuration flag can be set dynamically but the flag affects only PCP port forwards that are created after the flag has been set.

Default	false
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## version

Synopsis	Enter the <b>version</b> context
Context	<b>configure service nat pcp-server-policy</b> <i>string</i> <b>version</b>
Tree	<b>version</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## maximum *number*

Synopsis	Maximum protocol version supported by the PCP servers
Context	<b>configure service nat pcp-server-policy</b> <i>string</i> <b>version</b> <b>maximum</b> <i>number</i>
Tree	<b>maximum</b>
Range	1 to 255
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## minimum *number*

Synopsis	Minimum protocol version supported by the PCP servers
Context	<b>configure service nat pcp-server-policy</b> <i>string</i> <b>version</b> <b>minimum</b> <i>number</i>
Tree	<b>minimum</b>
Range	1 to 255
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix-list** [*name*] *string*

Synopsis	Enter the <b>prefix-list</b> list instance
Context	<b>configure service nat prefix-list</b> <i>string</i>
Tree	<a href="#">prefix-list</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	NAT prefix list name
Context	<b>configure service nat prefix-list</b> <i>string</i>
Tree	<a href="#">prefix-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**application** *keyword***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Prefix list for the application
Context	<b>configure service nat prefix-list</b> <i>string application</i> <i>keyword</i>
Tree	<a href="#">application</a>
Options	l2-aware-dest-to-policy, dnat-only-subscribers
Default	l2-aware-dest-to-policy
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix** [ip-prefix] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">service nat prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Max. Instances	1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[ip-prefix]** *string*

Synopsis	NAT prefix
Context	<b>configure</b> <a href="#">service nat prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT policy for LSN
Context	<b>configure</b> <a href="#">service nat prefix-list</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">nat-policy</a> <i>reference</i>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure</b> <a href="#">service nat nat-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**syslog**

Synopsis	Enter the <b>syslog</b> context
Context	<b>configure service nat syslog</b>
Tree	<a href="#">syslog</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export-policy** [[name](#)] *string*

Synopsis	Enter the <b>export-policy</b> list instance
Context	<b>configure service nat syslog export-policy</b> <i>string</i>
Tree	<a href="#">export-policy</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Syslog export policy name
Context	<b>configure service nat syslog export-policy</b> <i>string</i>
Tree	<a href="#">export-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**collector** [router-instance](#) *string* [ip-address](#) *string*

Synopsis	Enter the <b>collector</b> list instance
Context	<b>configure service nat syslog export-policy</b> <i>string</i> <b>collector</b> <a href="#">router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">collector</a>
Max. Instances	2
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis Router instance

Context **configure** [service](#) [nat](#) [syslog](#) [export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis IPv4 address of the external collector node

Context **configure** [service](#) [nat](#) [syslog](#) [export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string*

Tree [collector](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the collector node

Context **configure** [service](#) [nat](#) [syslog](#) [export-policy](#) *string* [collector](#) [router-instance](#) *string* [ip-address](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**destination-port** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination port
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">collector router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>destination-port</b> <i>number</i>
Tree	<a href="#">destination-port</a>
Range	1 to 65535
Default	514
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv4-source-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 source address
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">collector router-instance</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>ipv4-source-address</b> <i>string</i>
Tree	<a href="#">ipv4-source-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**facility** *keyword*

Synopsis	Facility number in the PRI part of the NAT SYSLOG messages
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">facility</a> <i>keyword</i>
Tree	<a href="#">facility</a>
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**include**

Synopsis	Enter the <b>include</b> context
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include</a>
Tree	<a href="#">include</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**destination-ip** *boolean*

Synopsis	Include the translated destination IP address
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include destination-ip</a> <i>boolean</i>
Tree	<a href="#">destination-ip</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**foreign-ip** *boolean*

Synopsis	Include the original destination IPv4 address
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include foreign-ip</a> <i>boolean</i>
Tree	<a href="#">foreign-ip</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**foreign-port** *boolean*

Synopsis	Include the original destination port
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include foreign-port</a> <i>boolean</i>
Tree	<a href="#">foreign-port</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy-name** *boolean*

Synopsis	Include the NAT policy name in the flow log
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include nat-policy-name</a> <i>boolean</i>
Tree	<a href="#">nat-policy-name</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sub-id** *boolean*

Synopsis	Subscriber ID in subscriber aware NAT
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">include sub-id</a> <i>boolean</i>
Tree	<a href="#">sub-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**log-prefix** *string*

Synopsis	Optional prefix text in the MSG part of the NAT syslog messages
Context	<b>configure</b> <a href="#">service nat syslog export-policy</a> <i>string</i> <a href="#">log-prefix</a> <i>string</i>
Tree	<a href="#">log-prefix</a>
String Length	1 to 32
Default	TMNX
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-tx-delay** *number*

Synopsis Maximum time a syslog message delays in the output buffer to aggregate multiple events

Context **configure** [service nat syslog export-policy](#) *string max-tx-delay number*

Tree [max-tx-delay](#)

Range 0 to 100

Units deciseconds

Default 3

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu** *number*

Synopsis Maximum transmission unit

Context **configure** [service nat syslog export-policy](#) *string mtu number*

Tree [mtu](#)

Range 512 to 9000

Default 1500

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** *number*

Synopsis Frame limit

Context **configure** [service nat syslog export-policy](#) *string rate-limit number*

Tree [rate-limit](#)

Range 10 to 2147483647

Units packets per second

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**severity-level** *keyword*

Synopsis	Severity level in the PRI part of the syslog messages
Context	<b>configure service nat syslog export-policy</b> <i>string severity-level keyword</i>
Tree	<a href="#">severity-level</a>
Options	emergency, alert, critical, error, warning, notice, info, debug
Default	info
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**up-nat-policy** [[name](#)] *string*

Synopsis	Enter the <b>up-nat-policy</b> list instance
Context	<b>configure service nat up-nat-policy</b> <i>string</i>
Tree	<a href="#">up-nat-policy</a>
Max. Instances	32
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	UP NAT policy name
Context	<b>configure service nat up-nat-policy</b> <i>string</i>
Tree	<a href="#">up-nat-policy</a>
Description	This command specifies the UP NAT policy name. The name default has a special meaning representing the default UP NAT policy template. The system uses the default template when the BNG CPF does not receive a more specific name when the subscriber is instantiated.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**alg**

Synopsis	Enter the <b>alg</b> context
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Context	<b>configure service nat up-nat-policy</b> <i>string alg</i>
Tree	<a href="#">alg</a>
Description	Commands in this context configure the Application Layer Gateway (ALG) attributes of the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ftp** *boolean*

Synopsis	Use FTP ALG for the policy
Context	<b>configure service nat up-nat-policy</b> <i>string alg ftp boolean</i>
Tree	<a href="#">ftp</a>
Default	true
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pptp** *boolean*

Synopsis	Use PPTP ALG for the policy
Context	<b>configure service nat up-nat-policy</b> <i>string alg pptp boolean</i>
Tree	<a href="#">pptp</a>
Description	<p>When configured to <b>true</b>, the policy uses Point-to-Point Tunneling Protocol (PPTP) ALG.</p> <p>PPTP sessions can only be initiated from NAT inside.</p> <p>GRE traffic is allowed through NAT only if the corresponding mapping exists.</p> <p>There can be seven calls (GRE tunnels) per control session.</p> <p>When configured to <b>false</b>, PPTP ALG is not used.</p>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rtsp** *boolean*

Synopsis	Use RTSP ALG for the policy
Context	<b>configure service nat up-nat-policy</b> <i>string alg rtsp boolean</i>
Tree	<a href="#">rtsp</a>

Description	When configured to <b>true</b> , Real-Time Streaming Protocol (RTSP) ALG is used for the policy.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sip boolean**

Synopsis	Use SIP ALG for the policy
Context	<b>configure service nat up-nat-policy</b> <i>string alg sip boolean</i>
Tree	<a href="#">sip</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **block-limit number**

Synopsis	Maximum number of port blocks per NAT subscriber
Context	<b>configure service nat up-nat-policy</b> <i>string block-limit number</i>
Tree	<a href="#">block-limit</a>
Range	1 to 10
Default	1
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-host**

Synopsis	Enable the <b>default-host</b> context
Context	<b>configure service nat up-nat-policy</b> <i>string default-host</i>
Tree	<a href="#">default-host</a>
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside).</p>

The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.

The rate of redirected unknown traffic can be restricted by configuration.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inside-router-instance** *string*

Synopsis	Router instance of the DMZ
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">default-host inside-router-instance</a> <i>string</i>
Tree	<a href="#">inside-router-instance</a>
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis	IP address of the default DMZ host
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">default-host ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">default-host rate-limit</a> <i>number</i>
Tree	<a href="#">rate-limit</a>
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host.



Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filtering** *keyword*

Synopsis	Filtering method for inbound traffic for the policy
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">filtering</a> <i>keyword</i>
Tree	<a href="#">filtering</a>
Options	endpoint-independent, address-and-port-dependent
Default	endpoint-independent
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flow-log-policy**

Synopsis	Enter the <b>flow-log-policy</b> context
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">flow-log-policy</a>
Tree	<a href="#">flow-log-policy</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipfix** *reference*

Synopsis	IPFIX export policy
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">flow-log-policy ipfix reference</a>
Tree	<a href="#">ipfix</a>
Description	This command specifies an IP flow information export policy for the flow-log policy.
Reference	<b>configure</b> <a href="#">service ipfix export-policy</a> <i>string</i>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **icmp-echo-reply** *boolean*

Synopsis	Enable replies to ICMP Echo Request messages
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">icmp-echo-reply boolean</a>
Tree	<a href="#">icmp-echo-reply</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-block-extension**

Synopsis	Enable the <b>port-block-extension</b> context
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">port-block-extension</a>
Tree	<a href="#">port-block-extension</a>
Description	Commands in this context configure the attributes for dynamic allocation of NAT port-blocks beyond the initial port-blocks.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ports** *number*

Synopsis	Number of ports per dynamic port block
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">port-block-extension ports number</a>
Tree	<a href="#">ports</a>
Range	10 to 5000

Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>port-block-extension watermarks</b>
Tree	<b>watermarks</b>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark percentage
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>port-block-extension watermarks high number</b>
Tree	<b>high</b>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark percentage
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>port-block-extension watermarks low number</b>
Tree	<b>low</b>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.

Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## port-limits

Synopsis	Enter the <b>port-limits</b> context
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <b>port-limits</b>
Tree	<a href="#">port-limits</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic-ports *number*

Synopsis	Maximum number of dynamic ports per subscriber
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">port-limits</a> <b>dynamic-ports</b> <i>number</i>
Tree	<a href="#">dynamic-ports</a>
Description	This command limits the number of ports per protocol on an outside IP address for a subscriber regardless of the pool pairing mode. This command applies to LSN44 pools with flexible port allocation.
Range	1 to 65536
Default	65536
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## reserved *number*

Synopsis	Number of ports reserved for prioritized sessions
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">port-limits</a> <b>reserved</b> <i>number</i>
Tree	<a href="#">reserved</a>
Description	This command configures the number of ports per block that are reserved for prioritized sessions.
Range	1 to 65534
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure service nat up-nat-policy string port-limits watermarks</b>
Tree	<a href="#">watermarks</a>
Description	This command configures watermarks for NAT resources.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark percentage
Context	<b>configure service nat up-nat-policy string port-limits watermarks high number</b>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark percentage
Context	<b>configure service nat up-nat-policy string port-limits watermarks low number</b>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## priority-sessions

Synopsis	Enter the <b>priority-sessions</b> context
Context	<b>configure service nat up-nat-policy string priority-sessions</b>
Tree	<a href="#">priority-sessions</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## fc

Synopsis	Enter the <b>fc</b> context
Context	<b>configure service nat up-nat-policy string priority-sessions fc</b>
Tree	<a href="#">fc</a>
Description	Commands in this context specify which Forwarding Class (FC) options have prioritized sessions.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## af *boolean*

Synopsis	Prioritize traffic from AF forwarding classes
Context	<b>configure service nat up-nat-policy string priority-sessions fc af <i>boolean</i></b>
Tree	<a href="#">af</a>
Description	When configured to <b>true</b> , traffic from Assured Forwarding (AF) FC sessions is prioritized. When configured to <b>false</b> , AF traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## be *boolean*

Synopsis	Prioritize traffic from BE forwarding classes
Context	<b>configure service nat up-nat-policy string priority-sessions fc be <i>boolean</i></b>
Tree	<a href="#">be</a>
Description	When configured to <b>true</b> , traffic from Best Effort (BE) FC sessions is prioritized. When configured to <b>false</b> , BE traffic is not prioritized.

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Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ef boolean**

Synopsis	Prioritize traffic from EF forwarding classes
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>priority-sessions fc ef boolean</b>
Tree	<b>ef</b>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **h1 boolean**

Synopsis	Prioritize traffic from H1 forwarding classes
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>priority-sessions fc h1 boolean</b>
Tree	<b>h1</b>
Description	When configured to <b>true</b> , traffic from H1 sessions is prioritized. When configured to false, H1 traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **h2 boolean**

Synopsis	Prioritize traffic from H2 forwarding classes
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>priority-sessions fc h2 boolean</b>
Tree	<b>h2</b>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## I1 *boolean*

Synopsis	Prioritize traffic from L1 forwarding classes
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">priority-sessions fc I1</a> <i>boolean</i>
Tree	<a href="#">I1</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## I2 *boolean*

Synopsis	Prioritize traffic from L2 forwarding classes
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">priority-sessions fc I2</a> <i>boolean</i>
Tree	<a href="#">I2</a>
Description	When configured to <b>true</b> , traffic from L2 sessions is prioritized. When configured to false, L2 traffic is not prioritized.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nc *boolean*

Synopsis	Prioritize traffic from NC forwarding classes
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">priority-sessions fc nc</a> <i>boolean</i>
Tree	<a href="#">nc</a>
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## session-limits

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">session-limits</a>
Tree	<a href="#">session-limits</a>
Description	Commands in this context configure session-limit attributes for the policy.
Introduced	20.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max number**

Synopsis Maximum number of sessions per subscriber  
 Context **configure service nat up-nat-policy** *string session-limits max number*  
 Tree [max](#)  
 Range 1 to 65535  
 Default 65535  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reserved number**

Synopsis Number of sessions reserved for prioritized sessions  
 Context **configure service nat up-nat-policy** *string session-limits reserved number*  
 Tree [reserved](#)  
 Description This command configures the number of sessions per block that are reserved for prioritized sessions.  
 Range 1 to 65534  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **watermarks**

Synopsis Enable the **watermarks** context  
 Context **configure service nat up-nat-policy** *string session-limits watermarks*  
 Tree [watermarks](#)  
 Description This command configures watermarks for NAT resources.  
 Introduced 20.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high number**

Synopsis High watermark percentage

Context	<b>configure service nat up-nat-policy</b> <i>string session-limits watermarks high number</i>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis	Low watermark percentage
Context	<b>configure service nat up-nat-policy</b> <i>string session-limits watermarks low number</i>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp**

Synopsis	Enter the <b>tcp</b> context
Context	<b>configure service nat up-nat-policy</b> <i>string tcp</i>
Tree	<a href="#">tcp</a>
Description	Commands in this context configure the transmission control protocol (TCP) attributes of the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mss-adjust** *number*

Synopsis	TCP MSS adjustment value
Context	<b>configure service nat up-nat-policy</b> <i>string tcp mss-adjust number</i>
Tree	<b>mss-adjust</b>
Description	This command configures the value to use to adjust the TCP Maximum Segment Size (MSS) option, if not already present or the present value is higher.
Range	160 to 10240
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reset-unknown** *boolean*

Synopsis	Generate TCP reset for packets from unknown flows
Context	<b>configure service nat up-nat-policy</b> <i>string tcp reset-unknown boolean</i>
Tree	<b>reset-unknown</b>
Description	When configured to <b>true</b> , TCP packets are dropped and a TCP reset is generated if the NAT inside receives a TCP packet without the SYN flag set for an unknown flow. When configured to <b>false</b> , no TCP reset is generated.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**timeouts**

Synopsis	Enter the <b>timeouts</b> context
Context	<b>configure service nat up-nat-policy</b> <i>string timeouts</i>
Tree	<b>timeouts</b>
Description	Commands in this context configure the attributes of session idle timeouts for the policy.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**icmp-query** *number*

Synopsis	Timeout applied to an ICMP Query session
Context	<b>configure service nat up-nat-policy</b> <i>string timeouts icmp-query number</i>

Tree	<a href="#">icmp-query</a>
Range	60 to 240
Units	seconds
Default	60
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sip number**

Synopsis	SIP inactive media timeout
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">timeouts sip number</a>
Tree	<a href="#">sip</a>
Range	10 to 7200
Units	seconds
Default	120
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-retention number**

Synopsis	IP address hold time after host and port blocks expire
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">timeouts subscriber-retention number</a>
Tree	<a href="#">subscriber-retention</a>
Description	This command configures the time to keep a NAT subscriber and its associated IP address after all hosts and associated port blocks expire. If a NAT subscriber host appears before the retention timeout elapses, it is given the same outside IP address.
Range	0 to 1440
Units	minutes
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tcp**

Synopsis	Enter the <b>tcp</b> context
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Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>timeouts tcp</b>
Tree	<b>tcp</b>
Description	Commands in this context configure TCP timeout attributes.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **established** *number*

Synopsis	Idle timeout for TCP session in established state
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>timeouts tcp established</b> <i>number</i>
Tree	<b>established</b>
Range	60 to 86400
Units	seconds
Default	7440
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rst** *number*

Synopsis	Suspend time for TCP connection ports closed by RST
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>timeouts tcp rst</b> <i>number</i>
Tree	<b>rst</b>
Description	This command configures the suspend time for outside TCP ports that are used in translations for TCP connections, when they are closed by TCP Reset (RST). After the timer expires, the outside ports can be reused for new TCP translations.
Range	0 to 240
Units	seconds
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **syn** *number*

Synopsis	TCP session timeout when synchronizing initial sequence
Context	<b>configure service nat up-nat-policy</b> <i>string</i> <b>timeouts tcp syn</b> <i>number</i>

Tree	<a href="#">syn</a>
Range	6 to 86400
Units	seconds
Default	15
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **time-wait** *number*

Synopsis	Timeout applied to a TCP session in the time-wait state
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">timeouts tcp time-wait</a> <i>number</i>
Tree	<a href="#">time-wait</a>
Range	0 to 240
Units	seconds
Default	0
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **transitory** *number*

Synopsis	Idle timeout for TCP session in transitory state
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">timeouts tcp transitory</a> <i>number</i>
Tree	<a href="#">transitory</a>
Range	60 to 86400
Units	seconds
Default	240
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **udp**

Synopsis	Enter the <b>udp</b> context
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <a href="#">timeouts udp</a>
Tree	<a href="#">udp</a>

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Description	Commands in this context configure the User Datagram Protocol (UDP) mapping timeout attributes.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dns number**

Synopsis	Timeout applied to UDP session with destination port 53
Context	<b>configure service nat up-nat-policy string timeouts udp dns number</b>
Tree	<b>dns</b>
Range	15 to 86400
Units	seconds
Default	15
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial number**

Synopsis	UDP mapping timeout applied to new sessions
Context	<b>configure service nat up-nat-policy string timeouts udp initial number</b>
Tree	<b>initial</b>
Range	10 to 300
Units	seconds
Default	15
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **normal number**

Synopsis	UDP mapping timeout
Context	<b>configure service nat up-nat-policy string timeouts udp normal number</b>
Tree	<b>normal</b>
Range	60 to 86400
Units	seconds
Default	300

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## udp

Synopsis	Enter the <b>udp</b> context
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <b>udp</b>
Tree	<a href="#">udp</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inbound-refresh *boolean*

Synopsis	Extend UDP session timeout on inbound traffic
Context	<b>configure</b> <a href="#">service nat up-nat-policy</a> <i>string</i> <b>udp inbound-refresh</b> <i>boolean</i>
Tree	<a href="#">inbound-refresh</a>
Description	When configured to <b>true</b> , this command extends the UDP session timeout on inbound traffic. When configured to <b>false</b> , the UDP session timeout is not extended.
Default	false
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## oper-group [[name](#)] *string*

Synopsis	Enter the <b>oper-group</b> list instance
Context	<b>configure</b> <a href="#">service oper-group</a> <i>string</i>
Tree	<a href="#">oper-group</a>
Max. Instances	32768
Introduced	16.0.R1
Platforms	All

## [\[name\]](#) *string*

Synopsis	Operational group name
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Context	<b>configure service oper-group</b> <i>string</i>
Tree	<a href="#">oper-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## bfd-liveness

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure service oper-group</b> <i>string</i> <b>bfd-liveness</b>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

## dest-ip *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for BFD
Context	<b>configure service oper-group</b> <i>string</i> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i>
Tree	<a href="#">dest-ip</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## interface-name *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source interface name
Context	<b>configure service oper-group</b> <i>string</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i>

Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Routing context used for route lookup
Context	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i> <a href="#">bfd-liveness</a> <b>router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i> <b>hold-time</b>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	All

### **down** *number*

Synopsis	Oper group hold down time
Context	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i> <a href="#">hold-time</a> <b>down</b> <i>number</i>
Tree	<a href="#">down</a>
Range	1 to 3600
Units	seconds
Introduced	16.0.R3

Platforms All

### **up** *number*

Synopsis Oper group hold up time  
 Context **configure** *service oper-group string hold-time up number*  
 Tree *up*  
 Range 0 to 3600  
 Units seconds  
 Default 4  
 Introduced 16.0.R3  
 Platforms All

### **pbb**

Synopsis Enter the **pbb** context  
 Context **configure** *service pbb*  
 Tree *pbb*  
 Introduced 16.0.R1  
 Platforms All

### **mac** [*name*] *string*

Synopsis Enter the **mac** list instance  
 Context **configure** *service pbb mac string*  
 Tree *mac*  
 Introduced 16.0.R1  
 Platforms All

### [*name*] *string*

Synopsis MAC name for the MAC address  
 Context **configure** *service pbb mac string*  
 Tree *mac*  
 String Length 1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **address string**

Synopsis	IEEE address assigned to the MAC name
Context	<b>configure</b> <a href="#">service pbb mac string address string</a>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **mac-notification**

Synopsis	Enter the <b>mac-notification</b> context
Context	<b>configure</b> <a href="#">service pbb mac-notification</a>
Tree	<a href="#">mac-notification</a>
Introduced	16.0.R1
Platforms	All

### **count number**

Synopsis	MAC notification messages count
Context	<b>configure</b> <a href="#">service pbb mac-notification count number</a>
Tree	<a href="#">count</a>
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

### **interval number**

Synopsis	Interval for MAC-notification messages
Context	<b>configure</b> <a href="#">service pbb mac-notification interval number</a>

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Tree	<a href="#">interval</a>
Range	1 to 100
Units	deciseconds
Default	1
Introduced	16.0.R1
Platforms	All

### **source-bmac**

Synopsis	Enter the <b>source-bmac</b> context
Context	<b>configure</b> <a href="#">service pbb source-bmac</a>
Tree	<a href="#">source-bmac</a>
Introduced	16.0.R1
Platforms	All

### **address *string***

Synopsis	Source B-VPLS MAC address to use with PBB
Context	<b>configure</b> <a href="#">service pbb source-bmac address <i>string</i></a>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

### **evpn-etree-leaf-address *string***

Synopsis	Source Backbone VPLS MAC address to use with Provider Backbone Bridging (PBB)
Context	<b>configure</b> <a href="#">service pbb source-bmac evpn-etree-leaf-address <i>string</i></a>
Tree	<a href="#">evpn-etree-leaf-address</a>
Introduced	16.0.R1
Platforms	All

### **proxy-arp-nd**

Synopsis	Enter the <b>proxy-arp-nd</b> context
Context	<b>configure</b> <a href="#">service proxy-arp-nd</a>

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Tree	<a href="#">proxy-arp-nd</a>
Introduced	16.0.R1
Platforms	All

## mac-list

Synopsis	Enter the <b>mac-list</b> context
Context	<b>configure</b> <a href="#">service proxy-arp-nd mac-list</a>
Tree	<a href="#">mac-list</a>
Introduced	16.0.R1
Platforms	All

## list [[list-name](#)] *string*

Synopsis	Enter the <b>list</b> list instance
Context	<b>configure</b> <a href="#">service proxy-arp-nd mac-list list</a> <i>string</i>
Tree	<a href="#">list</a>
Introduced	16.0.R1
Platforms	All

## [[list-name](#)] *string*

Synopsis	Specify name for mac list
Context	<b>configure</b> <a href="#">service proxy-arp-nd mac-list list</a> <i>string</i>
Tree	<a href="#">list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## mac [[address](#)] *string*

Synopsis	Add a list entry for <b>mac</b>
Context	<b>configure</b> <a href="#">service proxy-arp-nd mac-list list</a> <i>string</i> <b>mac</b> <i>string</i>
Tree	<a href="#">mac</a>

Max. Instances	10
Introduced	16.0.R1
Platforms	All

**[address]** *string*

Synopsis	MAC address to be added to the list
Context	<b>configure</b> <a href="#">service proxy-arp-nd mac-list list</a> <i>string mac string</i>
Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**pw-template** [[pw-template-name](#)] *string*

Synopsis	Enter the <b>pw-template</b> list instance
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i>
Tree	<a href="#">pw-template</a>
Max. Instances	2048
Introduced	16.0.R1
Platforms	All

**[pw-template-name]** *string*

Synopsis	SDP template name
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i>
Tree	<a href="#">pw-template</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**accounting-policy** *number*

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">accounting-policy</a> <i>number</i>
Tree	<a href="#">accounting-policy</a>
Range	1 to 99
Introduced	16.0.R1
Platforms	All

**allow-fragmentation** *boolean*

Synopsis	Allow packets to be sent without setting DF bit
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">allow-fragmentation</a> <i>boolean</i>
Tree	<a href="#">allow-fragmentation</a>
Default	false
Introduced	16.0.R1
Platforms	All

**auto-gre-sdp** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use a GRE tunnel to automatically create an SDP
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">auto-gre-sdp</a> <i>boolean</i>
Tree	<a href="#">auto-gre-sdp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**block-on-peer-fault** *boolean*

Synopsis	Enable block traffic on peer fault
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">block-on-peer-fault</a> <i>boolean</i>
Tree	<a href="#">block-on-peer-fault</a>
Default	false



Introduced 16.0.R1  
Platforms All

### **collect-stats** *boolean*

Synopsis Collect statistics  
Context **configure** [service](#) [pw-template](#) *string* [collect-stats](#) *boolean*  
Tree [collect-stats](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **control-word** *boolean*

Synopsis Enable/Disable the use of ControlWord  
Context **configure** [service](#) [pw-template](#) *string* [control-word](#) *boolean*  
Tree [control-word](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **egress**

Synopsis Enter the **egress** context  
Context **configure** [service](#) [pw-template](#) *string* [egress](#)  
Tree [egress](#)  
Introduced 16.0.R1  
Platforms All

### **filter**

Synopsis Enter the **filter** context  
Context **configure** [service](#) [pw-template](#) *string* [egress](#) [filter](#)  
Tree [filter](#)  
Introduced 16.0.R1

Platforms All

### **ip string**

Synopsis IPv4 filter policy name  
Context **configure** [service pw-template string egress filter ip string](#)  
Tree [ip](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms All

### **ipv6 string**

Synopsis IPv6 filter policy name  
Context **configure** [service pw-template string egress filter ipv6 string](#)  
Tree [ipv6](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms All

### **mac string**

Synopsis MAC filter policy name  
Context **configure** [service pw-template string egress filter mac string](#)  
Tree [mac](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms All

### **mfib-allowed-mda-destinations**

Synopsis Enter the **mfib-allowed-mda-destinations** context  
Context **configure** [service pw-template string egress mfib-allowed-mda-destinations](#)  
Tree [mfib-allowed-mda-destinations](#)  
Introduced 16.0.R1

Platforms All

### **mda** [**mda-id**] *string*

Synopsis Add a list entry for **mda**

Context **configure** [service pw-template](#) *string* [egress mfib-allowed-mda-destinations](#) **mda** *string*

Tree [mda](#)

Introduced 16.0.R1

Platforms All

### **[mda-id]** *string*

Synopsis MFIB allowed MDA destination

Context **configure** [service pw-template](#) *string* [egress mfib-allowed-mda-destinations](#) **mda** *string*

Tree [mda](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **qos**

Synopsis Enter the **qos** context

Context **configure** [service pw-template](#) *string* [egress qos](#)

Tree [qos](#)

Introduced 16.0.R1

Platforms All

### **network**

Synopsis Enter the **network** context

Context **configure** [service pw-template](#) *string* [egress qos network](#)

Tree [network](#)

Introduced 16.0.R1

Platforms All

**policy-name** *string*

Synopsis	Network policy ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">policy-name</a> <i>string</i>
Tree	<a href="#">policy-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a>
Tree	<a href="#">port-redirect-group</a>
Introduced	16.0.R1
Platforms	All

**group-name** *string*

Synopsis	Name of the egress port queue group template
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>string</i>
Tree	<a href="#">group-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**instance** *number*

Synopsis	Instance for FP ingress queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">network</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## encryption-keygroup

Synopsis	Enter the <b>encryption-keygroup</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">encryption-keygroup</a>
Tree	<a href="#">encryption-keygroup</a>
Introduced	19.10.R1
Platforms	VSR

## inbound *number*

Synopsis	Keygroup identifier in the inbound direction
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">encryption-keygroup</a> <a href="#">inbound</a> <i>number</i>
Tree	<a href="#">inbound</a>
Range	1 to 127
Introduced	19.10.R1
Platforms	VSR

## outbound *number*

Synopsis	Keygroup identifier in the outbound direction
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">encryption-keygroup</a> <a href="#">outbound</a> <i>number</i>
Tree	<a href="#">outbound</a>
Range	1 to 127
Introduced	19.10.R1
Platforms	VSR

## entropy-label

Synopsis	Enable the use of an entropy label
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">entropy-label</a>
Tree	<a href="#">entropy-label</a>
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

## **fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure</b> <a href="#">service pw-template string fdb</a>
Tree	<a href="#">fdb</a>
Introduced	16.0.R1
Platforms	All

## **auto-learn-mac-protect** *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	<b>configure</b> <a href="#">service pw-template string fdb auto-learn-mac-protect boolean</a>
Tree	<a href="#">auto-learn-mac-protect</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **auto-learn-mac-protect-exclude-list** *string*

Synopsis	Name of the MAC protect exclusion list
Context	<b>configure</b> <a href="#">service pw-template string fdb auto-learn-mac-protect-exclude-list string</a>
Tree	<a href="#">auto-learn-mac-protect-exclude-list</a>
Description	<p>This command configures the name of a MAC protect exclusion list.</p> <p>Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.</p> <p>An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.</p>
String Length	1 to 32
Introduced	20.5.R1
Platforms	All

## **discard-unknown-source** *boolean*

Synopsis	Discard frames with unknown source
Context	<b>configure</b> <a href="#">service pw-template string fdb discard-unknown-source boolean</a>

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Tree	<a href="#">discard-unknown-source</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **limit-mac-move** *keyword*

Synopsis	MAC move limit
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">fdb limit-mac-move</a> <i>keyword</i>
Tree	<a href="#">limit-mac-move</a>
Options	blockable, non-blockable
Default	blockable
Introduced	16.0.R1
Platforms	All

### **mac-learning**

Synopsis	Enter the <b>mac-learning</b> context
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">fdb mac-learning</a>
Tree	<a href="#">mac-learning</a>
Introduced	16.0.R1
Platforms	All

### **aging** *boolean*

Synopsis	Enable aging of MAC addresses
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">fdb mac-learning aging</a> <i>boolean</i>
Tree	<a href="#">aging</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **learning** *boolean*

Synopsis	Enable learning of new MAC addresses
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Context	<b>configure service pw-template</b> <i>string</i> <b>fdb mac-learning learning</b> <i>boolean</i>
Tree	<b>learning</b>
Default	true
Introduced	16.0.R1
Platforms	All

### **mac-pinning** *boolean*

Synopsis	Enable MAC address pinning on this spoke SDP
Context	<b>configure service pw-template</b> <i>string</i> <b>fdb mac-pinning</b> <i>boolean</i>
Tree	<b>mac-pinning</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **maximum-mac-addresses** *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	<b>configure service pw-template</b> <i>string</i> <b>fdb maximum-mac-addresses</b> <i>number</i>
Tree	<b>maximum-mac-addresses</b>
Description	<p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this PW template.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.</p> <p>When the configured limit is reached and the <b>configure service pw-template fdb discard-unknown-source</b> command is set to <b>true</b> for this PW template, packets with unknown source MAC addresses are discarded. If <b>discard-unknown-source</b> is set to <b>false</b>, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.</p> <p>However, if the <b>configure service vpls fdb discard-unknown</b> command is set to <b>true</b>, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.</p> <p>When unconfigured, the PW template uses the global MAC learning limitations.</p>
Range	1 to 511999
Introduced	16.0.R1
Platforms	All



### **protected-src-mac-violation-action** *keyword*

Synopsis	Action for protected source MAC restriction
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">fdb</a> <b>protected-src-mac-violation-action</b> <i>keyword</i>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

### **force-vc-forwarding** *keyword*

Synopsis	VC forwarding action
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">force-vc-forwarding</a> <i>keyword</i>
Tree	<a href="#">force-vc-forwarding</a>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

### **hash-label**

Synopsis	Enable the <b>hash-label</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">hash-label</a>
Tree	<a href="#">hash-label</a>
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i> .
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

### **signal-capability**

Synopsis	Signal hash label capability to the remote PE
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">hash-label</a> <a href="#">signal-capability</a>
Tree	<a href="#">signal-capability</a>

Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.  The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration. The node must withdraw the label it sent to its peer and send a new label mapping message with the new value of the F-bit in the flow label interface option sub-TLV of the pseudowire ID FEC element.
Introduced	16.0.R1
Platforms	All

## igmp-snooping

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service pw-template string igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

## fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	<b>configure</b> <a href="#">service pw-template string igmp-snooping fast-leave boolean</a>
Tree	<a href="#">fast-leave</a>
Default	false
Introduced	16.0.R1
Platforms	All

## import-policy *string*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">service pw-template string igmp-snooping import-policy string</a>
Tree	<a href="#">import-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**maximum-number-groups** *number*

Synopsis	Maximum multicast groups
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-response-interval</a> <i>number</i>

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Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">igmp-snooping robust-count</a> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

**send-queries** *boolean*

Synopsis	Generate IGMP general queries
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">igmp-snooping send-queries</a> <i>boolean</i>
Tree	<a href="#">send-queries</a>
Default	false
Introduced	16.0.R1
Platforms	All

**version** *keyword*

Synopsis	IGMP version
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">igmp-snooping version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service pw-template string ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service pw-template string ingress filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

## ip string

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service pw-template string ingress filter ip string</a>
Tree	<a href="#">ip</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

## ipv6 string

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service pw-template string ingress filter ipv6 string</a>
Tree	<a href="#">ipv6</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

## mac *string*

Synopsis	MAC filter policy name
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">ingress filter mac</a> <i>string</i>
Tree	<a href="#">mac</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">ingress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">ingress qos network</a>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	All

## fp-redirect-group

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a>
Tree	<a href="#">fp-redirect-group</a>
Introduced	16.0.R1
Platforms	All

## group-name *string*

Synopsis	Name of the forwarding plane queue group template
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Context	<b>configure service pw-template</b> <i>string</i> ingress qos network fp-redirect-group group-name <i>string</i>
Tree	<a href="#">group-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **instance** *number*

Synopsis	Instance for FP ingress queue group
Context	<b>configure service pw-template</b> <i>string</i> ingress qos network fp-redirect-group instance <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **policy-name** *string*

Synopsis	Network policy ID
Context	<b>configure service pw-template</b> <i>string</i> ingress qos network policy-name <i>string</i>
Tree	<a href="#">policy-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

### **l2pt**

Synopsis	Enter the <b>l2pt</b> context
Context	<b>configure service pw-template</b> <i>string</i> l2pt
Tree	<a href="#">l2pt</a>
Introduced	16.0.R1
Platforms	All

## termination

Synopsis	Enable the <b>termination</b> context
Context	<b>configure service pw-template string l2pt termination</b>
Tree	<a href="#">termination</a>
Introduced	16.0.R1
Platforms	All

## protocols

Synopsis	Enter the <b>protocols</b> context
Context	<b>configure service pw-template string l2pt termination protocols</b>
Tree	<a href="#">protocols</a>
Introduced	16.0.R1
Platforms	All

## cdp boolean

Synopsis	Enable Cisco discovery protocol
Context	<b>configure service pw-template string l2pt termination protocols cdp boolean</b>
Tree	<a href="#">cdp</a>
Default	false
Introduced	16.0.R1
Platforms	All

## dtp boolean

Synopsis	Enable dynamic trunking protocol
Context	<b>configure service pw-template string l2pt termination protocols dtp boolean</b>
Tree	<a href="#">dtp</a>
Default	false
Introduced	16.0.R1
Platforms	All



### **pagp** *boolean*

Synopsis	Enable port aggregation protocol
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt termination protocols</a> <a href="#">pagp</a> <i>boolean</i>
Tree	<a href="#">pagp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **stp** *boolean*

Synopsis	Enable all spanning tree protocols
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt termination protocols</a> <a href="#">stp</a> <i>boolean</i>
Tree	<a href="#">stp</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **udld** *boolean*

Synopsis	Enable unidirectional link detection
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt termination protocols</a> <a href="#">udld</a> <i>boolean</i>
Tree	<a href="#">udld</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vtp** *boolean*

Synopsis	Enable virtual trunk protocol
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">l2pt termination protocols</a> <a href="#">vtp</a> <i>boolean</i>
Tree	<a href="#">vtp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**provisioned-sdp** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Provisioned SDP type
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">provisioned-sdp</a> <i>keyword</i>
Tree	<a href="#">provisioned-sdp</a>
Options	use, prefer
Introduced	16.0.R1
Platforms	All

**pw-template-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PW Template Id
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">pw-template-id</a> <i>number</i>
Tree	<a href="#">pw-template-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**sdp-exclude** [[group-name](#)] *reference*

Synopsis	Add a list entry for <b>sdp-exclude</b>
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">sdp-exclude</a> <i>reference</i>
Tree	<a href="#">sdp-exclude</a>
Introduced	16.0.R1
Platforms	All

**[group-name]** *reference*

Synopsis	SDP group name
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Context	<b>configure service pw-template string sdp-exclude reference</b>
Tree	<a href="#">sdp-exclude</a>
Reference	<b>configure service sdp-group group-name string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **sdp-include** [[group-name](#)] *reference*

Synopsis	Add a list entry for <b>sdp-include</b>
Context	<b>configure service pw-template string sdp-include reference</b>
Tree	<a href="#">sdp-include</a>
Introduced	16.0.R1
Platforms	All

### **[group-name]** *reference*

Synopsis	SDP group name
Context	<b>configure service pw-template string sdp-include reference</b>
Tree	<a href="#">sdp-include</a>
Reference	<b>configure service sdp-group group-name string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **split-horizon-group**

Synopsis	Enter the <b>split-horizon-group</b> context
Context	<b>configure service pw-template string split-horizon-group</b>
Tree	<a href="#">split-horizon-group</a>
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group</a> <a href="#">fdb</a>
Tree	<a href="#">fdb</a>
Introduced	16.0.R1
Platforms	All

**saps**

Synopsis	Enter the <b>saps</b> context
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group</a> <a href="#">fdb</a> <a href="#">saps</a>
Tree	<a href="#">saps</a>
Introduced	16.0.R1
Platforms	All

**auto-learn-mac-protect** *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group</a> <a href="#">fdb</a> <a href="#">saps</a> <a href="#">auto-learn-mac-protect</a> <i>boolean</i>
Tree	<a href="#">auto-learn-mac-protect</a>
Default	false
Introduced	16.0.R1
Platforms	All

**discard-unprotected-dest-mac** *boolean*

Synopsis	Enable/disable unprotected dest MAC restriction
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group fdb saps</a> <a href="#">discard-unprotected-dest-mac</a> <i>boolean</i>
Tree	<a href="#">discard-unprotected-dest-mac</a>
Default	false
Introduced	16.0.R1
Platforms	All

**protected-src-mac-violation-action** *keyword*

Synopsis	Action for protected source MAC restriction
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group fdb saps</a> <a href="#">protected-src-mac-violation-action</a> <i>keyword</i>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	sap-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

**name** *string*

Synopsis	Split horizon group name to which the SDP belongs
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">split-horizon-group name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**stp**

Synopsis	Enter the <b>stp</b> context
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <a href="#">stp</a>
Tree	<a href="#">stp</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of STP
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">stp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R4
Platforms	All

**auto-edge** *boolean*

Synopsis	Enable automatic detection of edge port characteristics
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">stp</a> <b>auto-edge</b> <i>boolean</i>
Tree	<a href="#">auto-edge</a>
Default	true
Introduced	16.0.R4
Platforms	All

**edge-port** *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">stp</a> <b>edge-port</b> <i>boolean</i>
Tree	<a href="#">edge-port</a>
Default	false
Introduced	16.0.R4
Platforms	All

**link-type** *keyword*

Synopsis	Configure STP link-type
Context	<b>configure</b> <a href="#">service</a> <a href="#">pw-template</a> <i>string</i> <a href="#">stp</a> <b>link-type</b> <i>keyword</i>
Tree	<a href="#">link-type</a>
Options	pt-pt, shared
Default	pt-pt
Introduced	16.0.R4

Platforms All

### **path-cost** *number*

Synopsis Configure path-cost  
Context **configure** [service pw-template](#) *string* **stp path-cost** *number*  
Tree [path-cost](#)  
Range 1 to 200000000  
Default 10  
Introduced 16.0.R4  
Platforms All

### **priority** *number*

Synopsis Configure STP priority  
Context **configure** [service pw-template](#) *string* **stp priority** *number*  
Tree [priority](#)  
Range 0 to 255  
Default 128  
Introduced 16.0.R4  
Platforms All

### **root-guard** *boolean*

Synopsis Enable/disable STP root-guard  
Context **configure** [service pw-template](#) *string* **stp root-guard** *boolean*  
Tree [root-guard](#)  
Default false  
Introduced 16.0.R4  
Platforms All

### **vc-type** *keyword*

Synopsis Virtual circuit type associated with the SDP bind  
Context **configure** [service pw-template](#) *string* **vc-type** *keyword*

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Tree	<a href="#">vc-type</a>
Options	ether, vlan
Default	ether
Introduced	16.0.R1
Platforms	All

### **vlan-vc-tag** *number*

Synopsis	VLAN VC tag
Context	<b>configure</b> <a href="#">service pw-template</a> <i>string</i> <b>vlan-vc-tag</b> <i>number</i>
Tree	<a href="#">vlan-vc-tag</a>
Range	0 to 4094
Introduced	16.0.R1
Platforms	All

### **sdp** [[sdp-id](#)] *number*

Synopsis	Enter the <b>sdp</b> list instance
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i>
Tree	<a href="#">sdp</a>
Introduced	16.0.R1
Platforms	All

### **[sdp-id]** *number*

Synopsis	Service Distribution Point (SDP) identifier
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i>
Tree	<a href="#">sdp</a>
Range	1 to 32767
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



### **accounting-policy** *reference*

Synopsis	Accounting policy associated with an SDP
Context	<b>configure</b> <a href="#">service sdp number</a> <a href="#">accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Description	This command associates an accounting policy with an SDP. When unconfigured, there is no accounting policy applied to the SDP.
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the SDP
Context	<b>configure</b> <a href="#">service sdp number</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **adv-mtu-override** *boolean*

Synopsis	Override the advertised VC-type MTU using the SDP ID
Context	<b>configure</b> <a href="#">service sdp number</a> <a href="#">adv-mtu-override boolean</a>
Tree	<a href="#">adv-mtu-override</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **allow-fragmentation** *boolean*

Synopsis	Allow packets to be sent without setting DF bit
Context	<b>configure</b> <a href="#">service sdp number</a> <a href="#">allow-fragmentation boolean</a>
Tree	<a href="#">allow-fragmentation</a>
Default	false

---

Introduced	16.0.R1
Platforms	All

### **bgp-tunnel** *boolean*

Synopsis	Allow use of BGP route tunnels to reach far-end nodes
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <b>bgp-tunnel</b> <i>boolean</i>
Tree	<a href="#">bgp-tunnel</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **booking-factor** *number*

Synopsis	Percentage of SDP max available bandwidth for VLL CAC
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <b>booking-factor</b> <i>number</i>
Tree	<a href="#">booking-factor</a>
Range	0 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **class-forwarding**

Synopsis	Enable the <b>class-forwarding</b> context
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <b>class-forwarding</b>
Tree	<a href="#">class-forwarding</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of class-based forwarding
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <b>class-forwarding</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **default-lsp** *reference*

Synopsis	Default LSP for class-based forwarding on the SDP
Context	<b>configure</b> <a href="#">service sdp number class-forwarding default-lsp reference</a>
Tree	<a href="#">default-lsp</a>
Reference	<b>configure</b> <a href="#">service sdp number lsp string</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **enforce-diffserv-lsp-fc** *boolean*

Synopsis	Enable RSVP validation of FC support by the LSP
Context	<b>configure</b> <a href="#">service sdp number class-forwarding enforce-diffserv-lsp-fc boolean</a>
Tree	<a href="#">enforce-diffserv-lsp-fc</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **fc** [[fc-name](#)] *keyword*

Synopsis	Enter the <b>fc</b> list instance
Context	<b>configure</b> <a href="#">service sdp number class-forwarding fc keyword</a>
Tree	<a href="#">fc</a>
Introduced	16.0.R1
Platforms	All

### **[fc-name]** *keyword*

Synopsis	Forwarding class to LSP mapping
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Context	<b>configure service sdp number class-forwarding fc keyword</b>
Tree	<b>fc</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **lsp reference**

Synopsis	LSP name used to forward service packets
Context	<b>configure service sdp number class-forwarding fc keyword lsp reference</b>
Tree	<b>lsp</b>
Reference	<b>configure service sdp number lsp string</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **multicast-lsp reference**

Synopsis	LSP to forward all multicast traffic
Context	<b>configure service sdp number class-forwarding multicast-lsp reference</b>
Tree	<b>multicast-lsp</b>
Reference	<b>configure service sdp number lsp string</b>
Introduced	16.0.R1
Platforms	All

### **collect-stats boolean**

Synopsis	Collect accounting statistics for this SDP
Context	<b>configure service sdp number collect-stats boolean</b>
Tree	<b>collect-stats</b>
Default	false
Introduced	16.0.R1
Platforms	All

**delivery-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Delivery type used by the SDP
Context	<b>configure</b> <a href="#">service sdp number delivery-type keyword</a>
Tree	<a href="#">delivery-type</a>
Options	gre, mpls, l2tpv3, gre-eth-bridged
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service sdp number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**far-end**

Synopsis	Enter the <b>far-end</b> context
Context	<b>configure</b> <a href="#">service sdp number far-end</a>
Tree	<a href="#">far-end</a>
Introduced	16.0.R1
Platforms	All

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the far end destination router
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Context	<b>configure service sdp number far-end ip-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Introduced	16.0.R3
Platforms	All

## keep-alive

Synopsis	Enter the <b>keep-alive</b> context
Context	<b>configure service sdp number keep-alive</b>
Tree	<a href="#">keep-alive</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of keepalive mechanism for the SDP
Context	<b>configure service sdp number keep-alive admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## hello-time *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time period between SDP keepalive messages
Context	<b>configure service sdp number keep-alive hello-time number</b>
Tree	<a href="#">hello-time</a>
Range	1 to 3600
Units	seconds
Default	10

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Introduced	16.0.R1
Platforms	All

### **hold-down-time** *number*

Synopsis	Minimum time the SDP remains in the down state
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">keep-alive</a> <a href="#">hold-down-time</a> <i>number</i>
Tree	<a href="#">hold-down-time</a>
Range	0 to 3600
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **maximum-drop-count** *number*

Synopsis	Maximum failed request attempts when SDP is down
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">keep-alive</a> <a href="#">maximum-drop-count</a> <i>number</i>
Tree	<a href="#">maximum-drop-count</a>
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	All

### **message-length** *number*

Synopsis	Length of the keepalive request messages transmitted
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">keep-alive</a> <a href="#">message-length</a> <i>number</i>
Tree	<a href="#">message-length</a>
Range	40 to 9198
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Time SDP waits before tearing down the session
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">keep-alive</a> <i>timeout</i> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

**ldp** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable LDP-signaled LSPs
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">ldp</a> <i>boolean</i>
Tree	<a href="#">ldp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**local-end** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local end address of tunnel defined by the SDP
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">local-end</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-end</a>
Introduced	16.0.R1
Platforms	All



**lsp** [*lsp-name*] *string*

Synopsis	Add a list entry for <b>lsp</b>
Context	<b>configure</b> <a href="#">service sdp</a> <i>number lsp string</i>
Tree	<a href="#">lsp</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[lsp-name]** *string*

Synopsis	LSP name to associate with the SDP
Context	<b>configure</b> <a href="#">service sdp</a> <i>number lsp string</i>
Tree	<a href="#">lsp</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**metric** *number*

Synopsis	Metric used in tunnel table manager for decision making
Context	<b>configure</b> <a href="#">service sdp</a> <i>number metric number</i>
Tree	<a href="#">metric</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**mixed-lsp-mode**

Synopsis	Enable the <b>mixed-lsp-mode</b> context
Context	<b>configure</b> <a href="#">service sdp</a> <i>number mixed-lsp-mode</i>
Tree	<a href="#">mixed-lsp-mode</a>
Introduced	16.0.R1
Platforms	All

**revert-time** (*number* | *keyword*)

Synopsis	Delay before SDP can revert to higher priority LSP type
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">mixed-lsp-mode revert-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">revert-time</a>
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	16.0.R1
Platforms	All

**network-domain** *reference*

Synopsis	Network domain name associated with the SDP
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">network-domain</a> <i>reference</i>
Tree	<a href="#">network-domain</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">network-domains</a> <a href="#">network-domain</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**path-mtu** *number*

Synopsis	Maximum Transmission Unit (MTU) the SDP can transmit
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">path-mtu</a> <i>number</i>
Tree	<a href="#">path-mtu</a>
Range	576 to 9782
Units	bytes
Introduced	16.0.R1
Platforms	All

**pbb-etype** *string*

Synopsis	Ethertype used for PBB
Context	<b>configure</b> <a href="#">service sdp</a> <i>number</i> <a href="#">pbb-etype</a> <i>string</i>

Tree	<a href="#">pbb-etype</a>
String Length	5 to 6
Default	0x88E7
Introduced	16.0.R1
Platforms	All

## **pw-port**

Synopsis	Enter the <b>pw-port</b> context
Context	<b>configure</b> <a href="#">service sdp number pw-port</a>
Tree	<a href="#">pw-port</a>
Introduced	16.0.R4
Platforms	All

## **binding-port** *string*

Synopsis	Binding port
Context	<b>configure</b> <a href="#">service sdp number pw-port binding-port string</a>
Tree	<a href="#">binding-port</a>
Introduced	16.0.R4
Platforms	All

## **sdp-group** [[group-name](#)] *reference*

Synopsis	Add a list entry for <b>sdp-group</b>
Context	<b>configure</b> <a href="#">service sdp number sdp-group reference</a>
Tree	<a href="#">sdp-group</a>
Introduced	16.0.R1
Platforms	All

## **[group-name]** *reference*

Synopsis	SDP administrative group name
Context	<b>configure</b> <a href="#">service sdp number sdp-group reference</a>
Tree	<a href="#">sdp-group</a>

Reference	<b>configure service sdp-group</b> <i>group-name string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## signaling *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Signaling protocol used to obtain pseudowire labels
Context	<b>configure service sdp</b> <i>number signaling keyword</i>
Tree	<a href="#">signaling</a>
Description	<p>This command specifies the signaling protocol used to obtain the ingress and egress pseudowire labels in frames transmitted and received on the SDP. The signaling value can only be changed while the administrative status of the SDP is down. Additionally, the signaling can only be changed on an SDP if the SDP is not in use by BGP-AD or BGP-VPLS. BGP signaling can only be enabled if the SDP does not already have pseudowires signaled over it. Also, BGP signaling is not supported with mixed mode LSP SDPs.</p> <p><b>Note:</b> If the <b>tldp</b> option is selected as the mechanism for exchanging service labels over an MPLS or GRE SDP and the T-LDP session is automatically established, an explicit T-LDP session that is subsequently configured takes precedence over the automatic T-LDP session. However, if the explicit, manually-configured session is then removed, the system does not revert to the automatic session and the automatic session is also deleted. To address this, recreate the T-LDP session by using the <b>admin-state</b> command to administratively disable and then enable the SDP.</p>
Options	off, tldp, bgp
Introduced	16.0.R1
Platforms	All

## source-bmac-lsb

Synopsis	Enter the <b>source-bmac-lsb</b> context
Context	<b>configure service sdp</b> <i>number source-bmac-lsb</i>
Tree	<a href="#">source-bmac-lsb</a>
Introduced	16.0.R1
Platforms	All

**control-pw-vc-id** *number*

Synopsis	VC ID of the control pseudowire
Context	<b>configure service sdp</b> <i>number</i> <b>source-bmac-lsb</b> <b>control-pw-vc-id</b> <i>number</i>
Tree	<b>control-pw-vc-id</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**value** *string*

Synopsis	16 least significant bits of virtual backbone MAC
Context	<b>configure service sdp</b> <i>number</i> <b>source-bmac-lsb</b> <b>value</b> <i>string</i>
Tree	<b>value</b>
Introduced	16.0.R1
Platforms	All

**sr-isis** *boolean*

Synopsis	Enable Segment Routing for IS-IS
Context	<b>configure service sdp</b> <i>number</i> <b>sr-isis</b> <i>boolean</i>
Tree	<b>sr-isis</b>
Default	false
Introduced	16.0.R1
Platforms	All

**sr-ospf** *boolean*

Synopsis	Enable an MPLS SDP of LSP type OSPF Segment Routing
Context	<b>configure service sdp</b> <i>number</i> <b>sr-ospf</b> <i>boolean</i>
Tree	<b>sr-ospf</b>
Default	false
Introduced	16.0.R1
Platforms	All

**tunnel-far-end** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System address of the far-end router for the SDP
Context	<b>configure service sdp number tunnel-far-end</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">tunnel-far-end</a>
Introduced	16.0.R1
Platforms	All

**vlan-vc-etype** *string*

Synopsis	VLAN VC Ethertype
Context	<b>configure service sdp number vlan-vc-etype</b> <i>string</i>
Tree	<a href="#">vlan-vc-etype</a>
String Length	5 to 6
Default	0x8100
Introduced	16.0.R1
Platforms	All

**weighted-ecmp** *boolean*

Synopsis	Allow weighted load-balancing on an SDP
Context	<b>configure service sdp number weighted-ecmp</b> <i>boolean</i>
Tree	<a href="#">weighted-ecmp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sdp-group**

Synopsis	Enter the <b>sdp-group</b> context
Context	<b>configure service sdp-group</b>

Tree	<a href="#">sdp-group</a>
Introduced	16.0.R1
Platforms	All

### **group-name** [[group-name](#)] *string*

Synopsis	Enter the <b>group-name</b> list instance
Context	<b>configure</b> <a href="#">service sdp-group group-name string</a>
Tree	<a href="#">group-name</a>
Introduced	16.0.R1
Platforms	All

### **[group-name]** *string*

Synopsis	SDP administrative group name
Context	<b>configure</b> <a href="#">service sdp-group group-name string</a>
Tree	<a href="#">group-name</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **value** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Unique group value associated with the SDP admin group
Context	<b>configure</b> <a href="#">service sdp-group group-name string value number</a>
Tree	<a href="#">value</a>
Range	0 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## system

Synopsis	Enter the <b>system</b> context
Context	<b>configure service system</b>
Tree	<a href="#">system</a>
Introduced	16.0.R1
Platforms	All

## bgp

Synopsis	Enter the <b>bgp</b> context
Context	<b>configure service system bgp</b>
Tree	<a href="#">bgp</a>
Introduced	16.0.R1
Platforms	All

## evpn

Synopsis	Enter the <b>evpn</b> context
Context	<b>configure service system bgp evpn</b>
Tree	<a href="#">evpn</a>
Introduced	16.0.R1
Platforms	All

## ad-per-es-route

Synopsis	Enter the <b>ad-per-es-route</b> context
Context	<b>configure service system bgp evpn ad-per-es-route</b>
Tree	<a href="#">ad-per-es-route</a>
Introduced	16.0.R1
Platforms	All

## extended-evi-range *boolean*

Synopsis	Reserve extended RD comm-values for AD per-ES routes
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Context	<b>configure service system bgp evpn ad-per-es-route extended-evi-range</b> <i>boolean</i>
Tree	<a href="#">extended-evi-range</a>
Description	When configured to <b>true</b> , the system reserves the Route Distinguisher (RD) comm-values 1 to 65535 out of the type 1 RD that is used for AD per-ES routes. If <b>ad-per-es-route route-target-type</b> is also configured to <b>evi-route-target-set</b> , the system can pack the maximum number of EVI route targets in the AD per-ES routes  When configured to <b>false</b> , this command only reserves comm-values 1 to 512.
Default	false
Introduced	21.10.R1
Platforms	All

### **route-distinguisher-ip-address** *string*

Synopsis	IP address for route distinguisher for EVPN AD-ES routes
Context	<b>configure service system bgp evpn ad-per-es-route route-distinguisher-ip-address</b> <i>string</i>
Tree	<a href="#">route-distinguisher-ip-address</a>
Introduced	16.0.R1
Platforms	All

### **route-target-type** *keyword*

Synopsis	Method for the AD per-ES routes advertisement
Context	<b>configure service system bgp evpn ad-per-es-route route-target-type</b> <i>keyword</i>
Tree	<a href="#">route-target-type</a>
Options	evi-route-target, evi-route-target-set
Default	evi-route-target
Introduced	16.0.R1
Platforms	All

### **ad-per-evi-routes**

Synopsis	Enter the <b>ad-per-evi-routes</b> context
Context	<b>configure service system bgp evpn ad-per-evi-routes</b>
Tree	<a href="#">ad-per-evi-routes</a>
Introduced	23.10.R1

Platforms All

### **attribute-propagation** *boolean*

Synopsis Enable propagation of BGP path attributes

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ad-per-evi-routes](#) [attribute-propagation](#) *boolean*

Tree [attribute-propagation](#)

Description When configured to **true**, the router propagates the attributes in multi-instance Epipe services.  
When configured to **false**, the router disables the propagation of the attributes, including D-PATH, even if the **domain-id** is configured in the service.

Default false

Introduced 23.10.R1

Platforms All

### **bgp-path-selection** *boolean*

Synopsis Enable BGP path selection

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ad-per-evi-routes](#) [bgp-path-selection](#) *boolean*

Tree [bgp-path-selection](#)

Description When configured to **true**, the router compares the received EVPN VPWS AD per-EVI routes based on the BGP path attributes.  
The **attribute-propagation** command must be configured to **true**.  
When configured to **false**, the router does not compare the routes.

Default false

Introduced 23.10.R1

Platforms All

### **d-path-ignore** *boolean*

Synopsis Ignore D-PATH for BGP path selection

Context **configure** [service](#) [system](#) [bgp](#) [evpn](#) [ad-per-evi-routes](#) [d-path-ignore](#) *boolean*

Tree [d-path-ignore](#)

Description When configured to **true**, the router ignores the Domain PATH attribute (D-PATH) when BGP computes the best path selection for received routes.  
When configured to **false**, the router considers the D-PATH length and value as a tiebreaker in determining the best-path selection. In accordance with *draft-sr-bess-evpn-*

*dpath*, the router compares the D-PATH attribute received in AD per-EVI routes with the same key (same or different RD) as follows:

- Routes with the shortest D-PATH are preferred; therefore, routes not tied for the shortest D-PATH are removed. Routes without D-PATH are considered zero-length D-PATH.
- Routes with the numerically lowest left-most Domain-ID are preferred; therefore, routes not tied for the numerically lowest left-most Domain-ID are removed from consideration.

Default	false
Introduced	23.10.R1
Platforms	All

### **ethernet-segment** [[ethernet-segment-name](#)] *string*

Synopsis	Enter the <b>ethernet-segment</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">ethernet-segment</a> <i>string</i>
Tree	<a href="#">ethernet-segment</a>
Max. Instances	4095
Introduced	16.0.R1
Platforms	All

### **[ethernet-segment-name]** *string*

Synopsis	Specify name for Ethernet segment
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">ethernet-segment</a> <i>string</i>
Tree	<a href="#">ethernet-segment</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **ac-df-capability** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	AC-influenced DF election capability
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string ac-df-capability keyword</i>
Tree	<a href="#">ac-df-capability</a>
Description	<p>This command configures the Attachment Circuit-influenced (AC-influenced) designated forwarder (DF) election capability (AC-DF) into the DF election for the Ethernet Segment (ES).</p> <p>AC-DF supports EVPN Auto-Discovery per EVI/ES (AD per EVI/ES) routes for a specific PE, to ensure the PE is included in the candidate DF election list.</p> <p>When AC-DF is excluded on a specific ES, the presence or absence of the AD per EVI/ES routes from the ES peers does not modify the candidate DF election list for the ES. Excluding the AC-DF is recommended in ESs that use an operational group monitored by the access LAG to signal the standby LACP or to power-off.</p>
Options	include, exclude
Default	include
Introduced	21.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the Ethernet segment instance
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **association**

Synopsis	Enter the <b>association</b> context
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association</i>
Tree	<a href="#">association</a>
Introduced	16.0.R1
Platforms	All

**lag** [[lag-name](#)] *reference*

Synopsis	Enter the <b>lag</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <i>reference</i>
Tree	<a href="#">lag</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .
Introduced	16.0.R1
Platforms	All

**[lag-name]** *reference*

Synopsis	LAG multi-homed with the Ethernet segment entry
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <i>reference</i>
Tree	<a href="#">lag</a>
Reference	<b>configure</b> <a href="#">lag</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**virtual-ranges**

Synopsis	Enter the <b>virtual-ranges</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <i>reference</i> <a href="#">virtual-ranges</a>
Tree	<a href="#">virtual-ranges</a>
Introduced	16.0.R4
Platforms	All

**dot1q**

Synopsis	Enter the <b>dot1q</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <i>reference</i> <a href="#">virtual-ranges</a> <a href="#">dot1q</a>
Tree	<a href="#">dot1q</a>

Introduced 16.0.R4  
 Platforms All

### **q-tag** [[start](#)] (*number* | *keyword*)

Synopsis Enter the **q-tag** list instance  
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [lag](#) [reference](#)  
[virtual-ranges](#) [dot1q](#) [q-tag](#) (*number* | *keyword*)  
 Tree [q-tag](#)  
 Max. Instances 8  
 Introduced 16.0.R4  
 Platforms All

### **[start]** (*number* | *keyword*)

Synopsis Lower bound of the q-tag VLAN ID range  
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [lag](#) [reference](#)  
[virtual-ranges](#) [dot1q](#) [q-tag](#) (*number* | *keyword*)  
 Tree [q-tag](#)  
 Range 0 to 4094  
 Options tag-  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### **end** (*number* | *keyword*)

Synopsis Upper bound of the q-tag VLAN ID range  
 Context **configure** [service](#) [system](#) [bgp evpn ethernet-segment](#) *string* [association](#) [lag](#) [reference](#)  
[virtual-ranges](#) [dot1q](#) [q-tag](#) (*number* | *keyword*) **end** (*number* | *keyword*)  
 Tree [end](#)  
 Range 0 to 4094  
 Options tag-  
 Notes This element is mandatory.  
 Introduced 16.0.R4

Platforms All

## qinq

Synopsis Enter the **qinq** context

Context **configure service system bgp evpn ethernet-segment** *string association lag reference virtual-ranges qinq*

Tree [qinq](#)

Introduced 16.0.R4

Platforms All

## s-tag [[start](#)] (*number | keyword*)

Synopsis Enter the **s-tag** list instance

Context **configure service system bgp evpn ethernet-segment** *string association lag reference virtual-ranges qinq s-tag (number | keyword)*

Tree [s-tag](#)

Max. Instances 8

Introduced 16.0.R4

Platforms All

## [\[start\]](#) (*number | keyword*)

Synopsis Lower bound of the s-tag VLAN ID range

Context **configure service system bgp evpn ethernet-segment** *string association lag reference virtual-ranges qinq s-tag (number | keyword)*

Tree [s-tag](#)

Range 0 to 4094

Options tag-\*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

**end** (*number* | *keyword*)

Synopsis	Upper bound of the s-tag VLAN ID range
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association lag reference virtual-ranges qinq s-tag</i> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>end</b>
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**s-tag-c-tag** [**s-tag**] (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)

Synopsis	Enter the <b>s-tag-c-tag</b> list instance
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association lag reference virtual-ranges qinq s-tag-c-tag</i> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>s-tag-c-tag</b>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

**[s-tag]** (*number* | *keyword*)

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association lag reference virtual-ranges qinq s-tag-c-tag</i> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>s-tag-c-tag</b>
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All



**c-tag-start** (*number* | *keyword*)

Synopsis	Starting value of the qinq c-tag range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">s-tag-c-tag</a>
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**c-tag-end** (*number* | *keyword*)

Synopsis	End value of the qinq c-tag range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">lag</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-start</b> ( <i>number</i>   <i>keyword</i> ) <b>c-tag-end</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">c-tag-end</a>
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**network-interconnect-vxlan** [[network-interconnect-vxlan-id](#)] *number*

Synopsis	Enter the <b>network-interconnect-vxlan</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">network-interconnect-vxlan</a> <i>number</i>
Tree	<a href="#">network-interconnect-vxlan</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .
Introduced	16.0.R1
Platforms	All

**[network-interconnect-vxlan-id] number**

Synopsis	VXLAN instance ID associated with the virtual ES
Context	<b>configure service system bgp evpn ethernet-segment string association network-interconnect-vxlan number</b>
Tree	<a href="#">network-interconnect-vxlan</a>
Range	1
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**virtual-ranges**

Synopsis	Enter the <b>virtual-ranges</b> context
Context	<b>configure service system bgp evpn ethernet-segment string association network-interconnect-vxlan number virtual-ranges</b>
Tree	<a href="#">virtual-ranges</a>
Introduced	16.0.R4
Platforms	All

**service-id [start] number**

Synopsis	Enter the <b>service-id</b> list instance
Context	<b>configure service system bgp evpn ethernet-segment string association network-interconnect-vxlan number virtual-ranges service-id number</b>
Tree	<a href="#">service-id</a>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

**[start] number**

Synopsis	Lower bound of the service ID range
Context	<b>configure service system bgp evpn ethernet-segment string association network-interconnect-vxlan number virtual-ranges service-id number</b>
Tree	<a href="#">service-id</a>

Range	1 to 2147483647
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **end number**

Synopsis	Upper bound of the service ID range
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association network-interconnect-vxlan number virtual-ranges service-id number end number</i>
Tree	<a href="#">end</a>
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **port [port-id] reference**

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference</i>
Tree	<a href="#">port</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .
Introduced	16.0.R1
Platforms	All

### **[port-id] reference**

Synopsis	Port multi-homed with this Ethernet segment entry
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference</i>
Tree	<a href="#">port</a>
Reference	<b>configure port</b> <i>string</i>
Notes	This element is part of a list key.

Introduced	16.0.R4
Platforms	All

## virtual-ranges

Synopsis	Enter the <b>virtual-ranges</b> context
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference</i> <b>virtual-ranges</b>
Tree	<b>virtual-ranges</b>
Introduced	16.0.R4
Platforms	All

## dot1q

Synopsis	Enter the <b>dot1q</b> context
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference</i> <b>virtual-ranges dot1q</b>
Tree	<b>dot1q</b>
Introduced	16.0.R4
Platforms	All

## q-tag [**start**] (*number | keyword*)

Synopsis	Enter the <b>q-tag</b> list instance
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference</i> <b>virtual-ranges dot1q q-tag</b> ( <i>number   keyword</i> )
Tree	<b>q-tag</b>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

## [**start**] (*number | keyword*)

Synopsis	Lower bound of the q-tag VLAN ID range
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string association port reference</i> <b>virtual-ranges dot1q q-tag</b> ( <i>number   keyword</i> )

Tree	<a href="#">q-tag</a>
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **end** (*number* | *keyword*)

Synopsis	Upper bound of the q-tag VLAN ID range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <a href="#">q-tag</a> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">end</a>
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **qinq**

Synopsis	Enter the <b>qinq</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a>
Tree	<a href="#">qinq</a>
Introduced	16.0.R4
Platforms	All

### **s-tag** [[start](#)] (*number* | *keyword*)

Synopsis	Enter the <b>s-tag</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">s-tag</a>
Max. Instances	8

Introduced 16.0.R4  
 Platforms All

### **[start]** (*number* | *keyword*)

Synopsis Lower bound of the s-tag VLAN ID range  
 Context **configure service system bgp evpn ethernet-segment** *string association port reference virtual-ranges qinq s-tag* (*number* | *keyword*)  
 Tree **s-tag**  
 Range 0 to 4094  
 Options tag-  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms All

### **end** (*number* | *keyword*)

Synopsis Upper bound of the s-tag VLAN ID range  
 Context **configure service system bgp evpn ethernet-segment** *string association port reference virtual-ranges qinq s-tag* (*number* | *keyword*) **end** (*number* | *keyword*)  
 Tree **end**  
 Range 0 to 4094  
 Options tag-  
 Notes This element is mandatory.  
 Introduced 16.0.R4  
 Platforms All

### **s-tag-c-tag** [**s-tag**] (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)

Synopsis Enter the **s-tag-c-tag** list instance  
 Context **configure service system bgp evpn ethernet-segment** *string association port reference virtual-ranges qinq s-tag-c-tag* (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)  
 Tree **s-tag-c-tag**  
 Max. Instances 8  
 Introduced 16.0.R4

Platforms All

### **[s-tag]** (*number | keyword*)

Synopsis Starting value of the qinq s-tag range associated with a virtual ethernet segment

Context **configure service system bgp evpn ethernet-segment** *string association port reference virtual-ranges qinq s-tag-c-tag (number | keyword) c-tag-start (number | keyword)*

Tree [s-tag-c-tag](#)

Range 0 to 4094

Options tag-\*, null

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **c-tag-start** (*number | keyword*)

Synopsis Starting value of the qinq c-tag range

Context **configure service system bgp evpn ethernet-segment** *string association port reference virtual-ranges qinq s-tag-c-tag (number | keyword) c-tag-start (number | keyword)*

Tree [s-tag-c-tag](#)

Range 0 to 4094

Options tag-\*, null

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms All

### **c-tag-end** (*number | keyword*)

Synopsis End value of the qinq c-tag range

Context **configure service system bgp evpn ethernet-segment** *string association port reference virtual-ranges qinq s-tag-c-tag (number | keyword) c-tag-start (number | keyword) c-tag-end (number | keyword)*

Tree [c-tag-end](#)

Range 0 to 4094

Options tag-\*, null

Notes This element is mandatory.

Introduced	16.0.R4
Platforms	All

### **pw-port** [[pw-port-id](#)] *reference*

Synopsis	Enter the <b>pw-port</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <i>reference</i>
Tree	<a href="#">pw-port</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .
Introduced	16.0.R4
Platforms	All

### **[pw-port-id]** *reference*

Synopsis	Pw-port multi-homed with this Ethernet segment entry
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <i>reference</i>
Tree	<a href="#">pw-port</a>
Reference	<b>configure</b> <a href="#">pw-port</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **pw-port-headend** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Control state of PW SAPs on PW port using EVPN
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <i>reference</i> <a href="#">pw-port-headend</a> <i>boolean</i>
Tree	<a href="#">pw-port-headend</a>



Description	When configured to <b>true</b> , this command allows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port.  When configured to <b>false</b> , this command disallows EVPN and its multi-homing procedures to control the state of the PW SAPs on the PW port.
Default	false
Introduced	22.2.R1
Platforms	All

## virtual-ranges

Synopsis	Enter the <b>virtual-ranges</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <b>virtual-ranges</b>
Tree	<a href="#">virtual-ranges</a>
Introduced	16.0.R4
Platforms	All

## dot1q

Synopsis	Enter the <b>dot1q</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <b>dot1q</b>
Tree	<a href="#">dot1q</a>
Introduced	16.0.R4
Platforms	All

## q-tag [[start](#)] (*number* | *keyword*)

Synopsis	Enter the <b>q-tag</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <b>q-tag</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">q-tag</a>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

**[start]** (*number* | *keyword*)

Synopsis	Lower bound of the q-tag VLAN ID range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <a href="#">q-tag</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">q-tag</a>
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**end** (*number* | *keyword*)

Synopsis	Upper bound of the q-tag VLAN ID range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">dot1q</a> <a href="#">q-tag</a> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">end</a>
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**qinq**

Synopsis	Enter the <b>qinq</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a>
Tree	<a href="#">qinq</a>
Introduced	16.0.R4
Platforms	All

**s-tag** [**start**] (*number* | *keyword*)

Synopsis	Enter the <b>s-tag</b> list instance
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Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>association pw-port reference virtual-ranges qinq s-tag</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>s-tag</b>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

**[start]** (*number* | *keyword*)

Synopsis	Lower bound of the s-tag VLAN ID range
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>association pw-port reference virtual-ranges qinq s-tag</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>s-tag</b>
Range	0 to 4094
Options	tag-*
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**end** (*number* | *keyword*)

Synopsis	Upper bound of the s-tag VLAN ID range
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>association pw-port reference virtual-ranges qinq s-tag</b> ( <i>number</i>   <i>keyword</i> ) <b>end</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>end</b>
Range	0 to 4094
Options	tag-*
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**s-tag-c-tag** [**s-tag**] (*number* | *keyword*) **c-tag-start** (*number* | *keyword*)

Synopsis	Enter the <b>s-tag-c-tag</b> list instance
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Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">c-tag-start</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">s-tag-c-tag</a>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

**[s-tag]** (*number* | *keyword*)

Synopsis	Starting value of the qinq s-tag range associated with a virtual ethernet segment
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">c-tag-start</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">s-tag-c-tag</a>
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**c-tag-start** (*number* | *keyword*)

Synopsis	Starting value of the qinq c-tag range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">c-tag-start</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">s-tag-c-tag</a>
Range	0 to 4094
Options	tag-*, null
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**c-tag-end** (*number* | *keyword*)

Synopsis	End value of the qinq c-tag range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">pw-port</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">qinq</a> <a href="#">s-tag-c-tag</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">c-tag-start</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">c-tag-end</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">c-tag-end</a>
Range	0 to 4094
Options	tag-*, null
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**sdp** [[sdp-id](#)] *reference*

Synopsis	Enter the <b>sdp</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">sdp</a> <i>reference</i>
Tree	<a href="#">sdp</a>
Max. Instances	1
Notes	The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .
Introduced	16.0.R1
Platforms	All

**[sdp-id]** *reference*

Synopsis	Sdp multi-homed with this Ethernet segment entry
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">sdp</a> <i>reference</i>
Tree	<a href="#">sdp</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">sdp</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

## virtual-ranges

Synopsis	Enter the <b>virtual-ranges</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">sdp</a> <a href="#">reference</a> <a href="#">virtual-ranges</a>
Tree	<a href="#">virtual-ranges</a>
Introduced	16.0.R4
Platforms	All

## vc-id [[start](#)] *number*

Synopsis	Enter the <b>vc-id</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">sdp</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">vc-id</a> <i>number</i>
Tree	<a href="#">vc-id</a>
Max. Instances	8
Introduced	16.0.R4
Platforms	All

## [\[start\]](#) *number*

Synopsis	Lower bound of the VC-ID range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">sdp</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">vc-id</a> <i>number</i>
Tree	<a href="#">vc-id</a>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

## **end** *number*

Synopsis	Upper bound of the VC-ID range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <a href="#">string</a> <a href="#">association</a> <a href="#">sdp</a> <a href="#">reference</a> <a href="#">virtual-ranges</a> <a href="#">vc-id</a> <i>number</i> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>

Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **vprn-next-hop** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>vprn-next-hop</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">vprn-next-hop</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">vprn-next-hop</a>
Description	Commands in this list instance are used to associate an IPv4 or IPv6 address to an Ethernet segment. A virtual Ethernet segment using this VPRN next-hop association represents a Layer 3 Ethernet segment as described in <i>draft-sajassi-bess-evpn-ip-aliasing</i> . This IP address must be installed in the route table of the VPRN service identified by the EVI so that the Auto-Discovery per-ES or EVI routes for the ES are advertised. Only one VPRN next hop is supported per Ethernet segment.
Max. Instances	1
Notes	The following elements are part of a choice: <b>lag</b> , <b>network-interconnect-vxlan</b> , <b>port</b> , <b>pw-port</b> , <b>sdp</b> , or <b>vprn-next-hop</b> .
Introduced	22.10.R1
Platforms	All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	VPRN next-hop address
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">association</a> <a href="#">vprn-next-hop</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">vprn-next-hop</a>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

### **virtual-ranges**

Synopsis	Enter the <b>virtual-ranges</b> context
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Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>association vprn-next-hop</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>virtual-ranges</b>
Tree	<b>virtual-ranges</b>
Introduced	22.10.R1
Platforms	All

**evi** [**start**] *number*

Synopsis	Add a list entry for <b>evi</b>
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>association vprn-next-hop</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>virtual-ranges evi</b> <i>number</i>
Tree	<b>evi</b>
Max. Instances	1
Introduced	22.10.R1
Platforms	All

**[start]** *number*

Synopsis	EVI range start information
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>association vprn-next-hop</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>virtual-ranges evi</b> <i>number</i>
Tree	<b>evi</b>
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**auto-esi** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVPN Ethernet segment auto-ESI type
Context	<b>configure service system bgp evpn ethernet-segment</b> <i>string</i> <b>auto-esi</b> <i>keyword</i>
Tree	<b>auto-esi</b>



Description	This command configures the auto-ESI type to use in the Ethernet segment (ES).When <b>type-1</b> is configured, a manual ESI cannot be configured and the ESI is automatically derived in accordance with the RFC 7432 ESI type 1 definition.When configured to <b>none</b> , a manual ESI must be configured.
Options	none, type-1
Default	none
Introduced	21.5.R1
Platforms	All

## df-election

Synopsis	Enter the <b>df-election</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>df-election</b>
Tree	<a href="#">df-election</a>
Introduced	16.0.R1
Platforms	All

## es-activation-timer *number*

Synopsis	Activation timer per Ethernet segment
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>df-election</b> <b>es-activation-timer</b> <i>number</i>
Tree	<a href="#">es-activation-timer</a>
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

## manual

Synopsis	Enter the <b>manual</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>df-election</b> <b>manual</b>
Tree	<a href="#">manual</a>
Introduced	16.0.R1
Platforms	All

**evi** [**start**] *number*

Synopsis	Enter the <b>evi</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">evi</a> <i>number</i>
Tree	<a href="#">evi</a>
Introduced	16.0.R1
Platforms	All

**[start]** *number*

Synopsis	Lower bound of EVI range for which the PE is primary
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">evi</a> <i>number</i>
Tree	<a href="#">evi</a>
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end** *number*

Synopsis	Upper bound of EVI range for which the PE is primary
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">evi</a> <i>number</i> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**isid** [**start**] *number*

Synopsis	Enter the <b>isid</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">isid</a> <i>number</i>
Tree	<a href="#">isid</a>

Introduced	16.0.R1
Platforms	All

### **[start]** *number*

Synopsis	Lower bound of ISID range for which the PE is primary
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">isid</a> <i>number</i>
Tree	<a href="#">isid</a>
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of ISID range for which the PE is primary
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">isid</a> <i>number</i> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **preference**

Synopsis	Enable the <b>preference</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">preference</a>
Tree	<a href="#">preference</a>
Introduced	16.0.R1
Platforms	All

**mode** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Method used to elect the DF
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">preference</a> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	revertive, non-revertive
Default	revertive
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Preference that is used to elect the designated forwarder
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">manual</a> <a href="#">preference</a> <a href="#">value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 65535
Default	32767
Introduced	16.0.R1
Platforms	All

**service-carving-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Mode of service carving enabled per EVPN associated with this Ethernet segment entry
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <a href="#">df-election</a> <a href="#">service-carving-mode</a> <i>keyword</i>
Tree	<a href="#">service-carving-mode</a>
Options	auto, manual, off
Default	auto

Introduced	16.0.R1
Platforms	All

**esi string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet segment identifier
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>esi</b> <i>string</i>
Tree	<a href="#">esi</a>
Introduced	16.0.R1
Platforms	All

**multi-homing-mode keyword****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode of the Ethernet segment
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>multi-homing-mode</b> <i>keyword</i>
Tree	<a href="#">multi-homing-mode</a>
Description	<p>This command configures the multihoming mode for the Ethernet segment as defined in RFC 7432.</p> <p>By default, the use of ESI label is enabled for <b>all-active</b> and <b>single-active</b> as defined in RFC 7432 (for <b>single-active multi-homing</b>, the ESI label is used to avoid transient loops).</p> <p>When <b>single-active no-esi-label</b> or <b>all-active no-esi-label</b> is specified, the system does not allocate a label for the ESI; and therefore, advertises ESI label 0 to peers. Even if the ESI is configured not to send the ESI label, on reception of an ESI label from a peer, the PE always sends traffic to that peer using the received ESI label.</p>
Options	none, single-active, single-active-no-esi-label, all-active
Default	none
Introduced	16.0.R1
Platforms	All

**oper-group** *reference*

Synopsis	Operational group ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>oper-group</b> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Introduced	19.10.R1
Platforms	All

**orig-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Originating IP address advertised in the ES route
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>orig-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">orig-ip</a>
Introduced	16.0.R4
Platforms	All

**pbb**

Synopsis	Enter the <b>pbb</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>pbb</b>
Tree	<a href="#">pbb</a>
Introduced	16.0.R1
Platforms	All

**es-bmac-table-size** *number*

Synopsis	Size of virtual backbone mac table for this ethernet segment
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ethernet-segment</a> <i>string</i> <b>pbb</b> <b>es-bmac-table-size</b> <i>number</i>
Tree	<a href="#">es-bmac-table-size</a>

Range	1 to 511999
Default	8
Introduced	16.0.R1
Platforms	All

### source-bmac-lsb *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Least significant bytes of the B-MAC for packet source
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">pbb</a> <a href="#">source-bmac-lsb</a> <i>string</i>
Tree	<a href="#">source-bmac-lsb</a>
Introduced	16.0.R1
Platforms	All

### route-next-hop (*ipv4-address-no-zone | ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Next-hop IP address for ES and AD per ES routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">route-next-hop</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">route-next-hop</a>
Introduced	16.0.R4
Platforms	All

### type *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ethernet Segment type
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn ethernet-segment</a> <i>string</i> <a href="#">type</a> <i>keyword</i>

Tree	<a href="#">type</a>
Options	none, virtual
Default	none
Introduced	16.0.R1
Platforms	All

### **etree-leaf-label** *boolean*

Synopsis	Enable E-Tree leaf label for PE
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">etree-leaf-label</a> <i>boolean</i>
Tree	<a href="#">etree-leaf-label</a>
Description	When configured to <b>true</b> , this command enables EVPN Ethernet-Tree (E-Tree) VPLS services on the router (not B-VPLS), allocates an E-Tree leaf label for the Provider Edge (PE) device, and configures the ILM entry. This command ensures that in-flight traffic can perform an ILM entry lookup at any time, and avoids discards when administratively enabling or disabling services, or reduces the timing window so that it does not occur during normal operation or configuration. The value for the E-Tree leaf label is set via the <b>etree-leaf-label-value</b> command.  When configured to <b>false</b> , PE leaf labels are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

### **etree-leaf-label-value** (*number* | *keyword*)

Synopsis	Global E-tree leaf label for PE in EVPN E-Tree services
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">etree-leaf-label-value</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">etree-leaf-label-value</a>
Range	32 to 524526
Options	dynamic
Default	dynamic
Introduced	21.7.R1
Platforms	All

### **ip-prefix-routes**

Synopsis	Enter the <b>ip-prefix-routes</b> context
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Context	<b>configure service system bgp evpn ip-prefix-routes</b>
Tree	<a href="#">ip-prefix-routes</a>
Introduced	21.2.R1
Platforms	All

### **d-path-length-ignore** *boolean*

Synopsis	Ignore D-PATH length for BGP path selection of EVPN-IFF
Context	<b>configure service system bgp evpn ip-prefix-routes d-path-length-ignore</b> <i>boolean</i>
Tree	<a href="#">d-path-length-ignore</a>
Default	false
Introduced	21.10.R1
Platforms	All

### **iff-attribute-uniform-propagation** *boolean*

Synopsis	Enable uniform propagation of BGP attributes
Context	<b>configure service system bgp evpn ip-prefix-routes iff-attribute-uniform-propagation</b> <i>boolean</i>
Tree	<a href="#">iff-attribute-uniform-propagation</a>
Description	<p>When configured to <b>true</b>, this command enables the uniform propagation of BGP attributes for EVPN-IFF (Interfaceful) routes. EVPN-IFF is used in R-VPLS services with <b>bgp-evpn ip-route-advertisement</b>. When enabled, the received EVPN-IFF routes for the R-VPLS can be propagated with the original BGP path attributes into EVPN-IFL, IPVPN, EVPN-IFF (in other R-VPLS services) or BGP IP routes advertised for the attached VPRN. The command also enables the attribute propagation in the opposite direction, for example, from EVPN-IFL/IPVPN/IP/EVPN-IFF routes into EVPN-IFF routes.</p> <p>The propagation follows the uniform mode defined in draft-ietf-bess-evpn-ipvpn-interworking.</p> <p>When configured to <b>false</b>, this command re-originates the BGP Path Attributes when propagating EVPN-IFF routes into other Inter-Subnet Forwarding families.</p>
Default	false
Introduced	21.2.R1
Platforms	All

**iff-bgp-path-selection** *boolean*

Synopsis	Enable BGP path selection for EVPN-IFF routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">ip-prefix-routes</a> <a href="#">iff-bgp-path-selection</a> <i>boolean</i>
Tree	<a href="#">iff-bgp-path-selection</a>
Description	<p>When configured to <b>true</b>, this command enables the EVPN-IFF routes to be ordered and selected in a similar manner as IPVPN or EVPN-IFL routes, that is, based on the regular BGP path selection process.</p> <p>When configured to <b>false</b>, this command makes the system order EVPN-IFF routes based on their {RVPLS Iindex, RD, Ethernet Tag}. For example, if two EVPN-IFF routes are received for the same prefix on the same R-VPLS and with different RDs (Route Distinguishers), the route with the lowest RD is selected.</p>
Default	false
Introduced	21.2.R1
Platforms	All

**multicast-leave-sync-propagation** *number*

Synopsis	Multicast leave group synchronization delay
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp</a> <a href="#">evpn</a> <a href="#">multicast-leave-sync-propagation</a> <i>number</i>
Tree	<a href="#">multicast-leave-sync-propagation</a>
Description	<p>This command configures the additional amount of time that the system waits before removing a multicast state that was synchronized in an Ethernet Segment via Multicast Join or Leave Synch routes. This value represents a delta corresponding to the time it takes for a BGP advertisement to propagate to ES peers.</p> <p>The node triggering the route computes the maximum response time as the product of the locally configured values, Last Member Query Count and Last Member Query Interval, and adds the delta value to the maximum response time. The query count value is configured in the <b>configure services vrpn igmp robust-count</b> command. The query interval value is taken from the <b>configure service vpls sap igmp-snooping query-last-member-interval</b> or the <b>configure service vpls spoke-sdp igmp-snooping query-last-member-interval</b> configuration, depending on the Ethernet Segment.</p> <p>Increasing the maximum response time by this value can help minimize the churn of removing and recreating the state on the node.</p> <p>This value should be configured consistently in all ES peers.</p>
Range	0 to 300
Units	seconds
Default	5
Introduced	20.7.R1
Platforms	All

### **route-distinguisher** *string*

Synopsis	Route distinguisher for ES routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp evpn</a> <a href="#">route-distinguisher</a> <i>string</i>
Tree	<a href="#">route-distinguisher</a>
Introduced	16.0.R1
Platforms	All

### **bgp-auto-rd-range**

Synopsis	Enter the <b>bgp-auto-rd-range</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp-auto-rd-range</a>
Tree	<a href="#">bgp-auto-rd-range</a>
Introduced	16.0.R1
Platforms	All

### **community-value**

Synopsis	Enter the <b>community-value</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp-auto-rd-range</a> <a href="#">community-value</a>
Tree	<a href="#">community-value</a>
Introduced	16.0.R1
Platforms	All

### **end** *number*

Synopsis	Upper bound of BGP route distinguisher community range
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">bgp-auto-rd-range</a> <a href="#">community-value</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**start number**

Synopsis	Lower bound of BGP route distinguisher community range
Context	<b>configure service system bgp-auto-rd-range community-value start number</b>
Tree	<a href="#">start</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**ip-address string**

Synopsis	IP address used for selecting the route distinguisher
Context	<b>configure service system bgp-auto-rd-range ip-address string</b>
Tree	<a href="#">ip-address</a>
Introduced	16.0.R1
Platforms	All

**extended-default-qinq-sap-lookup boolean**

Synopsis	Control the forwarding of the packets
Context	<b>configure service system extended-default-qinq-sap-lookup boolean</b>
Tree	<a href="#">extended-default-qinq-sap-lookup</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

**fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure service system fdb</b>
Tree	<a href="#">fdb</a>
Introduced	16.0.R1
Platforms	All

**table-size number**

Synopsis	Maximum FDB entries in the system
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Context	<b>configure service system fdb table-size</b> <i>number</i>
Tree	<a href="#">table-size</a>
Description	This command determines the maximum number of MAC entries in the forwarding database (FDB) for the system instance on this node.  Do not configure the <b>table-size</b> command. This command is automatically initialized by SR OS on boot up.
Range	4095 to 2047999
Introduced	16.0.R1
Platforms	All

### gre-eth-bridged

Synopsis	Enter the <b>gre-eth-bridged</b> context
Context	<b>configure service system gre-eth-bridged</b>
Tree	<a href="#">gre-eth-bridged</a>
Introduced	16.0.R1
Platforms	All

### tunnel-termination [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>tunnel-termination</b> list instance
Context	<b>configure service system gre-eth-bridged tunnel-termination</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">tunnel-termination</a>
Introduced	16.0.R1
Platforms	All

### [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Tunnel end-point IP address in the SR OS node
Context	<b>configure service system gre-eth-bridged tunnel-termination</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">tunnel-termination</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## fpe-id reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FPE ID
Context	<b>configure service system gre-eth-bridged tunnel-termination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>fpe-id reference</b>
Tree	<b>fpe-id</b>
Reference	<b>configure fwd-path-ext fpe number</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## pw-port-list

Synopsis	Enter the <b>pw-port-list</b> context
Context	<b>configure service system pw-port-list</b>
Tree	<b>pw-port-list</b>
Introduced	16.0.R6
Platforms	VSR

## port [**port-id**] *string*

Synopsis	Add a list entry for <b>port</b>
Context	<b>configure service system pw-port-list port string</b>
Tree	<b>port</b>
Introduced	16.0.R6
Platforms	VSR

## [**port-id**] *string*

Synopsis	Port ID
Context	<b>configure service system pw-port-list port string</b>
Tree	<b>port</b>

Notes	This element is part of a list key.
Introduced	16.0.R6
Platforms	VSR

### **vpn-gre-source-ip** *string*

Synopsis	VPN GRE source ip-address
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">vpn-gre-source-ip</a> <i>string</i>
Tree	<a href="#">vpn-gre-source-ip</a>
Introduced	16.0.R4
Platforms	All

### **vxlan**

Synopsis	Enter the <b>vxlan</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">vxlan</a>
Tree	<a href="#">vxlan</a>
Introduced	16.0.R1
Platforms	All

### **assisted-replication**

Synopsis	Enter the <b>assisted-replication</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">vxlan</a> <a href="#">assisted-replication</a>
Tree	<a href="#">assisted-replication</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** *string*

Synopsis	IP address for assisted replication in the router
Context	<b>configure</b> <a href="#">service</a> <a href="#">system</a> <a href="#">vxlan</a> <a href="#">assisted-replication</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Introduced	16.0.R1
Platforms	All

**tunnel-termination** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>tunnel-termination</b> list instance
Context	<b>configure service system vxlan tunnel-termination</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">tunnel-termination</a>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Non-system IP address that terminates the VXLAN
Context	<b>configure service system vxlan tunnel-termination</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">tunnel-termination</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**fpe-id** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FPE id for this entry
Context	<b>configure service system vxlan tunnel-termination</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">fpe-id</a> <i>reference</i>
Tree	<a href="#">fpe-id</a>
Reference	<b>configure fwd-path-ext fpe</b> <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**template**

Synopsis	Enter the <b>template</b> context
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Context	<b>configure service template</b>
Tree	<a href="#">template</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **epipe-sap-template** [[name](#)] *string*

Synopsis	Enter the <b>epipe-sap-template</b> list instance
Context	<b>configure service template epipe-sap-template</b> <i>string</i>
Tree	<a href="#">epipe-sap-template</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	SAP template name
Context	<b>configure service template epipe-sap-template</b> <i>string</i>
Tree	<a href="#">epipe-sap-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure service template epipe-sap-template</b> <i>string egress</i>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service template epipe-sap-template</b> <i>string egress filter</i>

Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip reference**

Synopsis IPv4 filter policy name  
 Context **configure** [service](#) [template](#) [epipe-sap-template](#) *string* [egress](#) [filter](#) [ip](#) *reference*  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6 reference**

Synopsis IPv6 filter policy name  
 Context **configure** [service](#) [template](#) [epipe-sap-template](#) *string* [egress](#) [filter](#) [ipv6](#) *reference*  
 Tree [ipv6](#)  
 Reference **configure** [filter](#) [ipv6-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac reference**

Synopsis MAC filter policy name  
 Context **configure** [service](#) [template](#) [epipe-sap-template](#) *string* [egress](#) [filter](#) [mac](#) *reference*  
 Tree [mac](#)  
 Reference **configure** [filter](#) [mac-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qos**

Synopsis Enter the **qos** context  
 Context **configure** [service](#) [template](#) [epipe-sap-template](#) *string* [egress](#) [qos](#)

Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis	SAP egress QoS policy name to apply to the SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip** *reference*

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6 reference**

Synopsis IPv6 filter policy name  
Context **configure** [service](#) [template](#) [epipe-sap-template](#) *string* [ingress](#) [filter](#) [ipv6](#) *reference*  
Tree [ipv6](#)  
Reference **configure** [filter](#) [ipv6-filter](#) *string*  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac reference**

Synopsis MAC filter policy name  
Context **configure** [service](#) [template](#) [epipe-sap-template](#) *string* [ingress](#) [filter](#) [mac](#) *reference*  
Tree [mac](#)  
Reference **configure** [filter](#) [mac-filter](#) *string*  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qos**

Synopsis Enter the **qos** context  
Context **configure** [service](#) [template](#) [epipe-sap-template](#) *string* [ingress](#) [qos](#)  
Tree [qos](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-name reference**

Synopsis SAP ingress QoS policy name to apply to the SAP  
Context **configure** [service](#) [template](#) [epipe-sap-template](#) *string* [ingress](#) [qos](#) [policy-name](#) *reference*  
Tree [policy-name](#)

Reference	<b>configure qos sap-ingress</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure service template epipe-sap-template</b> <i>string ingress qos queuing-type keyword</i>
Tree	<b>queuing-type</b>
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upnp**

Synopsis	Enter the <b>upnp</b> context
Context	<b>configure service upnp</b>
Tree	<b>upnp</b>
Description	Commands in this context configure Universal Plug 'n Play (UPnP) for the service.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy** [*name*] *string*

Synopsis	Enter the <b>policy</b> list instance
Context	<b>configure service upnp policy</b> <i>string</i>
Tree	<b>policy</b>
Description	Commands in this context configure the attributes of the UPnP policy.
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	UPnP policy name
Context	<b>configure service upnp policy</b> <i>string</i>
Tree	<i>policy</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure service upnp policy</b> <i>string description</i> <i>string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mapping-limit** *number*

Synopsis	Maximum number of UPnP mappings per subscriber
Context	<b>configure service upnp policy</b> <i>string mapping-limit</i> <i>number</i>
Tree	<i>mapping-limit</i>
Range	1 to 256
Default	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port** *number*

Synopsis	HTTP TCP port to which the UPnP IGD listens
Context	<b>configure service upnp policy</b> <i>string port</i> <i>number</i>
Tree	<i>port</i>
Range	1 to 65535
Default	5000

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**strict-mode** *boolean*

Synopsis	Enable UPnP strict mode
Context	<b>configure</b> <a href="#">service upnp policy</a> <i>string</i> <b>strict-mode</b> <i>boolean</i>
Tree	<a href="#">strict-mode</a>
Description	When configured to <b>true</b> , this command enables UPnP strict mode, in which the system only allows changes to an existing UPnP mapping if the request comes from the same UPnP client.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vpls** [[service-name](#)] *string*

Synopsis	Enter the <b>vpls</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i>
Tree	<a href="#">vpls</a>
Introduced	16.0.R1
Platforms	All

**[service-name]** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i>
Tree	<a href="#">vpls</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the service
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Context	<b>configure service vpls string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **bgp [bgp-instance] number**

Synopsis	Enter the <b>bgp</b> list instance
Context	<b>configure service vpls string bgp number</b>
Tree	<b>bgp</b>
Introduced	16.0.R1
Platforms	All

### **[bgp-instance] number**

Synopsis	BGP instance
Context	<b>configure service vpls string bgp number</b>
Tree	<b>bgp</b>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adv-service-mtu number**

Synopsis	Advertised service MTU value
Context	<b>configure service vpls string bgp number adv-service-mtu number</b>
Tree	<b>adv-service-mtu</b>
Description	This command configures the MTU signaled value used in the BGP for the service. When configured, the router uses the value for signaling and for validation with the received MTU instead of the service MTU. However, the value does not affect the locally enforced value, which is still based on the service MTU.
Range	0 to 9782
Introduced	22.2.R1



Platforms All

### **pw-template-binding** [[pw-template-name](#)] *reference*

Synopsis Enter the **pw-template-binding** list instance

Context **configure** [service vpls](#) *string* [bgp](#) *number* [pw-template-binding](#) *reference*

Tree [pw-template-binding](#)

Max. Instances 100

Introduced 16.0.R1

Platforms All

### **[pw-template-name]** *reference*

Synopsis Policy name

Context **configure** [service vpls](#) *string* [bgp](#) *number* [pw-template-binding](#) *reference*

Tree [pw-template-binding](#)

Reference **configure** [service pw-template](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **bfd-liveness** *boolean*

Synopsis Enable BFD

Context **configure** [service vpls](#) *string* [bgp](#) *number* [pw-template-binding](#) *reference* [bfd-liveness](#) *boolean*

Tree [bfd-liveness](#)

Default false

Introduced 16.0.R1

Platforms All

### **bfd-template** *reference*

Synopsis BFD template name for PW-Template binding

Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <a href="#">bfd-template reference</a>
Tree	<a href="#">bfd-template</a>
Reference	<b>configure</b> <a href="#">bfd</a> <a href="#">bfd-template</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

### **import-rt** *string*

Synopsis	Import route-target communities
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <a href="#">import-rt string</a>
Tree	<a href="#">import-rt</a>
String Length	10 to 28
Max. Instances	5
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group** *reference*

Synopsis	Operational group to monitor
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <a href="#">monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group</a> <a href="#">string</a>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <a href="#">oper-group reference</a>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group</a> <a href="#">string</a>

Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

### **split-horizon-group** *string*

Synopsis	Split horizon group
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">pw-template-binding reference</a> <a href="#">split-horizon-group string</a>
Tree	<a href="#">split-horizon-group</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **route-distinguisher** (*keyword* | *vpn-route-distinguisher*)

Synopsis	High-order 6 bytes that are used as string to compose VSI-ID for use in NLRI
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">route-distinguisher (keyword   vpn-route-distinguisher)</a>
Tree	<a href="#">route-distinguisher</a>
Options	auto-rd
Introduced	16.0.R1
Platforms	All

### **route-target**

Synopsis	Enter the <b>route-target</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">route-target</a>
Tree	<a href="#">route-target</a>
Introduced	16.0.R1
Platforms	All

### **export** *string*

Synopsis	Extended community name for default import policy
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number</a> <a href="#">route-target</a> <a href="#">export string</a>

Tree	<a href="#">export</a>
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

### **import string**

Synopsis	Extended community name for default import policy
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number route-target import string</a>
Tree	<a href="#">import</a>
String Length	10 to 28
Introduced	16.0.R1
Platforms	All

### **vsi-export reference**

Synopsis	VSI export policies
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number vsi-export reference</a>
Tree	<a href="#">vsi-export</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **vsi-import reference**

Synopsis	VSI import policies
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp number vsi-import reference</a>
Tree	<a href="#">vsi-import</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Max. Instances	5
Notes	This element is ordered by the user.

Introduced	16.0.R1
Platforms	All

## bgp-ad

Synopsis	Enable the <b>bgp-ad</b> context
Context	<b>configure service vpls string bgp-ad</b>
Tree	<a href="#">bgp-ad</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of BGP Auto-Discovery
Context	<b>configure service vpls string bgp-ad admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## vpls-id *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VPLS identifier as a 8-byte route distinguisher
Context	<b>configure service vpls string bgp-ad vpls-id string</b>
Tree	<a href="#">vpls-id</a>
Introduced	16.0.R1
Platforms	All

**vsi-id-prefix** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VSI prefix value
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-ad vsi-id-prefix string</a>
Tree	<a href="#">vsi-id-prefix</a>
Introduced	16.0.R1
Platforms	All

**bgp-evpn**

Synopsis	Enable the <b>bgp-evpn</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn</a>
Tree	<a href="#">bgp-evpn</a>
Introduced	16.0.R1
Platforms	All

**accept-ivpls-evpn-flush** *boolean*

Synopsis	Accept and process non-zero ethernet-tag MAC routes
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn accept-ivpls-evpn-flush boolean</a>
Tree	<a href="#">accept-ivpls-evpn-flush</a>
Default	false
Introduced	16.0.R1
Platforms	All

**evi** *number*

Synopsis	EVPN ID
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn evi number</a>
Tree	<a href="#">evi</a>
Description	This command configures a 2-byte EVPN instance (EVI) unique in the system. It is used for the service-carving algorithm for multi-homing and auto-deriving route target and route distinguishers.

If not specified, the EVPN ID value is zero and no route distinguisher or route targets are auto-derived from it.

If the EVI ID value is specified and no other **route-distinguisher** or **route-target** is configured in the service, the following rules apply:

- the route distinguisher is derived from <system\_ip>:evi
- the route target is derived from <autonomous-system>:evi

If VSI import and export policies are configured, the route target must be configured in the policies and those values take precedence over the auto-derived route targets. If **bgp-ad vpls-id** and **bgp-evpn evi** are both configured on the same service, the VPLS ID auto-derived route target or route distinguisher takes precedence over the values auto-derived from the EVI. Use the **show service id bgp** command to display the operational route target for a service.

Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **ignore-mtu-mismatch** *boolean*

Synopsis	Ignore MTU mismatch
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn ignore-mtu-mismatch</a> <i>boolean</i>
Tree	<a href="#">ignore-mtu-mismatch</a>
Description	When configured to <b>true</b> , the system ignores the received Layer 2 MTU in the L2 Attributes extended community of the IMET route for a peer.  When configured to <b>false</b> , the system compares the local service MTU against the received Layer 2 MTU and if there is a mismatch, keeps the EVPN destination to the peer with operational state down.
Default	false
Introduced	23.3.R1
Platforms	All

### **incl-mcast-orig-ip** *string*

Synopsis	Originating IP address
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn incl-mcast-orig-ip</a> <i>string</i>
Tree	<a href="#">incl-mcast-orig-ip</a>
Introduced	16.0.R1
Platforms	All

**isid-route-target**

Synopsis	Enter the <b>isid-route-target</b> context
Context	<b>configure service vpls string bgp-evpn isid-route-target</b>
Tree	<a href="#">isid-route-target</a>
Introduced	16.0.R1
Platforms	All

**range [start] number**

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure service vpls string bgp-evpn isid-route-target range number</b>
Tree	<a href="#">range</a>
Max. Instances	8192
Introduced	16.0.R1
Platforms	All

**[start] number**

Synopsis	Lower bound of the ISID range
Context	<b>configure service vpls string bgp-evpn isid-route-target range number</b>
Tree	<a href="#">range</a>
Range	1 to 16777215
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end number**

Synopsis	Upper bound of the ISID range
Context	<b>configure service vpls string bgp-evpn isid-route-target range number end number</b>
Tree	<a href="#">end</a>
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1



Platforms All

### route-target *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Route for the ISID range

Context **configure** [service vpls string](#) [bgp-evpn isid-route-target range number route-target string](#)

Tree [route-target](#)

String Length 10 to 28

Introduced 16.0.R1

Platforms All

### type *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Method used to support the PBB-EVPN ISID-based route target advertisement

Context **configure** [service vpls string](#) [bgp-evpn isid-route-target range number type keyword](#)

Tree [type](#)

Options auto, configured

Default auto

Introduced 16.0.R1

Platforms All

### mac-duplication

Synopsis Enter the **mac-duplication** context

Context **configure** [service vpls string](#) [bgp-evpn mac-duplication](#)

Tree [mac-duplication](#)

Introduced 16.0.R1

Platforms All

**blackhole** *boolean*

Synopsis	Use duplicated MAC as a black-hole MAC
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mac-duplication blackhole</a> <i>boolean</i>
Tree	<a href="#">blackhole</a>
Default	false
Introduced	16.0.R1
Platforms	All

**detect**

Synopsis	Enter the <b>detect</b> context
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mac-duplication detect</a>
Tree	<a href="#">detect</a>
Description	Commands in this context monitor the number of moves of a MAC address for a period of time (window).
Introduced	16.0.R1
Platforms	All

**num-moves** *number*

Synopsis	BGP EVPN MAC duplication detection number of moves
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mac-duplication detect num-moves</a> <i>number</i>
Tree	<a href="#">num-moves</a>
Range	3 to 10
Default	5
Introduced	16.0.R1
Platforms	All

**trusted-mac-move-factor** *number*

Synopsis	Trusted MAC move factor
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mac-duplication detect trusted-mac-move-factor</a> <i>number</i>
Tree	<a href="#">trusted-mac-move-factor</a>

Description	This command configures the factor by which the number of moves is multiplied when detecting a MAC duplication event for trusted MACs. For example, if the number of moves is 5 and the trusted MAC move factor is 3, 5 moves, within the window, is enough to declare a non-trusted MAC as duplicate. However, 15 moves are needed to declare a trusted MAC as duplicate.  By default the factor for a trusted MAC is the same as for a non-trusted MAC. This provides a backwards compatible solution upon upgrade of the node.
Range	1 to 10
Default	1
Introduced	23.7.R1
Platforms	All

### **window** *number*

Synopsis	BGP EVPN MAC duplication detection window
Context	<b>configure</b> <i>service vpls string</i> <b>bgp-evpn mac-duplication detect window</b> <i>number</i>
Tree	<a href="#">window</a>
Range	1 to 15
Units	minutes
Default	3
Introduced	16.0.R1
Platforms	All

### **retry** (*number* | *keyword*)

Synopsis	BGP EVPN MAC duplication retry time
Context	<b>configure</b> <i>service vpls string</i> <b>bgp-evpn mac-duplication retry</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">retry</a>
Range	2 to 60
Units	minutes
Options	never
Default	9
Introduced	16.0.R1
Platforms	All

**trusted-mac-time** *number*

Synopsis	Trusted MAC time
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mac-duplication trusted-mac-time</a> <i>number</i>
Tree	<a href="#">trusted-mac-time</a>
Description	This command configures how long a MAC address needs to stay in the FDB as type learned without being flushed or changed in its type so the MAC is declared as trusted for the MAC duplication procedures. If the MAC changes from SAP to SAP within the same VPLS service and node, the MAC does not reset its trusted MAC timer.
Range	1 to 15
Units	minutes
Default	5
Introduced	23.7.R1
Platforms	All

**mpls** [[bgp-instance](#)] *number*

Synopsis	Enter the <b>mpls</b> list instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls</a> <i>number</i>
Tree	<a href="#">mpls</a>
Introduced	16.0.R1
Platforms	All

**[bgp-instance]** *number*

Synopsis	BGP instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls</a> <i>number</i>
Tree	<a href="#">mpls</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of BGP EVPN MPLS
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **auto-bind-tunnel**

Synopsis	Enter the <b>auto-bind-tunnel</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>auto-bind-tunnel</b>
Tree	<a href="#">auto-bind-tunnel</a>
Introduced	16.0.R1
Platforms	All

### **allow-flex-algo-fallback** *boolean*

Synopsis	Enable flexible algorithm fallback
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>auto-bind-tunnel</b> <b>allow-flex-algo-fallback</b> <i>boolean</i>
Tree	<a href="#">allow-flex-algo-fallback</a>
Description	When configured to <b>true</b> , a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.  When configured to <b>false</b> , the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	20.10.R1
Platforms	All

### **ecmp** *number*

Synopsis	Maximum ECMP routes information
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>auto-bind-tunnel</b> <b>ecmp</b> <i>number</i>
Tree	<a href="#">ecmp</a>
Range	1 to 32
Default	1

Introduced 19.10.R1  
 Platforms All

### **enforce-strict-tunnel-tagging** *boolean*

Synopsis Enable/disable enforcement of strict tunnel tagging  
 Context **configure** [service vpls string](#) [bgp-evpn mpls number](#) [auto-bind-tunnel enforce-strict-tunnel-tagging](#) *boolean*  
 Tree [enforce-strict-tunnel-tagging](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms All

### **resolution** *keyword*

Synopsis Resolution method for tunnel selection  
 Context **configure** [service vpls string](#) [bgp-evpn mpls number](#) [auto-bind-tunnel resolution](#) *keyword*  
 Tree [resolution](#)  
 Options none, filter, any  
 Default none  
 Introduced 16.0.R1  
 Platforms All

### **resolution-filter**

Synopsis Enter the **resolution-filter** context  
 Context **configure** [service vpls string](#) [bgp-evpn mpls number](#) [auto-bind-tunnel resolution-filter](#)  
 Tree [resolution-filter](#)  
 Introduced 16.0.R1  
 Platforms All

### **bgp** *boolean*

Synopsis Use BGP tunneling for next-hop resolution

Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mpls number auto-bind-tunnel resolution-filter</a> <a href="#">bgp boolean</a>
Tree	<a href="#">bgp</a>
Description	When configured to <b>true</b> , BGP searches the BGP LSP for the address of the BGP next hop. When configured to <b>false</b> , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	false
Introduced	16.0.R1
Platforms	All

### **ldp boolean**

Synopsis	Use LDP tunneling for next-hop resolution
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mpls number auto-bind-tunnel resolution-filter</a> <a href="#">ldp boolean</a>
Tree	<a href="#">ldp</a>
Description	When configured to <b>true</b> , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop. When configured to <b>false</b> , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

### **mpls-fwd-policy boolean**

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mpls number auto-bind-tunnel resolution-filter</a> <a href="#">mpls-fwd-policy boolean</a>
Tree	<a href="#">mpls-fwd-policy</a>
Description	When configured to <b>true</b> , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop. When configured to <b>false</b> , the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

**rib-api boolean**

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rib-api boolean</a>
Tree	<a href="#">rib-api</a>
Description	When configured to <b>true</b> , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.  When configured to <b>false</b> , the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

**rsvp boolean**

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rsvp boolean</a>
Tree	<a href="#">rsvp</a>
Description	When configured to <b>true</b> , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.  When configured to <b>false</b> , the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

**sr-isis boolean**

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">sr-isis boolean</a>
Tree	<a href="#">sr-isis</a>
Description	When configured to <b>true</b> , BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.



The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.

When configured to **false**, IS-IS tunneling is not used for next-hop resolution.

Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf** *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter sr-ospf</a> <i>boolean</i>
Tree	<a href="#">sr-ospf</a>
Description	When configured to <b>true</b> , BGP uses an OSPF tunnel type to determine the address of the BGP next hop.  The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.  When configured to <b>false</b> , OSPF tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

### **sr-ospf3** *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter sr-ospf3</a> <i>boolean</i>
Tree	<a href="#">sr-ospf3</a>
Description	When configured to <b>true</b> , BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.  The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF3 instance.  When configured to <b>false</b> , OSPF3 tunneling is not used for next-hop resolution.
Default	false
Introduced	19.10.R1
Platforms	All

**sr-policy** *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter sr-policy</a> <i>boolean</i>
Tree	<a href="#">sr-policy</a>
Description	When configured to <b>true</b> , this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.  When configured to <b>false</b> , SR policies are not used for next-hop resolution.
Default	false
Introduced	19.5.R1
Platforms	All

**sr-te** *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter sr-te</a> <i>boolean</i>
Tree	<a href="#">sr-te</a>
Description	When configured to <b>true</b> , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.  The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.  When configured to <b>false</b> , SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	16.0.R1
Platforms	All

**udp** *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter udp</a> <i>boolean</i>
Tree	<a href="#">udp</a>
Description	When configured to <b>true</b> , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop.

When configured to **false**, MPLS over UDP tunneling is not used for next-hop resolution.

Default	false
Introduced	16.0.R1
Platforms	All

### **weighted-ecmp** *boolean*

Synopsis	Allow weighted load balancing
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <b>weighted-ecmp</b> <i>boolean</i>
Tree	<a href="#">weighted-ecmp</a>
Description	When configured to <b>true</b> , this router enables weighted ECMP for packets using tunnels that a VPLS or Epipe automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP.  When configured to <b>false</b> , this command disables weighted ECMP for next-hop tunnel selection.
Default	false
Introduced	22.7.R1
Platforms	All

### **control-word** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable control word support
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>control-word</b> <i>boolean</i>
Tree	<a href="#">control-word</a>
Description	When configured to <b>true</b> , the router enables the transmission and reception of the control word for all EVPN-MPLS destinations at the same time.
Default	false
Introduced	16.0.R1
Platforms	All

**default-route-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	<b>configure</b> <i>service vpls string bgp-evpn mpls number default-route-tag string</i>
Tree	<i>default-route-tag</i>
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	16.0.R4
Platforms	All

**dynamic-egress-label-limit** *boolean*

Synopsis	Enables dynamic egress label limit
Context	<b>configure</b> <i>service vpls string bgp-evpn mpls number dynamic-egress-label-limit boolean</i>
Tree	<i>dynamic-egress-label-limit</i>
Description	<p>When configured to <b>true</b>, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p>

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

Default	false
Introduced	22.2.R1
Platforms	All

### **ecmp number**

Synopsis	Maximum ECMP routes information
Context	<b>configure service vpls string bgp-evpn mpls number ecmp number</b>
Tree	<a href="#">ecmp</a>
Range	1 to 32
Default	1
Introduced	16.0.R1
Platforms	All

### **entropy-label boolean**

Synopsis	Allow use of entropy labels for spoke SDPs
Context	<b>configure service vpls string bgp-evpn mpls number entropy-label boolean</b>
Tree	<a href="#">entropy-label</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	<b>configure service vpls string bgp-evpn mpls number evi-three-byte-auto-rt boolean</b>
Tree	<a href="#">evi-three-byte-auto-rt</a>
Description	When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where:

- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

Default	false
Introduced	21.10.R1
Platforms	All

## **fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>fdb</b>
Tree	<a href="#">fdb</a>
Introduced	16.0.R1
Platforms	All

## **protected-src-mac-violation-action** *keyword*

Synopsis	Relearn request for a protected MAC is received action
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">fdb</a> <b>protected-src-mac-violation-action</b> <i>keyword</i>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	discard
Introduced	16.0.R1
Platforms	All

## **force-vc-forwarding** *keyword*

Synopsis	VC forwarding action
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>force-vc-forwarding</b> <i>keyword</i>
Tree	<a href="#">force-vc-forwarding</a>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag

Introduced	16.0.R1
Platforms	All

### hash-label *boolean*

Synopsis	Push hash label
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">hash-label boolean</a>
Tree	<a href="#">hash-label</a>
Description	<p>When configured to <b>true</b>, the router pushes the hash label based on the following:</p> <ul style="list-style-type: none"> <li>• If <b>advertise-l2-attributes</b> (in the <b>configure service vpls bgp-evpn routes incl-mcast</b> context) is set to <b>false</b>, the hash label is pushed to a unicast EVPN destination.</li> <li>• If <b>advertise-l2-attributes</b> is set to <b>true</b>, the F bit is set to 1 in the Layer 2 Attributes Extended Community of the EVPN IMET route for the service. The hash label is pushed only if the remote PE signaled support for hash label (received F bit is set to 1).</li> </ul> <p>When configured to <b>false</b>, the hash label is not pushed.</p> <p>The hash label is never used for BUM packets.</p>
Default	false
Introduced	23.10.R1
Platforms	All

### ingress-replication-bum-label *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the same label as the one advertised for unicast traffic
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">ingress-replication-bum-label boolean</a>
Tree	<a href="#">ingress-replication-bum-label</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mh-mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>mh-mode</b> <i>keyword</i>
Tree	<a href="#">mh-mode</a>
Description	This command configures the multihoming mode for BGP-EVPN. Users can configure only one network instance for the service.  If a provider tunnel is enabled for the service instance, this command must be configured using the <b>network</b> option.
Options	access, network
Default	network
Introduced	21.10.R1
Platforms	All

**oper-group** *reference*

Synopsis	Operational group ID
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>oper-group</b> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group string</a>
Introduced	19.10.R1
Platforms	All

**route-next-hop**

Synopsis	Enter the <b>route-next-hop</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <b>route-next-hop</b>
Tree	<a href="#">route-next-hop</a>
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	19.10.R1
Platforms	All



**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mpls number route-next-hop ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	19.10.R1
Platforms	All

**system-ipv4****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mpls number route-next-hop system-ipv4</a>
Tree	<a href="#">system-ipv4</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	19.10.R1
Platforms	All

**system-ipv6****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn mpls number route-next-hop system-ipv6</a>
Tree	<a href="#">system-ipv6</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	19.10.R1

Platforms All

## send-tunnel-encap

Synopsis Enter the **send-tunnel-encap** context

Context **configure** [service vpls string](#) [bgp-evpn mpls number](#) **send-tunnel-encap**

Tree [send-tunnel-encap](#)

Introduced 16.0.R1

Platforms All

## mpls *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable MPLS encapsulation

Context **configure** [service vpls string](#) [bgp-evpn mpls number](#) [send-tunnel-encap mpls](#) *boolean*

Tree [mpls](#)

Default true

Introduced 16.0.R1

Platforms All

## mpls-over-udp *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable MPLS over UDP encapsulation

Context **configure** [service vpls string](#) [bgp-evpn mpls number](#) [send-tunnel-encap mpls-over-udp](#) *boolean*

Tree [mpls-over-udp](#)

Default false

Introduced 16.0.R1

Platforms All

**split-horizon-group** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">split-horizon-group reference</a>
Tree	<a href="#">split-horizon-group</a>
Description	This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances.
Reference	<b>configure</b> <a href="#">service vpls string</a> <a href="#">split-horizon-group string</a>
Introduced	16.0.R1
Platforms	All

**routes**

Synopsis	Enter the <b>routes</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes</a>
Tree	<a href="#">routes</a>
Introduced	16.0.R1
Platforms	All

**incl-mcast**

Synopsis	Enter the <b>incl-mcast</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes incl-mcast</a>
Tree	<a href="#">incl-mcast</a>
Introduced	16.0.R1
Platforms	All

**advertise-ingress-replication** *boolean*

Synopsis	BGP EVPN IMET-IR route advertisement
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes incl-mcast advertise-ingress-replication boolean</a>

Tree	<a href="#">advertise-ingress-replication</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **advertise-l2-attributes** *boolean*

Synopsis	Advertise Layer 2 attributes
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes incl-mcast</a> <b>advertise-l2-attributes</b> <i>boolean</i>
Tree	<a href="#">advertise-l2-attributes</a>

Description When configured to **true**, the router advertises the Layer 2 Attributes Extended Community including:

- the service MTU in the Layer 2 MTU field
- the F bit, which is set to 1 if the **hash-label** command is set to true (in the **configure service vpls bgp-evpn mpls** context); otherwise, the F bit is set to 0
- the C bit, which is set to 1 if the **control-word** command is set to true (in the **configure service vpls bgp-evpn mpls** context); otherwise, the C bit is set to 0

The router compares the received Layer 2 MTU from a peer with the local service MTU. If there is a mismatch, the operation state of the EVPN destination is set to down, except if the **configure service vpls bgp-evpn ignore-mtu-mismatch** command is set to **true**.

A mismatch between the received C bit and the local **control-word** setting (in the **configure service vpls bgp-evpn mpls** context) results in the operational state of the EVPN destination being set to down.

A mismatch between the received F bit and the local F bit (via the hash label configuration) results in the operational state of the EVPN destination being set to down.

When configured to **false**, the Layer 2 Attributes Extended Community is not advertised with the Inclusive Multicast Ethernet Tag route for the service.

Default	false
Introduced	23.3.R1
Platforms	All

### **ip-prefix**

Synopsis	Enter the <b>ip-prefix</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes</a> <b>ip-prefix</b>
Tree	<a href="#">ip-prefix</a>
Introduced	16.0.R1

Platforms All

### **advertise** *boolean*

Synopsis Status for the IP prefix routes advertisement

Context **configure** [service vpls](#) [string](#) [bgp-evpn](#) [routes ip-prefix](#) [advertise](#) *boolean*

Tree [advertise](#)

Default false

Introduced 16.0.R1

Platforms All

### **domain-id** *string*

Synopsis Domain ID of received BGP route before readvertisement

Context **configure** [service vpls](#) [string](#) [bgp-evpn](#) [routes ip-prefix](#) [domain-id](#) *string*

Tree [domain-id](#)

Description This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf\_safi\_type in the D-PATH attribute, as described in *draft-ietf-bess-evpn-ipvpn-interworking*. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

```
Seg Len=1 / 65000:1:128
```

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

```
Seg Len=2 / 65000:2:70 / 65000:1:128
```

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced 21.10.R1

Platforms All

### **include-direct-interface-host** *boolean*

Synopsis	Advertise the interface host address in EVPN
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn routes ip-prefix include-direct-interface-host</a> <i>boolean</i>
Tree	<a href="#">include-direct-interface-host</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **link-bandwidth**

Synopsis	Enter the <b>link-bandwidth</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn routes ip-prefix link-bandwidth</a>
Tree	<a href="#">link-bandwidth</a>
Introduced	22.7.R1
Platforms	All

### **advertise**

Synopsis	Enable the <b>advertise</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn routes ip-prefix link-bandwidth advertise</a>
Tree	<a href="#">advertise</a>
Introduced	22.7.R1
Platforms	All

### **max-dynamic-weight** *number*

Synopsis	Maximum weight of the advertised evpn-iff route
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn routes ip-prefix link-bandwidth advertise max-dynamic-weight</a> <i>number</i>
Tree	<a href="#">max-dynamic-weight</a>
Range	1 to 128
Default	128
Introduced	22.7.R1
Platforms	All

**weight** (*number* | *keyword*)

Synopsis	Weight of the advertised evpn-iff route
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">routes</a> <a href="#">ip-prefix</a> <a href="#">link-bandwidth</a> <a href="#">advertise</a> <a href="#">weight</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">weight</a>
Range	1 to 128
Options	dynamic
Default	dynamic
Introduced	22.7.R1
Platforms	All

**weighted-ecmp** *boolean*

Synopsis	Enable weighted ECMP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">routes</a> <a href="#">ip-prefix</a> <a href="#">link-bandwidth</a> <a href="#">weighted-ecmp</a> <i>boolean</i>
Tree	<a href="#">weighted-ecmp</a>
Default	false
Introduced	22.7.R1
Platforms	All

**mac-ip**

Synopsis	Enter the <b>mac-ip</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">routes</a> <a href="#">mac-ip</a>
Tree	<a href="#">mac-ip</a>
Introduced	16.0.R1
Platforms	All

**advertise** *boolean*

Synopsis	Status for the BGP-EVPN MAC/IP routes advertisement
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">routes</a> <a href="#">mac-ip</a> <a href="#">advertise</a> <i>boolean</i>
Tree	<a href="#">advertise</a>
Default	true

Introduced	16.0.R1
Platforms	All

### **arp-nd-extended-community** *boolean*

Synopsis	Enable ARP/ND extended community
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes mac-ip arp-nd-extended-community</a> <i>boolean</i>
Tree	<a href="#">arp-nd-extended-community</a>
Description	<p>When configured to <b>true</b>, the system advertises the RFC9047 ARP/ND extended community along with the MAC/IP routes advertised for local static and dynamic proxy ARP or ND entries. The system also processes the ARP/ND extended community and selects the ARP or ND entries based on the immutable flag.</p> <p>When configured to <b>false</b>, the system does not advertise the RFC9047 ARP/ND extended community.</p>
Default	false
Introduced	23.3.R1
Platforms	All

### **arp-nd-only-with-fdb-advertisement** *boolean*

Synopsis	Advertise ARP/ND entries if local MAC is in the FDB
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes mac-ip arp-nd-only-with-fdb-advertisement</a> <i>boolean</i>
Tree	<a href="#">arp-nd-only-with-fdb-advertisement</a>
Description	<p>When configured to <b>true</b>, the router advertises local ARP/ND entries of VPRN interfaces using this VPLS in this BGP-EVPN service when the corresponding local MAC is programmed in the FDB.</p> <p>When configured to <b>false</b>, the router does not advertise local ARP/ND entries.</p>
Default	false
Introduced	23.10.R3
Platforms	All

### **cfm-mac** *boolean*

Synopsis	Enable advertisement and withdrawal of MAC address
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes mac-ip cfm-mac</a> <i>boolean</i>



---

Tree	<a href="#">cfm-mac</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **unknown-mac** *boolean*

Synopsis	Enable advertisement of unknown MAC route in BGP
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes mac-ip unknown-mac</a> <i>boolean</i>
Tree	<a href="#">unknown-mac</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sel-mcast**

Synopsis	Enter the <b>sel-mcast</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes sel-mcast</a>
Tree	<a href="#">sel-mcast</a>
Introduced	19.10.R2
Platforms	All

### **advertise** *boolean*

Synopsis	Advertise Selective Multicast Ethernet Tag routes
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn routes sel-mcast advertise</a> <i>boolean</i>
Tree	<a href="#">advertise</a>
Default	false
Introduced	19.10.R2
Platforms	All

### **segment-routing-v6** [[bgp-instance](#)] *number*

Synopsis	Enter the <b>segment-routing-v6</b> list instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i>

Tree	<a href="#">segment-routing-v6</a>
Description	Commands in this context configure the SRv6 instance used in the service.
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[bgp-instance] number**

Synopsis	BGP instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state keyword**

Synopsis	Administrative state of segment routing over IPv6
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **default-route-tag string**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>default-route-tag</b> <i>string</i>

Tree	<a href="#">default-route-tag</a>
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **ecmp** *number*

Synopsis	Maximum ECMP value configured on the service
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">ecmp</a> <i>number</i>
Tree	<a href="#">ecmp</a>
Range	1 to 32
Default	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **evi-three-byte-auto-rt** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">evi-three-byte-auto-rt</a> <i>boolean</i>
Tree	<a href="#">evi-three-byte-auto-rt</a>

Description	When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID). Where: <ul style="list-style-type: none"> <li>• Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken</li> <li>• A=0 (for auto-derivation)</li> <li>• Type=4 (EVI-based route-target)</li> <li>• D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance</li> <li>• Service ID=3-octet EVI</li> </ul> When configured to <b>false</b> , route target derivation is not allowed.
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## **fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure service vpls string bgp-evpn segment-routing-v6 number fdb</b>
Tree	<b>fdb</b>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## **protected-src-mac-violation-action keyword**

Synopsis	Relearn request for a protected MAC is received action
Context	<b>configure service vpls string bgp-evpn segment-routing-v6 number fdb protected-src-mac-violation-action keyword</b>
Tree	<b>protected-src-mac-violation-action</b>
Options	discard
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## **force-vc-forwarding keyword**

Synopsis	Datapath forwarding to force vlan-vc-type
----------	---

Context	<b>configure service vpls string</b> <a href="#">bgp-evpn segment-routing-v6 number force-vc-forwarding keyword</a>
Tree	<a href="#">force-vc-forwarding</a>
Description	<p>This command allows the system to preserve the VLAN ID and 802.1p bits of the service-delimiting qtag in a new tag added in the customer frame before sending it to the EVPN destinations.</p> <p>This command may be used in conjunction with the <b>sap ingress vlan-translation</b> command. If so used, the configured translated VLAN ID is the VLAN ID sent to the EVPN destinations as opposed to the service-delimiting tag VLAN ID. If the ingress SAP/SDP binding is 'null'-encapsulated, the output VLAN ID and pbits is zero.</p>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **mh-mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multihoming mode
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn segment-routing-v6 number mh-mode keyword</a>
Tree	<a href="#">mh-mode</a>
Options	access, network
Default	network
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **oper-group** *reference*

Synopsis	Operational group
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn segment-routing-v6 number oper-group reference</a>
Tree	<a href="#">oper-group</a>
Description	<p>This command adds the BGP EVPN SRv6 instance or an Ethernet Segment (ES) as a member of the operational group.</p> <p>When configured on a BGP EVPN instance, the operational group is up when it is either empty (meaning that the operational group has no members) or at least an EVPN destination is created under the EVPN instance added as member. When configured, no</p>

other SAP, SDP binding, or BGP EVPN instance can be added to the same operational group within the same or different service.

The operational group is down when it is applied on a BGP EVPN instance as well as:

- the service is administratively disabled
- the BGP EVPN MPLS and VXLAN is administratively disabled
- all the EVPN destinations in the instance are removed

When configured on an ES, the state of the operational group depends on the state of the SAPs contained in the ES. The operational group transitions to up if at least one SAP in the ES is up. The operational group goes down when all the associated SAPs are operationally down. Monitor the ES operational group on the LAG associated with the ES, along with single-active multihoming, so that the NDF state can be signaled to the CE by LAG standby signaling.

Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### resolution *keyword*

Synopsis	Resolution options for routes
Context	<b>configure service vpls</b> <i>string</i> <b>bgp-evpn segment-routing-v6</b> <i>number</i> <b>resolution</b> <i>keyword</i>
Tree	<b>resolution</b>
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### route-next-hop

Synopsis	Enter the <b>route-next-hop</b> context
Context	<b>configure service vpls</b> <i>string</i> <b>bgp-evpn segment-routing-v6</b> <i>number</i> <b>route-next-hop</b>
Tree	<b>route-next-hop</b>
Description	Commands in this context configure the next hop of the EVPN routes.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP address of the next-hop for the service EVPN route
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn segment-routing-v6 number route-next-hop ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**system-ipv4****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv4 address for service EVPN route next hop
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn segment-routing-v6 number route-next-hop system-ipv4</a>
Tree	<a href="#">system-ipv4</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**system-ipv6****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System IPv6 address for service EVPN route next hop
Context	<b>configure service vpls string</b> <a href="#">bgp-evpn segment-routing-v6 number route-next-hop system-ipv6</a>
Tree	<a href="#">system-ipv6</a>
Notes	The following elements are part of a choice: <b>ip-address</b> , <b>system-ipv4</b> , or <b>system-ipv6</b> .

Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### source-address *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Description	<p>When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.</p> <p>When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.</p> <p>A source IPv6 address must be configured in this context or in the base router context. The system does not check if the address entered is a valid local address.</p>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### split-horizon-group *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">split-horizon-group</a> <i>reference</i>
Tree	<a href="#">split-horizon-group</a>
Description	This command configures the value of split-horizon group for all BGP-EVPN segment routing v6 instances.
Reference	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR



**srv6**

Synopsis	Enter the <b>srv6</b> context
Context	<b>configure service vpls string bgp-evpn segment-routing-v6 number srv6</b>
Tree	<b>srv6</b>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**default-locator string****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	<b>configure service vpls string bgp-evpn segment-routing-v6 number srv6 default-locator string</b>
Tree	<b>default-locator</b>
Description	This command specifies the locator that exists in the SRv6 service instance and is used as the default locator for the service.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**instance reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing SRv6 instance
Context	<b>configure service vpls string bgp-evpn segment-routing-v6 number srv6 instance reference</b>
Tree	<b>instance</b>
Reference	<b>configure service vpls string segment-routing-v6 number</b>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**vxlan** [**bgp-instance**] *number*

Synopsis	Enter the <b>vxlan</b> list instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a>
Tree	<a href="#">vxlan</a>
Introduced	16.0.R1
Platforms	All

**[bgp-instance]** *number*

Synopsis	BGP instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a>
Tree	<a href="#">vxlan</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of VXLAN auto-bindings creation
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**default-route-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">default-route-tag string</a>
Tree	<a href="#">default-route-tag</a>

Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag X</b> and <b>proxy-arp evpn-route-tag Y</b>, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag A and the R-VPLS, in which the route is advertised, uses B as the <b>default-route-tag</b>, then EVPN keeps tag A when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	16.0.R4
Platforms	All

### **ecmp number**

Synopsis	Number of paths to reach a specified MAC address
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">ecmp number</a>
Tree	<a href="#">ecmp</a>
Range	1 to 32
Default	1
Introduced	19.5.R1
Platforms	All

### **evi-three-byte-auto-rt boolean**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Auto-derive the BGP EVPN route target
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">evi-three-byte-auto-rt boolean</a>
Tree	<a href="#">evi-three-byte-auto-rt</a>
Description	When configured to <b>true</b> , the BGP-EVPN instance import and export route target is auto-derived as described in RFC 8365 (Global-Administrator:A/Type/D-ID/Service-ID).

Where:

- Global Administrator – is the configured 2-octet AS number; if the configured ASN exceeds the 2 byte limit, the low order 16-bit value is taken
- A=0 (for auto-derivation)
- Type=4 (EVI-based route-target)
- D-ID= [1..2] – encodes the BGP instance, which allows the auto-derivation of different route-targets in multi-instance services; the value is inherited from the corresponding BGP instance
- Service ID=3-octet EVI

When configured to **false**, route target derivation is not allowed.

Default	false
Introduced	21.10.R1
Platforms	All

### **mh-mode** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multi-homing mode
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn vxlan</a> <i>number</i> <a href="#">mh-mode</a> <i>keyword</i>
Tree	<a href="#">mh-mode</a>
Options	access, network
Default	access
Introduced	19.5.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group ID
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-evpn vxlan</a> <i>number</i> <a href="#">oper-group</a> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group</a> <i>string</i>
Introduced	19.10.R1
Platforms	All

**routes**

Synopsis	Enter the <b>routes</b> context
Context	<b>configure service vpls string bgp-evpn vxlan number routes</b>
Tree	<a href="#">routes</a>
Introduced	19.5.R1
Platforms	All

**auto-disc**

Synopsis	Enter the <b>auto-disc</b> context
Context	<b>configure service vpls string bgp-evpn vxlan number routes auto-disc</b>
Tree	<a href="#">auto-disc</a>
Introduced	19.5.R1
Platforms	All

**advertise boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise routes on auto-discovery
Context	<b>configure service vpls string bgp-evpn vxlan number routes auto-disc advertise boolean</b>
Tree	<a href="#">advertise</a>
Default	false
Introduced	19.5.R1
Platforms	All

**send-incl-mcast-ir-on-ndf boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow IMET-IR on NDF
Context	<b>configure service vpls string bgp-evpn vxlan number send-incl-mcast-ir-on-ndf boolean</b>

Tree	<a href="#">send-incl-mcast-ir-on-ndf</a>
Default	true
Introduced	16.0.R1
Platforms	All

## send-tunnel-encap *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send VXLAN value in encapsulation extended community
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">send-tunnel-encap boolean</a>
Tree	<a href="#">send-tunnel-encap</a>
Description	When configured to <b>true</b> , this command sends the VXLAN value in the encapsulation that is advertised with the EVPN routes for the service. The encapsulation is encoded in RFC5512-based tunnel encapsulation extended communities.  When configured to <b>false</b> , no encapsulation extended community is sent.
Default	true
Introduced	16.0.R1
Platforms	All

## vxlan-instance *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VXLAN instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-evpn vxlan number</a> <a href="#">vxlan-instance reference</a>
Tree	<a href="#">vxlan-instance</a>
Reference	<b>configure</b> <a href="#">service vpls string</a> <a href="#">vxlan instance number</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**bgp-mh-site** [*site-name*] *string*

Synopsis	Enter the <b>bgp-mh-site</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i>
Tree	<a href="#">bgp-mh-site</a>
Introduced	16.0.R1
Platforms	All

**[site-name]** *string*

Synopsis	Name for the specific site
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i>
Tree	<a href="#">bgp-mh-site</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**activation-timer** *number*

Synopsis	Time that the local sites are in standby status, waiting for BGP updates
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <a href="#">activation-timer</a> <i>number</i>
Tree	<a href="#">activation-timer</a>
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the VPLS BGP multi-homing site
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">bgp-mh-site</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **boot-timer** *number*

Synopsis Wait time after reboot to run the DF election algorithm

Context **configure** [service vpls](#) *string* [bgp-mh-site](#) *string* **boot-timer** *number*

Tree [boot-timer](#)

Range 0 to 600

Units seconds

Introduced 16.0.R1

Platforms All

### **failed-threshold** (*number* | *keyword*)

Synopsis Threshold for the site to be declared down

Context **configure** [service vpls](#) *string* [bgp-mh-site](#) *string* **failed-threshold** (*number* | *keyword*)

Tree [failed-threshold](#)

Range 1 to 1000

Options all

Default all

Introduced 16.0.R1

Platforms All

### **id** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Site ID

Context **configure** [service vpls](#) *string* [bgp-mh-site](#) *string* **id** *number*

Tree [id](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All



## mesh-sdp-binds

Synopsis	Specify if a mesh-sdp-binding is associated with this site
Context	<b>configure service vpls string</b> <a href="#">bgp-mh-site string</a> <a href="#">mesh-sdp-binds</a>
Tree	<a href="#">mesh-sdp-binds</a>
Notes	The following elements are part of a choice: <b>mesh-sdp-binds</b> , <b>sap</b> , <b>shg-name</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

## min-down-timer *number*

Synopsis	Minimum downtime for BGP multi-homing site after transition from up to down
Context	<b>configure service vpls string</b> <a href="#">bgp-mh-site string</a> <a href="#">min-down-timer number</a>
Tree	<a href="#">min-down-timer</a>
Range	0 to 100
Units	seconds
Introduced	16.0.R1
Platforms	All

## monitor-oper-group *reference*

Synopsis	Operational group to monitor
Context	<b>configure service vpls string</b> <a href="#">bgp-mh-site string</a> <a href="#">monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure service oper-group string</b>
Introduced	16.0.R1
Platforms	All

## sap *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to be associated with this site
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Context	<b>configure service vpls string</b> <i>bgp-mh-site string sap string</i>
Tree	<i>sap</i>
String Length	1 to 45
Notes	The following elements are part of a choice: <b>mesh-sdp-binds</b> , <b>sap</b> , <b>shg-name</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

### **shg-name string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SHG name to be associated with the site
Context	<b>configure service vpls string</b> <i>bgp-mh-site string shg-name string</i>
Tree	<i>shg-name</i>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>mesh-sdp-binds</b> , <b>sap</b> , <b>shg-name</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

### **spoke-sdp string**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SDP associated with the site
Context	<b>configure service vpls string</b> <i>bgp-mh-site string spoke-sdp string</i>
Tree	<i>spoke-sdp</i>
String Length	3 to 16
Notes	The following elements are part of a choice: <b>mesh-sdp-binds</b> , <b>sap</b> , <b>shg-name</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

## bgp-vpls

Synopsis	Enable the <b>bgp-vpls</b> context
Context	<b>configure service vpls string</b> <b>bgp-vpls</b>
Tree	<b>bgp-vpls</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the BGP-VPLS instance
Context	<b>configure service vpls string</b> <b>bgp-vpls admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## maximum-ve-id *number*

Synopsis	Maximum vpls-edge id for BGP-VPLS
Context	<b>configure service vpls string</b> <b>bgp-vpls maximum-ve-id number</b>
Tree	<b>maximum-ve-id</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## ve

Synopsis	Enter the <b>ve</b> context
Context	<b>configure service vpls string</b> <b>bgp-vpls ve</b>
Tree	<b>ve</b>
Introduced	16.0.R1
Platforms	All

**id number**

Synopsis	VPLS edge ID
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-vpls ve id number</a>
Tree	<a href="#">id</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**name string**

Synopsis	VPLS Edge instance name
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">bgp-vpls ve name string</a>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**capture-sap** [[sap-id](#)] *string*

Synopsis	Enter the <b>capture-sap</b> list instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a>
Tree	<a href="#">capture-sap</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[sap-id]** *string*

Synopsis	SAP identifier
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">capture-sap string</a>
Tree	<a href="#">capture-sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the SAP
Context	<b>configure</b> <a href="#">service vpls string capture-sap string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**allow-dot1q-msaps** *boolean*

Synopsis	Enable support for triggering managed SAP creation
Context	<b>configure</b> <a href="#">service vpls string capture-sap string allow-dot1q-msaps boolean</a>
Tree	<a href="#">allow-dot1q-msaps</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bandwidth** *number*

Synopsis	SAP bandwidth
Context	<b>configure</b> <a href="#">service vpls string capture-sap string bandwidth number</a>
Tree	<a href="#">bandwidth</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">service vpls string capture-sap string cpu-protection</a>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## mac-monitoring

Synopsis Monitor MAC for CPU protection  
 Context **configure service vpls string capture-sap string cpu-protection mac-monitoring**  
 Tree [mac-monitoring](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## policy-id reference

Synopsis CPM protection policy  
 Context **configure service vpls string capture-sap string cpu-protection policy-id reference**  
 Tree [policy-id](#)  
 Reference **configure system security cpu-protection policy number**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## description string

Synopsis Text description  
 Context **configure service vpls string capture-sap string description string**  
 Tree [description](#)  
 String Length 1 to 160  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp

Synopsis Enter the **dhcp** context  
 Context **configure service vpls string capture-sap string dhcp**  
 Tree [dhcp](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service vpls string capture-sap string dhcp python-policy reference</a>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python python-policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis	Local user database
Context	<b>configure</b> <a href="#">service vpls string capture-sap string dhcp user-db reference</a>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp6**

Synopsis	Enter the <b>dhcp6</b> context
Context	<b>configure</b> <a href="#">service vpls string capture-sap string dhcp6</a>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service vpls string capture-sap string dhcp6 python-policy reference</a>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python python-policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis	Local user database
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">dhcp6 user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dist-cpu-protection** *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system security dist-cpu-protection</a> <i>policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-lockout-policy** *reference*

Synopsis	Host lockout policy
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">host-lockout-policy</a> <i>reference</i>
Tree	<a href="#">host-lockout-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt host-lockout-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vpls string capture-sap string ingress filter</b>
Tree	<b>filter</b>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac reference

Synopsis	MAC filter policy name
Context	<b>configure service vpls string capture-sap string ingress filter mac reference</b>
Tree	<b>mac</b>
Reference	<b>configure filter mac-filter string</b>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-session

Synopsis	Enter the <b>ipoe-session</b> context
Context	<b>configure service vpls string capture-sap string ipoe-session</b>
Tree	<b>ipoe-session</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state keyword

Synopsis	Administrative state of IPoE session management
Context	<b>configure service vpls string capture-sap string ipoe-session admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe-session-policy** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE Session policy to be used for new sessions
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">ipoe-session-policy</a> <i>reference</i>
Tree	<a href="#">ipoe-session-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ipoe-session-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-db** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for IPoE session authentication
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## msap-defaults

Synopsis	Enter the <b>msap-defaults</b> context
Context	<b>configure service vpls string capture-sap string msap-defaults</b>
Tree	<a href="#">msap-defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## group-interface *string*

Synopsis	Group interface
Context	<b>configure service vpls string capture-sap string msap-defaults group-interface string</b>
Tree	<a href="#">group-interface</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policy *reference*

Synopsis	MSAP policy
Context	<b>configure service vpls string capture-sap string msap-defaults policy reference</b>
Tree	<a href="#">policy</a>
Reference	<b>configure subscriber-mgmt msap-policy string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## service-name *string*

Synopsis	Administrative service name
Context	<b>configure service vpls string capture-sap string msap-defaults service-name string</b>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nasreq-auth-policy** *reference*

Synopsis	Diameter NASREQ application policy to use for authentication
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">nasreq-auth-policy</a> <i>reference</i>
Tree	<a href="#">nasreq-auth-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pfcp**

Synopsis	Enter the <b>pfcp</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">pfcp</a>
Tree	<a href="#">pfcp</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**association** *reference*

Synopsis	Association used for PFCP messages on the capture SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">pfcp</a> <a href="#">association</a> <i>reference</i>
Tree	<a href="#">association</a>
Description	This command links the capture SAP to a PFCP association. This enables CUPS for the capture SAP and any trigger packets are forwarded to the BNG CUPS CPF.
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pfcp</a> <a href="#">association</a> <i>string</i>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**I2-access-id-alias** *string*

Synopsis	String used as Layer 2 access ID for the capture SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">pfcp</a> <a href="#">I2-access-id-alias</a> <i>string</i>
Tree	<a href="#">I2-access-id-alias</a>
Description	This command defines a Layer 2 access ID alias for the capture SAP. It replaces the default underlying port-based or LAG-based Layer 2 access ID. Different capture SAPs on the same underlying port or LAG can have different Layer 2 access ID aliases.

String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## up-resiliency

Synopsis	Enter the <b>up-resiliency</b> context
Context	<b>configure service vpls string capture-sap string pfc up-resiliency</b>
Tree	<a href="#">up-resiliency</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## monitor-oper-group [[oper-group](#)] *reference*

Synopsis	Enter the <b>monitor-oper-group</b> list instance
Context	<b>configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group <i>reference</i></b>
Tree	<a href="#">monitor-oper-group</a>
Description	<p>Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).</p> <p><b>Note:</b> The following is only applicable for the <b>configure service vpls capture-sap</b> context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.</p>
Max. Instances	2
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[oper-group](#)] *reference*

Synopsis	Operational group name
Context	<b>configure service vpls string capture-sap string pfc up-resiliency monitor-oper-group <i>reference</i></b>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure service oper-group string</b>

Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **health-drop** *number*

Synopsis	Number subtracted from the health value per failure
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">pfc</a> <a href="#">up-resiliency monitor-oper-group</a> <a href="#">reference</a> <b>health-drop</b> <i>number</i>
Tree	<a href="#">health-drop</a>
Description	This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0.
Range	1 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe**

Synopsis	Enter the <b>pppoe</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <b>pppoe</b>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	PPP policy
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">pppoe</a> <b>policy</b> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service vpls string capture-sap string pppoe python-policy reference</a>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python python-policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis	Local user database
Context	<b>configure</b> <a href="#">service vpls string capture-sap string pppoe user-db reference</a>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *reference*

Synopsis	RADIUS authentication policy
Context	<b>configure</b> <a href="#">service vpls string capture-sap string radius-auth-policy reference</a>
Tree	<a href="#">radius-auth-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-solicit**

Synopsis	Enter the <b>router-solicit</b> context
Context	<b>configure</b> <a href="#">service vpls string capture-sap string router-solicit</a>
Tree	<a href="#">router-solicit</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis	Local user database
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">router-solicit</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-srrp** *number*

Synopsis	SRRP instance that this capture SAP tracks
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">track-srrp</a> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **trigger-packet**

Synopsis	Enter the <b>trigger-packet</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">trigger-packet</a>
Tree	<a href="#">trigger-packet</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **arp** *boolean*

Synopsis	ARP packet
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">trigger-packet</a> <a href="#">arp</a> <i>boolean</i>
Tree	<a href="#">arp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**data** *boolean*

Synopsis	Data packet
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">trigger-packet</a> <a href="#">data</a> <i>boolean</i>
Tree	<a href="#">data</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp** *boolean*

Synopsis	DHCP packet
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">trigger-packet</a> <a href="#">dhcp</a> <i>boolean</i>
Tree	<a href="#">dhcp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp6** *boolean*

Synopsis	DHCP6 packet
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">trigger-packet</a> <a href="#">dhcp6</a> <i>boolean</i>
Tree	<a href="#">dhcp6</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe** *boolean*

Synopsis	PPPoE packet
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">trigger-packet</a> <a href="#">pppoe</a> <i>boolean</i>
Tree	<a href="#">pppoe</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rtr-solicit** *boolean*

Synopsis	Router-solicit packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">capture-sap</a> <i>string</i> <a href="#">trigger-packet</a> <b>rtr-solicit</b> <i>boolean</i>
Tree	<a href="#">rtr-solicit</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**customer** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">customer</a> <i>reference</i>
Tree	<a href="#">customer</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**endpoint** [[name](#)] *string*

Synopsis	Enter the <b>endpoint</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>

Tree	<a href="#">endpoint</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Service endpoint name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Tree	<a href="#">endpoint</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**block-on-mesh-failure** *boolean*

Synopsis	Enable blocking after the endpoints are in a down state
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <b>block-on-mesh-failure</b> <i>boolean</i>
Tree	<a href="#">block-on-mesh-failure</a>
Default	false
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure service vpls string endpoint string fdb</b>
Tree	<b>fdb</b>
Introduced	16.0.R1
Platforms	All

**auto-learn-mac-protect boolean**

Synopsis	Populate automatically MAC protect list with MAC addresses learned on SDP with this endpoint
Context	<b>configure service vpls string endpoint string fdb auto-learn-mac-protect boolean</b>
Tree	<b>auto-learn-mac-protect</b>
Default	false
Introduced	16.0.R1
Platforms	All

**mac-pinning boolean**

Synopsis	Activate MAC address pinning on this endpoint
Context	<b>configure service vpls string endpoint string fdb mac-pinning boolean</b>
Tree	<b>mac-pinning</b>
Default	false
Introduced	16.0.R1
Platforms	All

**maximum-mac-addresses number**

Synopsis	Maximum number of MAC address entries in the FDB
Context	<b>configure service vpls string endpoint string fdb maximum-mac-addresses number</b>
Tree	<b>maximum-mac-addresses</b>
Description	This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this endpoint.

When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared. Packets with unknown source MAC addresses are still forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.

However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.

When unconfigured, the endpoint uses the global MAC learning limitations.

Range	1 to 511999
Introduced	16.0.R1
Platforms	All

### **protected-src-mac-violation-action** *keyword*

Synopsis	Action when a relearn request for a protected MAC is received on the SDP
Context	<b>configure service vpls string endpoint string fdb protected-src-mac-violation-action keyword</b>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

### **ignore-standby-signaling** *boolean*

Synopsis	Ignore standby-bit received from TLDP peers when performing internal tasks
Context	<b>configure service vpls string endpoint string ignore-standby-signaling boolean</b>
Tree	<a href="#">ignore-standby-signaling</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mc-endpoint** [[mc-ep-id](#)] *number*

Synopsis	Enter the <b>mc-endpoint</b> list instance
Context	<b>configure service vpls string endpoint string mc-endpoint number</b>
Tree	<a href="#">mc-endpoint</a>
Max. Instances	1
Introduced	22.10.R1
Platforms	All

**[mc-ep-id]** *number*

Synopsis	MC-EP ID
Context	<b>configure service vpls string endpoint string mc-endpoint number</b>
Tree	<b>mc-endpoint</b>
Description	This command configures the identifier associated with the MC-EP. The ID must be the same on both MC-EP peers.
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

**mc-ep-peer**

Synopsis	Enter the <b>mc-ep-peer</b> context
Context	<b>configure service vpls string endpoint string mc-endpoint number mc-ep-peer</b>
Tree	<b>mc-ep-peer</b>
Introduced	22.10.R1
Platforms	All

**name** *string*

Synopsis	Name of the MC-EP peer
Context	<b>configure service vpls string endpoint string mc-endpoint number mc-ep-peer name string</b>
Tree	<b>name</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>name</b> or <b>peer-address</b> .
Introduced	22.10.R1
Platforms	All

**peer-address** *reference*

Synopsis	IP address of the MC-EP peer
Context	<b>configure service vpls string endpoint string mc-endpoint number mc-ep-peer peer-address reference</b>

Tree	<a href="#">peer-address</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	The following elements are part of a choice: <b>name</b> or <b>peer-address</b> .
Introduced	22.10.R1
Platforms	All

### **revert-time** (*number | keyword*)

Synopsis	Time to wait before reverting to primary spoke SDP
Context	<b>configure</b> <a href="#">service vpls string endpoint string revert-time</a> ( <i>number   keyword</i> )
Tree	<a href="#">revert-time</a>
Range	1 to 600
Units	seconds
Options	never, immediate
Default	immediate
Introduced	16.0.R1
Platforms	All

### **suppress-standby-signaling** *boolean*

Synopsis	Do not send pseudowire standby bit to TLDP peer when specified spoke SDP is selected as standby
Context	<b>configure</b> <a href="#">service vpls string endpoint string suppress-standby-signaling</a> <i>boolean</i>
Tree	<a href="#">suppress-standby-signaling</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service vpls string eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** *md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*

Synopsis Enter the **mep** list instance

Context **configure** *service vpls string eth-cfm mep md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*

Tree [mep](#)

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis Maintenance Domain (MD) name

Context **configure** *service vpls string eth-cfm mep md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*

Tree [mep](#)

Reference **configure** *eth-cfm domain string*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis Maintenance Association (MA) name

Context **configure** *service vpls string eth-cfm mep md-admin-name* *reference* *ma-admin-name* *reference* *mep-id* *number*

Tree [mep](#)

Reference **configure** *eth-cfm domain string association string*

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis Maintenance Endpoint (MEP) ID



Context	<b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference mep-id number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference mep-id number admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference mep-id number alarm-notification</i>
Tree	<a href="#">alarm-notification</a>
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.  Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
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Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <a href="#">number</a>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <a href="#">number</a>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm</a> <a href="#">boolean</a>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">ccm-ltm-priority</a> <a href="#">number</a>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7

Default	7
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference mep-id number</a> <b>ccm-padding-size</b> <i>number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference mep-id number</a> <b>cfm-vlan-tag</b> <i>string</i>
Tree	<a href="#">cfm-vlan-tag</a>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the <b>vc-type vlan</b> or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">bit-error-threshold</a> <a href="#">number</a>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-pattern**

Synopsis	Enter the <b>test-pattern</b> context
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Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number eth-test test-pattern</a>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **crc-tlv** *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number eth-test test-pattern</a> <b>crc-tlv</b> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number eth-test test-pattern</a> <b>pattern</b> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id number</a> <b>grace</b>
Tree	<a href="#">grace</a>

Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-ed

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</a>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## max-rx-defect-window *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</a>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## priority *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-ed boolean**

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</a>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-ed boolean**

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</a>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service vpls string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-vsm-grace boolean**

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
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Context	<b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id number grace eth-vsm-grace rx-eth-vsm-grace</b> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id number grace eth-vsm-grace tx-eth-vsm-grace</b> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards. The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED). When configured to <b>false</b> , the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure service vpls string eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id number low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon



Default	mac-rem-err-xcon
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <b>one-way-delay-threshold</b> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **etree** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use VPLS service as an E-Tree VPLS
Context	<b>configure</b> <a href="#">service vpls string</a> <b>etree</b> <i>boolean</i>
Tree	<a href="#">etree</a>

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Default	false
Introduced	16.0.R1
Platforms	All

## **fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure service vpls string fdb</b>
Tree	<b>fdb</b>
Introduced	16.0.R1
Platforms	All

## **discard-unknown boolean**

Synopsis	Discard packets with unknown destination MAC addresses
Context	<b>configure service vpls string fdb discard-unknown boolean</b>
Tree	<b>discard-unknown</b>
Default	false
Introduced	16.0.R1
Platforms	All

## **mac-learning**

Synopsis	Enter the <b>mac-learning</b> context
Context	<b>configure service vpls string fdb mac-learning</b>
Tree	<b>mac-learning</b>
Introduced	16.0.R1
Platforms	All

## **aging boolean**

Synopsis	Enable aging of MAC addresses
Context	<b>configure service vpls string fdb mac-learning aging boolean</b>
Tree	<b>aging</b>
Default	true

Introduced	16.0.R1
Platforms	All

### **learning** *boolean*

Synopsis	Enable learning of new MAC addresses
Context	<b>configure service vpls string fdb mac-learning learning boolean</b>
Tree	<a href="#">learning</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **local-age-time** *number*

Synopsis	Aging time for locally learned MAC addresses
Context	<b>configure service vpls string fdb mac-learning local-age-time number</b>
Tree	<a href="#">local-age-time</a>
Description	<p>This command configures the aging time for locally learned MAC addresses in the forwarding database (FDB) for the Virtual Private LAN Service (VPLS) instance. In a VPLS service, MAC addresses are associated with a Service Access Point (SAP) or a Service Distribution Point (SDP). MACs associated with a SAP are classified as local MACs, and MACs associated with an SDP are remote MACs. In each VPLS service instance, there are independent aging timers for locally learned MAC and remotely learned MAC entries in the FDB.</p> <p>As in a Layer 2 switch, learned MACs can be aged out if no packets are sourced from the MAC address for a period of time (the aging time).</p>
Range	60 to 86400
Default	300
Introduced	16.0.R1
Platforms	All

### **remote-age-time** *number*

Synopsis	Aging time for remotely learned MAC addresses
Context	<b>configure service vpls string fdb mac-learning remote-age-time number</b>
Tree	<a href="#">remote-age-time</a>
Description	<p>This command configures the aging time for remotely learned MAC addresses in the forwarding database (FDB) for the Virtual Private LAN Service (VPLS) instance. In a</p>

VPLS service, MAC addresses are associated with a Service Access Point (SAP) or a Service Distribution Point (SDP). MACs associated with a SAP are classified as local MACs, and MACs associated with an SDP are remote MACs. In each VPLS service instance, there are independent aging timers for locally learned MAC and remotely learned MAC entries in the FDB.

As in a Layer 2 switch, learned MACs can be aged out if no packets are sourced from the MAC address for a period of time (the aging time). To reduce the amount of signaling required between switches, configure this time larger than the **local-age-time** command.

Range	60 to 86400
Default	900
Introduced	16.0.R1
Platforms	All

### mac-move

Synopsis	Enter the <b>mac-move</b> context
Context	<b>configure service vpls string fdb mac-move</b>
Tree	<b>mac-move</b>
Introduced	16.0.R1
Platforms	All

### admin-state *keyword*

Synopsis	Administrative state of MAC move
Context	<b>configure service vpls string fdb mac-move admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### hold-down-time *number*

Synopsis	Wait time before re-enabling disabled SAP
Context	<b>configure service vpls string fdb mac-move hold-down-time number</b>
Tree	<b>hold-down-time</b>

Range	0 to 600
Units	seconds
Default	10
Introduced	19.7.R1
Platforms	All

### **move-frequency** *number*

Synopsis	Maximum rate MACs can be re-learned in the VPLS service
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb mac-move</a> <a href="#">move-frequency</a> <i>number</i>
Tree	<a href="#">move-frequency</a>
Range	1 to 10
Default	2
Introduced	16.0.R1
Platforms	All

### **primary-cumulative-factor** *number*

Synopsis	Factor for MAC-relearn periods for MAC-relearn rate
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb mac-move</a> <a href="#">primary-cumulative-factor</a> <i>number</i>
Tree	<a href="#">primary-cumulative-factor</a>
Range	3 to 10
Default	3
Introduced	19.7.R1
Platforms	All

### **retry-count** (*number* | *keyword*)

Synopsis	Number of retries for re-enabling the SAP or SDP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb mac-move</a> <a href="#">retry-count</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">retry-count</a>
Range	1 to 255
Options	unlimited
Default	3
Introduced	16.0.R1

Platforms All

### **sap** [[sap-id](#)] *reference*

Synopsis Enter the **sap** list instance

Context **configure** [service vpls string fdb mac-move sap reference](#)

Tree [sap](#)

Introduced 19.7.R1

Platforms All

### **[sap-id]** *reference*

Synopsis SAP identifier

Context **configure** [service vpls string fdb mac-move sap reference](#)

Tree [sap](#)

Reference **configure** [service vpls string sap string](#)

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms All

### **level** *keyword*

Synopsis Primary or secondary port level

Context **configure** [service vpls string fdb mac-move sap reference level keyword](#)

Tree [level](#)

Options primary, secondary

Notes This element is mandatory.

Introduced 19.7.R1

Platforms All

### **secondary-cumulative-factor** *number*

Synopsis Number of periods to measure mac-relearn rate

Context **configure** [service vpls string fdb mac-move secondary-cumulative-factor number](#)

Tree [secondary-cumulative-factor](#)

Range	2 to 9
Default	2
Introduced	19.7.R1
Platforms	All

### **spoke-sdp** [[sdp-bind-id](#)] *reference*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">fdb</a> <a href="#">mac-move</a> <a href="#">spoke-sdp</a> <i>reference</i>
Tree	<a href="#">spoke-sdp</a>
Introduced	19.7.R1
Platforms	All

### **[sdp-bind-id]** *reference*

Synopsis	SDP binding ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">fdb</a> <a href="#">mac-move</a> <a href="#">spoke-sdp</a> <i>reference</i>
Tree	<a href="#">spoke-sdp</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

### **level** *keyword*

Synopsis	Primary or secondary port level
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">fdb</a> <a href="#">mac-move</a> <a href="#">spoke-sdp</a> <i>reference</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Options	primary, secondary
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	All

**mac-subnet-length** *number*

Synopsis	Number of bits performing MAC learning or MAC switching
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb mac-subnet-length</a> <i>number</i>
Tree	<a href="#">mac-subnet-length</a>
Range	24 to 48
Default	48
Introduced	16.0.R1
Platforms	All

**selective-learning** *boolean*

Synopsis	Allocate FDB entries on selectively learned line cards
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb selective-learning</a> <i>boolean</i>
Tree	<a href="#">selective-learning</a>
Default	false
Introduced	16.0.R1
Platforms	All

**static-mac**

Synopsis	Enter the <b>static-mac</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb static-mac</a>
Tree	<a href="#">static-mac</a>
Introduced	16.0.R1
Platforms	All

**mac** [[mac-address](#)] *string*

Synopsis	Enter the <b>mac</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb static-mac</a> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	All



**[mac-address] string**

Synopsis	Static MAC address to SAP/SDP-binding or black-hole
Context	<b>configure service vpls string fdb static-mac mac string</b>
Tree	<b>mac</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**blackhole****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a static FDB entry for the MAC address to black-hole traffic
Context	<b>configure service vpls string fdb static-mac mac string blackhole</b>
Tree	<b>blackhole</b>
Notes	The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

**endpoint reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Endpoint associated with the MAC
Context	<b>configure service vpls string fdb static-mac mac string endpoint reference</b>
Tree	<b>endpoint</b>
Reference	<b>configure service vpls string endpoint string</b>
Notes	The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

## mesh-sdp *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mesh SDP bind associated with this MAC
Context	<b>configure service vpls string fdb static-mac mac string mesh-sdp reference</b>
Tree	<b>mesh-sdp</b>
Reference	<b>configure service vpls string mesh-sdp string</b>
Notes	The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

## monitor *keyword*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Entity to be monitored to decide whether this entry can be installed in the FDB
Context	<b>configure service vpls string fdb static-mac mac string monitor keyword</b>
Tree	<b>monitor</b>
Options	none, forward-status
Default	none
Introduced	16.0.R1
Platforms	All

## sap *reference*

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SAP associated with this MAC
Context	<b>configure service vpls string fdb static-mac mac string sap reference</b>

Tree	<a href="#">sap</a>
Reference	<b>configure service vpls string sap string</b>
Notes	The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

### **spoke-sdp** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Spoke SDP bind associated with this MAC
Context	<b>configure service vpls string fdb static-mac mac string spoke-sdp reference</b>
Tree	<a href="#">spoke-sdp</a>
Reference	<b>configure service vpls string spoke-sdp string</b>
Notes	The following elements are part of a mandatory choice: <b>blackhole</b> , <b>endpoint</b> , <b>mesh-sdp</b> , <b>sap</b> , or <b>spoke-sdp</b> .
Introduced	16.0.R1
Platforms	All

### **table**

Synopsis	Enter the <b>table</b> context
Context	<b>configure service vpls string fdb table</b>
Tree	<a href="#">table</a>
Introduced	16.0.R1
Platforms	All

### **high-wmark** *number*

Synopsis	High watermark for the FDB table
Context	<b>configure service vpls string fdb table high-wmark number</b>
Tree	<a href="#">high-wmark</a>
Range	0 to 100

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Default	95
Introduced	16.0.R1
Platforms	All

### **low-wmark** *number*

Synopsis	Low watermark for the FDB table
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb table</a> <b>low-wmark</b> <i>number</i>
Tree	<a href="#">low-wmark</a>
Range	0 to 100
Default	90
Introduced	16.0.R1
Platforms	All

### **size** *number*

Synopsis	Maximum MAC entries in the FDB
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">fdb table</a> <b>size</b> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 511999
Default	250
Introduced	16.0.R1
Platforms	All

### **gsmp**

Synopsis	Enter the <b>gsmp</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>gsmp</b>
Tree	<a href="#">gsmp</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of GSMP
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Context	<b>configure service vpls string gsmp admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **group [name] string**

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure service vpls string gsmp group string</b>
Tree	<b>group</b>
Max. Instances	1024
Introduced	16.0.R1
Platforms	All

### **[name] string**

Synopsis	GSMP group name
Context	<b>configure service vpls string gsmp group string</b>
Tree	<b>group</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the GSMP group
Context	<b>configure service vpls string gsmp group string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

## ancp

Synopsis Enter the **ancp** context  
 Context **configure** [service vpls string](#) [gsmp group string](#) [ancp](#)  
 Tree [ancp](#)  
 Introduced 16.0.R1  
 Platforms All

## dynamic-topology-discovery *boolean*

Synopsis Enable the ANCP dynamic topology discovery capability  
 Context **configure** [service vpls string](#) [gsmp group string](#) [ancp dynamic-topology-discovery](#) [boolean](#)  
 Tree [dynamic-topology-discovery](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

## oam *boolean*

Synopsis Enable GSMP ANCP OAM capability at startup of GSMP connection  
 Context **configure** [service vpls string](#) [gsmp group string](#) [ancp oam](#) [boolean](#)  
 Tree [oam](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## description *string*

Synopsis Text description  
 Context **configure** [service vpls string](#) [gsmp group string](#) [description](#) [string](#)  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1

Platforms All

### **hold-multiplier** *number*

Synopsis Hold-multiplier for the GSMP connections in this group  
Context **configure** [service vpls](#) *string* [gsmp group](#) *string* **hold-multiplier** *number*  
Tree [hold-multiplier](#)  
Range 1 to 100  
Default 3  
Introduced 16.0.R1  
Platforms All

### **idle-filter** *boolean*

Synopsis Filter ANCP messages from IDLE DSL lines  
Context **configure** [service vpls](#) *string* [gsmp group](#) *string* **idle-filter** *boolean*  
Tree [idle-filter](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **keepalive** *number*

Synopsis Keepalive value for the GSMP connections in this group  
Context **configure** [service vpls](#) *string* [gsmp group](#) *string* **keepalive** *number*  
Tree [keepalive](#)  
Range 1 to 25  
Units seconds  
Default 10  
Introduced 16.0.R1  
Platforms All

### **neighbor** [[remote-address](#)] *string*

Synopsis Enter the **neighbor** list instance

Context	<b>configure service vpls string gsmp group string neighbor string</b>
Tree	<b>neighbor</b>
Introduced	16.0.R1
Platforms	All

**[remote-address] string**

Synopsis	GSMP neighbor remote IP address
Context	<b>configure service vpls string gsmp group string neighbor string</b>
Tree	<b>neighbor</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the GSMP neighbor
Context	<b>configure service vpls string gsmp group string neighbor string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure service vpls string gsmp group string neighbor string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All



## local-address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Restrict connections to this local address only within the service running ANCP
Context	<b>configure</b> <i>service vpls string</i> <i>gsmg group string</i> <i>neighbor string</i> <b>local-address</b> <i>string</i>
Tree	<b>local-address</b>
Introduced	16.0.R1
Platforms	All

## priority-marking

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>priority-marking</b> context
Context	<b>configure</b> <i>service vpls string</i> <i>gsmg group string</i> <i>neighbor string</i> <b>priority-marking</b>
Tree	<b>priority-marking</b>
Introduced	16.0.R1
Platforms	All

## dscp *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DSCP that is used while remarking the in profile packets
Context	<b>configure</b> <i>service vpls string</i> <i>gsmg group string</i> <i>neighbor string</i> <b>priority-marking</b> <b>dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .

Introduced	16.0.R1
Platforms	All

### **prec** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precedence priority marking
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">gsmg group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">priority-marking</a> <b>prec</b> <i>number</i>
Tree	<a href="#">prec</a>
Range	0 to 7
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

### **persistence** *boolean*

Synopsis	Store DSL line information when the GSMP connection terminates
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">gsmg group</a> <i>string</i> <a href="#">persistence</a> <i>boolean</i>
Tree	<a href="#">persistence</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **igmp-host-tracking**

Synopsis	Enter the <b>igmp-host-tracking</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-host-tracking</a>
Tree	<a href="#">igmp-host-tracking</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**expiry-time** *number*

Synopsis	Time that the system continues to track inactive hosts
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">expiry-time</a> <i>number</i>
Tree	<a href="#">expiry-time</a>
Range	1 to 65535
Units	seconds
Default	260
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of snooping
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced 16.0.R1  
Platforms All

## evpn-proxy

Synopsis Enter the **evpn-proxy** context  
Context **configure service vpls string igmp-snooping evpn-proxy**  
Tree [evpn-proxy](#)  
Introduced 20.10.R1  
Platforms All

## admin-state *keyword*

Synopsis Administrative state of EVPN proxy  
Context **configure service vpls string igmp-snooping evpn-proxy admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 20.10.R1  
Platforms All

## mvr

Synopsis Enter the **mvr** context  
Context **configure service vpls string igmp-snooping mvr**  
Tree [mvr](#)  
Introduced 16.0.R1  
Platforms All

## admin-state *keyword*

Synopsis Administrative state of MVR  
Context **configure service vpls string igmp-snooping mvr admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable

---

Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">igmp-snooping mvr description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**group-policy** *string*

Synopsis	Policy that applies MVR
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">igmp-snooping mvr group-policy string</a>
Tree	<a href="#">group-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">igmp-snooping query-interval number</a>
Tree	<a href="#">query-interval</a>
Range	1 to 65535
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

**query-source-address** (*keyword* | *ipv4-address*)

Synopsis	Source address for IGMP queries
Context	<b>configure service vpls string igmp-snooping query-source-address</b> ( <i>keyword</i>   <i>ipv4-address</i> )
Tree	<a href="#">query-source-address</a>
Options	system
Default	system
Introduced	16.0.R1
Platforms	All

**report-source-address** *string*

Synopsis	Source IP address used when generating IGMP reports
Context	<b>configure service vpls string igmp-snooping report-source-address</b> <i>string</i>
Tree	<a href="#">report-source-address</a>
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure service vpls string igmp-snooping robust-count</b> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	1 to 255
Default	2
Introduced	16.0.R1
Platforms	All

**ignore-l2vpn-mtu-mismatch** *boolean*

Synopsis	Ignore the L2 VPN MTU mismatch with local service MTU
Context	<b>configure service vpls string ignore-l2vpn-mtu-mismatch</b> <i>boolean</i>
Tree	<a href="#">ignore-l2vpn-mtu-mismatch</a>
Description	When configured to <b>true</b> , the router does not check the value of the Layer 2 MTU in the Layer2 Info Extended Community received in a BGP update message against the local

service MTU or locally signaled MTU. It may, therefore, bring up the BGP VPLS service regardless of any MTU mismatch.

When configured to **false**, an MTU mismatch prevents the system from bringing up a BGP-VPLS service.

Default	false
Introduced	22.2.R1
Platforms	All

### **interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure service vpls string interface string</b>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure service vpls string interface string</b>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure service vpls string interface string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">hold-time</a>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">hold-time</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

### **down**

Synopsis	Enter the <b>down</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a>
Tree	<a href="#">down</a>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All



**init-only** *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">init-only</a> <i>boolean</i>
Tree	<a href="#">init-only</a>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

**up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a> <a href="#">seconds</a> <i>number</i>

Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

## static-neighbor [[ipv4-address](#)] *string*

Synopsis	Enter the <b>static-neighbor</b> list instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery</a> <a href="#">static-neighbor string</a>
Tree	<a href="#">static-neighbor</a>
Introduced	16.0.R1
Platforms	All

## [\[ipv4-address\]](#) *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string</a> <a href="#">ipv4 neighbor-discovery</a> <a href="#">static-neighbor string</a>

Tree	<a href="#">static-neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **mac-address** *string*

Synopsis	MAC address for the static neighbor
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string ipv4 neighbor-discovery static-neighbor string mac-address string</a>
Tree	<a href="#">mac-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	ARP timeout value to determine how long an ARP entry remains in the ARP cache
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string ipv4 neighbor-discovery timeout number</a>
Tree	<a href="#">timeout</a>
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

### **primary**

Synopsis	Enable the <b>primary</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string ipv4 primary</a>
Tree	<a href="#">primary</a>
Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	IP address of the interface
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string ipv4 primary address string</a>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string ipv4 primary prefix-length number</a>
Tree	<a href="#">prefix-length</a>
Range	0 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **mac** *string*

Synopsis	MAC address for the interface
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">interface string mac string</a>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	All

### **isid-policy**

Synopsis	Enter the <b>isid-policy</b> context
Context	<b>configure</b> <a href="#">service vpls string isid-policy</a>
Tree	<a href="#">isid-policy</a>
Introduced	19.10.R1
Platforms	All

**entry** [*range-entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">isid-policy entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	19.10.R1
Platforms	All

**[range-entry-id]** *number*

Synopsis	ISID policy entry ID
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">isid-policy entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**advertise-local** *boolean*

Synopsis	Advertise locally-defined I-VPLS ISIDs or static ISIDs
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">isid-policy entry</a> <i>number</i> <a href="#">advertise-local</a> <i>boolean</i>
Tree	<a href="#">advertise-local</a>
Default	true
Introduced	19.10.R1
Platforms	All

**range**

Synopsis	Enter the <b>range</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">isid-policy entry</a> <i>number</i> <a href="#">range</a>
Tree	<a href="#">range</a>
Introduced	19.10.R1
Platforms	All

### **end number**

Synopsis	Upper bound of the ISID range
Context	<b>configure service vpls string isid-policy entry number range end number</b>
Tree	<b>end</b>
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the ISID range
Context	<b>configure service vpls string isid-policy entry number range start number</b>
Tree	<b>start</b>
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

### **use-def-mcast boolean**

Synopsis	Use default multicast tree to propagate ISIS range
Context	<b>configure service vpls string isid-policy entry number use-def-mcast boolean</b>
Tree	<b>use-def-mcast</b>
Default	false
Introduced	19.10.R1
Platforms	All

### **load-balancing**

Synopsis	Enter the <b>load-balancing</b> context
Context	<b>configure service vpls string load-balancing</b>
Tree	<b>load-balancing</b>
Introduced	16.0.R1
Platforms	All

**lbl-eth-or-ip-l4-teid** *boolean*

Synopsis	Enable hashing of MPLS ethernet and IP packets on SAPs
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">lbl-eth-or-ip-l4-teid</a> <i>boolean</i>
Tree	<a href="#">lbl-eth-or-ip-l4-teid</a>
Description	When configured to <b>true</b> , this command enables hashing of MPLS Ethernet and MPLS IP packets received on the Epipe and VPLS service SAP using the MPLS labels, the inner IP addresses, the port numbers, and the GTP TEID field, if read by the system. This capability is supported on line cards that are FP4-based and later.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**per-service-hashing** *boolean*

Synopsis	Enable per-service hashing for Ethernet services
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">per-service-hashing</a> <i>boolean</i>
Tree	<a href="#">per-service-hashing</a>
Default	false
Introduced	16.0.R1
Platforms	All

**spi-load-balancing** *boolean*

Synopsis	Allow use of SPI (Security Parameter Index) in hashing for ESP/AH encrypted IPv4/IPv6 traffic
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i>
Tree	<a href="#">spi-load-balancing</a>
Default	false
Introduced	16.0.R1
Platforms	All

**teid-load-balancing** *boolean*

Synopsis	Include TEID in hashing algorithm for GTP-U/C encapsulated traffic
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">teid-load-balancing</a> <i>boolean</i>
Tree	<a href="#">teid-load-balancing</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **m-vpls** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Specify whether this is a management VPLS
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>m-vpls</b> <i>boolean</i>
Tree	<a href="#">m-vpls</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mac-flush**

Synopsis	Enter the <b>mac-flush</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mac-flush</b>
Tree	<a href="#">mac-flush</a>
Introduced	16.0.R1
Platforms	All

### **tldp**

Synopsis	Enter the <b>tldp</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mac-flush</b> <b>tldp</b>
Tree	<a href="#">tldp</a>
Introduced	16.0.R1
Platforms	All

### **propagate** *boolean*

Synopsis	Propagate MAC flush messages received from the T-LDP
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Context	<b>configure service vpls string mac-flush tldp propagate boolean</b>
Tree	<a href="#">propagate</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **send-on-failure boolean**

Synopsis	Send MAC withdraw message on SAP/Spoke-SDP failure
Context	<b>configure service vpls string mac-flush tldp send-on-failure boolean</b>
Tree	<a href="#">send-on-failure</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mac-protect**

Synopsis	Enter the <b>mac-protect</b> context
Context	<b>configure service vpls string mac-protect</b>
Tree	<a href="#">mac-protect</a>
Introduced	19.10.R1
Platforms	All

### **mac [mac-address] string**

Synopsis	Add a list entry for <b>mac</b>
Context	<b>configure service vpls string mac-protect mac string</b>
Tree	<a href="#">mac</a>
Introduced	19.10.R1
Platforms	All

### **[mac-address] string**

Synopsis	Protected MAC address
Context	<b>configure service vpls string mac-protect mac string</b>

Tree	<a href="#">mac</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **mcast-ipv6-snooping-scope** *keyword*

Synopsis	IPv6 multicast snooping scope
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>mcast-ipv6-snooping-scope</b> <i>keyword</i>
Tree	<a href="#">mcast-ipv6-snooping-scope</a>
Options	sg-based, mac-based
Default	mac-based
Introduced	16.0.R1
Platforms	All

### **mcr-default-gtw**

Synopsis	Enter the <b>mcr-default-gtw</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>mcr-default-gtw</b>
Tree	<a href="#">mcr-default-gtw</a>
Introduced	16.0.R1
Platforms	All

### **ip** *string*

Synopsis	Multi-chassis ring default gateway IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>mcr-default-gtw</b> <b>ip</b> <i>string</i>
Tree	<a href="#">ip</a>
Introduced	16.0.R1
Platforms	All

### **mac** *string*

Synopsis	Multi-chassis ring default gateway MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <b>mcr-default-gtw</b> <b>mac</b> <i>string</i>

Tree	<a href="#">mac</a>
Default	00:00:00:00:00:00
Introduced	16.0.R1
Platforms	All

### **mesh-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Enter the <b>mesh-sdp</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mesh-sdp</b> <i>string</i>
Tree	<a href="#">mesh-sdp</a>
Introduced	16.0.R1
Platforms	All

### **[sdp-bind-id]** *string*

Synopsis	SDP binding ID
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mesh-sdp</b> <i>string</i>
Tree	<a href="#">mesh-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **accounting-policy** *reference*

Synopsis	Policy to collect accounting statistics
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>accounting-policy</b> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <b>accounting-policy</b> <i>number</i>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the SDP binding to the service
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Context	<b>configure service vpls string mesh-sdp string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure service vpls string mesh-sdp string bfd</b>
Tree	<b>bfd</b>
Introduced	21.2.R1
Platforms	All

## **bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure service vpls string mesh-sdp string bfd bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Introduced	21.2.R1
Platforms	All

## **encap keyword**

Synopsis	BFD encapsulation used on the SDP binding
Context	<b>configure service vpls string mesh-sdp string bfd bfd-liveness encap keyword</b>
Tree	<b>encap</b>
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template associated with the SDP binding
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">bfd bfd-template</a> <i>reference</i>
Tree	<a href="#">bfd-template</a>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Reference	<b>configure</b> <a href="#">bfd bfd-template</a> <i>string</i>
Introduced	21.2.R1
Platforms	All

**collect-stats** *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

**control-word** *boolean*

Synopsis	Use the control word as preferred
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">control-word</a> <i>boolean</i>
Tree	<a href="#">control-word</a>
Default	false
Introduced	16.0.R1
Platforms	All

**cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">cpu-protection</a>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context

Context **configure service vpls string mesh-sdp string cpu-protection eth-cfm-monitoring**

Tree [eth-cfm-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates

Context **configure service vpls string mesh-sdp string cpu-protection eth-cfm-monitoring aggregate**

Tree [aggregate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate

Context **configure service vpls string mesh-sdp string cpu-protection eth-cfm-monitoring car**

Tree [car](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis Monitor MAC for CPU protection

Context **configure service vpls string mesh-sdp string cpu-protection mac-monitoring**

Tree [mac-monitoring](#)

Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **policy-id** *reference*

Synopsis CPM protection policy  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [cpu-protection](#) [policy-id](#) *reference*  
 Tree [policy-id](#)  
 Reference **configure** [system security](#) [cpu-protection](#) [policy](#) *number*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **description** *string*

Synopsis Text description  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **dhcp**

Synopsis Enter the **dhcp** context  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [dhcp](#)  
 Tree [dhcp](#)  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [dhcp](#) [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1

Platforms All

### **snoop** *boolean*

Synopsis Allow DHCP snooping of DHCP messages on the SAP or SDP  
Context **configure** [service vpls string](#) [mesh-sdp string](#) [dhcp snoop boolean](#)  
Tree [snoop](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **egress**

Synopsis Enter the **egress** context  
Context **configure** [service vpls string](#) [mesh-sdp string](#) [egress](#)  
Tree [egress](#)  
Introduced 16.0.R1  
Platforms All

### **filter**

Synopsis Enter the **filter** context  
Context **configure** [service vpls string](#) [mesh-sdp string](#) [egress filter](#)  
Tree [filter](#)  
Introduced 16.0.R1  
Platforms All

### **ip** *reference*

Synopsis IPv4 filter policy name  
Context **configure** [service vpls string](#) [mesh-sdp string](#) [egress filter ip reference](#)  
Tree [ip](#)  
Reference **configure** [filter ip-filter string](#)  
Introduced 16.0.R1  
Platforms All



### ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress filter ipv6 reference</a>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter string</a>
Introduced	16.0.R1
Platforms	All

### mac reference

Synopsis	MAC filter policy name
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress filter mac reference</a>
Tree	<a href="#">mac</a>
Reference	<b>configure</b> <a href="#">filter mac-filter string</a>
Introduced	16.0.R1
Platforms	All

### mfib-allowed-mda-destinations

Synopsis	Enter the <b>mfib-allowed-mda-destinations</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress mfib-allowed-mda-destinations</a>
Tree	<a href="#">mfib-allowed-mda-destinations</a>
Introduced	16.0.R4
Platforms	All

### mda [[mda-id](#)] *string*

Synopsis	Add a list entry for <b>mda</b>
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress mfib-allowed-mda-destinations</a> <a href="#">mda string</a>
Tree	<a href="#">mda</a>
Introduced	16.0.R4
Platforms	All

**[mda-id] string**

Synopsis	MFIB allowed MDA destination
Context	<b>configure service vpls string mesh-sdp string egress mfib-allowed-mda-destinations mda string</b>
Tree	<b>mda</b>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service vpls string mesh-sdp string egress qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	All

**network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure service vpls string mesh-sdp string egress qos network</b>
Tree	<b>network</b>
Introduced	16.0.R1
Platforms	All

**policy-name reference**

Synopsis	Network policy ID
Context	<b>configure service vpls string mesh-sdp string egress qos network policy-name reference</b>
Tree	<b>policy-name</b>
Reference	<b>configure qos network string</b>
Introduced	16.0.R1
Platforms	All

## port-redirect-group

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress qos network</a> <a href="#">port-redirect-group</a>
Tree	<a href="#">port-redirect-group</a>
Introduced	16.0.R1
Platforms	All

## group-name *reference*

Synopsis	Name of the egress port queue group
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress qos network</a> <a href="#">port-redirect-group</a> <a href="#">group-name reference</a>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">egress queue-group string</a>
Introduced	16.0.R1
Platforms	All

## instance *number*

Synopsis	Queue-group instance ID
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress qos network</a> <a href="#">port-redirect-group</a> <a href="#">instance number</a>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">egress</a> <a href="#">vc-label number</a>
Tree	<a href="#">vc-label</a>

Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

## entropy-label

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string entropy-label</a>
Tree	<a href="#">entropy-label</a>
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

## eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## collect-lmm-fc-stats

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats</a>
Tree	<a href="#">collect-lmm-fc-stats</a>
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc keyword**

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats fc keyword</b>
Tree	<b>fc</b>
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc-in-profile keyword**

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure service vpls string mesh-sdp string eth-cfm collect-lmm-fc-stats fc-in-profile keyword</b>
Tree	<b>fc-in-profile</b>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-stats</a> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ais**

Synopsis	Enable the <b>ais</b> context
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Context	<b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais</b>
Tree	<b>ais</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **client-meg-level** *number*

Synopsis	Client MEG level for AIS message generation
Context	<b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais client-meg-level</b> <i>number</i>
Tree	<b>client-meg-level</b>
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interface-support** *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais interface-support</b> <i>boolean</i>
Tree	<b>interface-support</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*

Synopsis	Transmission interval for AIS messages
Context	<b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1   60
Units	seconds
Default	1



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis	Priority of the AIS messages generated by the node
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>alarm-notification</b>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis Time that must expire before an FNG alarm is raised

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification fng-alarm-time](#) *number*

Tree [fng-alarm-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis Time that must expire before an FNG alarm is reset

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [alarm-notification fng-reset-time](#) *number*

Tree [fng-reset-time](#)

Range 250 | 500 | 1000

Units centiseconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis Generate CCM messages

Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm mep md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [ccm](#) *boolean*

Tree [ccm](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>cfm-vlan-tag</b> <i>string</i>
Tree	<a href="#">cfm-vlan-tag</a>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the <b>vc-type vlan</b> or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or

MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.

String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## csf

Synopsis	Enable the <b>csf</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>csf</b>
Tree	<a href="#">csf</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>csf</b> <b>multiplier</b> <i>decimal-number</i>
Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**direction** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	<b>configure</b> <b>service</b> <b>vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>direction</b> <i>keyword</i>
Tree	<b>direction</b>
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <b>service</b> <b>vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b>
Tree	<b>eth-test</b>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <b>service</b> <b>vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b> <b>bit-error-threshold</b> <i>number</i>
Tree	<b>bit-error-threshold</b>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**test-pattern**

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</a>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**crc-tlv boolean**

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean</a>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**pattern keyword**

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</a>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fault-propagation** *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>fault-propagation</b> <i>keyword</i>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>grace</b>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <b>eth-ed</b>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <b>max-rx-defect-window</b> <i>number</i>
Tree	<a href="#">max-rx-defect-window</a>

Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority number**

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed priority number</b>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed boolean**

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</b>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed boolean**

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</b>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## eth-vsm-grace

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean</a>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean</a>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.  The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers.

The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lbm-svc-act-responder** *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <b>lbm-svc-act-responder</b> <i>boolean</i>
Tree	<a href="#">lbm-svc-act-responder</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">mesh-sdp string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <b>mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP. When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis Threshold time limit for the one-way delay test  
 Context **configure** [service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number](#)  
 Tree [one-way-delay-threshold](#)  
 Range 0 to 600  
 Units seconds  
 Default 3  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **primary-vlan** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MEP provisioned using MA primary VLAN ID  
 Context **configure** [service vpls string mesh-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean](#)  
 Tree [primary-vlan](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mip** [primary-vlan](#) (*number* | *keyword*)

Synopsis Enter the **mip** list instance  
 Context **configure** [service vpls string mesh-sdp string eth-cfm mip primary-vlan \(number | keyword\)](#)  
 Tree [mip](#)  
 Introduced 21.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**primary-vlan** (*number* | *keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mip</a> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mip</a>
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mip</a> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">cfm-vlan-tag</a> <i>string</i>
Tree	<a href="#">cfm-vlan-tag</a>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mac-address** *string*

Synopsis	MAC address of the MIP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm mip</a> <a href="#">primary-vlan</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **snelch- ingress-ctag-levels *number***

Synopsis	Snelch levels using additional VLAN C-Tag space
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">snelch- ingress-ctag-levels</a> <i>number</i>
Tree	<a href="#">snelch- ingress-ctag-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **snelch- ingress-levels *number***

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">snelch- ingress-levels</a> <i>number</i>
Tree	<a href="#">snelch- ingress-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vmep-filter** *boolean*

Synopsis Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [eth-cfm vmep-filter](#) *boolean*  
 Tree [vmep-filter](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **etree-leaf** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable etree leaf access-circuit status  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [etree-leaf](#) *boolean*  
 Tree [etree-leaf](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **etree-root-leaf-tag** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Status for E-tree root leaf tag  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [etree-root-leaf-tag](#) *boolean*  
 Tree [etree-root-leaf-tag](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

**fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <b>fdb</b>
Tree	<a href="#">fdb</a>
Introduced	16.0.R1
Platforms	All

**auto-learn-mac-protect** *boolean*

Synopsis	Enable automatic population of the MAC protect list
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <b>fdb</b> <a href="#">auto-learn-mac-protect</a> <i>boolean</i>
Tree	<a href="#">auto-learn-mac-protect</a>
Default	false
Introduced	16.0.R4
Platforms	All

**auto-learn-mac-protect-exclude-list** *reference*

Synopsis	Referenced MAC protect exclusion list name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <b>fdb</b> <a href="#">auto-learn-mac-protect-exclude-list</a> <i>reference</i>
Tree	<a href="#">auto-learn-mac-protect-exclude-list</a>
Description	This command references the name of a MAC protect exclusion list.  Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.  An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.
Reference	<b>configure</b> <a href="#">service</a> <a href="#">mac-list</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

**mac-pinning** *boolean*

Synopsis	MAC address pinning in active status
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Context	<b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>fdb mac-pinning</b> <i>boolean</i>
Tree	<a href="#">mac-pinning</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **protected-src-mac-violation-action** *keyword*

Synopsis	Action to take whenever a relearn request for a protected MAC is received
Context	<b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>fdb protected-src-mac-violation-action</b> <i>keyword</i>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R4
Platforms	All

### **force-vc-forwarding** *keyword*

Synopsis	VC forwarding action
Context	<b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>force-vc-forwarding</b> <i>keyword</i>
Tree	<a href="#">force-vc-forwarding</a>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

### **hash-label**

Synopsis	Enable the <b>hash-label</b> context
Context	<b>configure service vpls</b> <i>string</i> <b>mesh-sdp</b> <i>string</i> <b>hash-label</b>
Tree	<a href="#">hash-label</a>
Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i> .
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1



Platforms All

## signal-capability

Synopsis Signal hash label capability to the remote PE

Context **configure service vpls string mesh-sdp string hash-label signal-capability**

Tree [signal-capability](#)

Description When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.

The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.

Introduced 16.0.R1

Platforms All

## igmp-snooping

Synopsis Enter the **igmp-snooping** context

Context **configure service vpls string mesh-sdp string igmp-snooping**

Tree [igmp-snooping](#)

Introduced 16.0.R1

Platforms All

## fast-leave *boolean*

Synopsis Allow IGMP fast leave processing

Context **configure service vpls string mesh-sdp string igmp-snooping fast-leave *boolean***

Tree [fast-leave](#)

Default false

Introduced 16.0.R1

Platforms All

## import-policy *reference*

Synopsis Import policy that filters IGMP packets

Context **configure service vpls string mesh-sdp string igmp-snooping import-policy *reference***

Tree [import-policy](#)

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Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **maximum-number-group-sources** *number*

Synopsis	Maximum group source combinations
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

### **maximum-number-groups** *number*

Synopsis	Maximum groups allowed
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

### **maximum-number-sources** *number*

Synopsis	Maximum sources that are allowed per group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

**mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure service vpls string mesh-sdp string igmp-snooping mcac</b>
Tree	<b>mcac</b>
Introduced	16.0.R1
Platforms	All

**bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth</b>
Tree	<b>bandwidth</b>
Introduced	16.0.R1
Platforms	All

**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth mandatory (number   keyword)</b>
Tree	<b>mandatory</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure service vpls string mesh-sdp string igmp-snooping mcac bandwidth total (number   keyword)</b>
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited

Default	unlimited
Introduced	16.0.R1
Platforms	All

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac</a> <a href="#">policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**mrouter-port** *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mrouter-port</a> <i>boolean</i>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
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Context	<b>configure service vpls string mesh-sdp string igmp-snooping query-response-interval number</b>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure service vpls string mesh-sdp string igmp-snooping robust-count number</b>
Tree	<a href="#">robust-count</a>
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

**router-alert-check** *boolean*

Synopsis	Enable IP router alert check option
Context	<b>configure service vpls string mesh-sdp string igmp-snooping router-alert-check boolean</b>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

**send-queries** *boolean*

Synopsis	Generate IGMP general queries
Context	<b>configure service vpls string mesh-sdp string igmp-snooping send-queries boolean</b>
Tree	<a href="#">send-queries</a>
Default	false
Introduced	16.0.R1

Platforms All

## static

Synopsis Enter the **static** context  
 Context **configure service vpls string mesh-sdp string igmp-snooping static**  
 Tree **static**  
 Introduced 16.0.R1  
 Platforms All

## group [group-address] string

Synopsis Enter the **group** list instance  
 Context **configure service vpls string mesh-sdp string igmp-snooping static group string**  
 Tree **group**  
 Introduced 16.0.R1  
 Platforms All

## [group-address] string

Synopsis Group address of static IGMP multicast channel  
 Context **configure service vpls string mesh-sdp string igmp-snooping static group string**  
 Tree **group**  
 Description This command configures an address that receives data on an interface. The IP address must be unique for each static group.  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

## source [source-address] string

Synopsis Add a list entry for **source**  
 Context **configure service vpls string mesh-sdp string igmp-snooping static group string source string**  
 Tree **source**  
 Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 16.0.R1  
 Platforms All

### **[source-address]** *string*

Synopsis Source IP address of multicast channel sending data  
 Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [static group](#) *string* [source](#) *string*  
 Tree [source](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R2  
 Platforms All

### **starg**

Synopsis any source address (\*,G)  
 Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [static group](#) *string* [starg](#)  
 Tree [starg](#)  
 Notes The following elements are part of a mandatory choice: **source** or **starg**.  
 Introduced 16.0.R2  
 Platforms All

### **version** *keyword*

Synopsis IGMP protocol version  
 Context **configure** [service](#) [vpls](#) *string* [mesh-sdp](#) *string* [igmp-snooping](#) [version](#) *keyword*  
 Tree [version](#)  
 Options 1, 2, 3  
 Default 3  
 Introduced 16.0.R1  
 Platforms All

### **ingress**

Synopsis Enter the **ingress** context



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Context	<b>configure service vpls string mesh-sdp string ingress</b>
Tree	<b>ingress</b>
Introduced	16.0.R1
Platforms	All

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vpls string mesh-sdp string ingress filter</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	All

### **ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure service vpls string mesh-sdp string ingress filter ip reference</b>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	All

### **ipv6 reference**

Synopsis	IPv6 filter policy name
Context	<b>configure service vpls string mesh-sdp string ingress filter ipv6 reference</b>
Tree	<b>ipv6</b>
Reference	<b>configure filter ipv6-filter string</b>
Introduced	16.0.R1
Platforms	All

### **mac reference**

Synopsis	MAC filter policy name
Context	<b>configure service vpls string mesh-sdp string ingress filter mac reference</b>

Tree	<a href="#">mac</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos network</a>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	All

## fp-redirect-group

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a>
Tree	<a href="#">fp-redirect-group</a>
Introduced	16.0.R1
Platforms	All

## group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>

Reference	<b>configure</b> qos queue-group-templates ingress queue-group <i>string</i>
Introduced	16.0.R1
Platforms	All

### **instance** *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	<b>configure</b> service vpls <i>string</i> mesh-sdp <i>string</i> ingress qos network fp-redirect-group <i>instance</i> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Network policy ID
Context	<b>configure</b> service vpls <i>string</i> mesh-sdp <i>string</i> ingress qos network policy-name <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> qos network <i>string</i>
Introduced	16.0.R1
Platforms	All

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	<b>configure</b> service vpls <i>string</i> mesh-sdp <i>string</i> ingress vc-label <i>number</i>
Tree	<a href="#">vc-label</a>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	All

**mld-snooping**

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

**fast-leave** *boolean*

Synopsis	Allow IGMP fast leave processing
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">fast-leave</a> <i>boolean</i>
Tree	<a href="#">fast-leave</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**maximum-number-groups** *number*

Synopsis	Maximum groups allowed
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mesh-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

**mrouter-port** *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">mld-snooping</a> <a href="#">mrouter-port</a> <i>boolean</i>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">mld-snooping</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">mesh-sdp</a> <a href="#">string</a> <a href="#">mld-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
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Context	<b>configure service vpls string mesh-sdp string mld-snooping query-response-interval number</b>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure service vpls string mesh-sdp string mld-snooping robust-count number</b>
Tree	<a href="#">robust-count</a>
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

**router-alert-check** *boolean*

Synopsis	Enable IP router alert check option
Context	<b>configure service vpls string mesh-sdp string mld-snooping router-alert-check boolean</b>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

**send-queries** *boolean*

Synopsis	Generate IGMP general queries
Context	<b>configure service vpls string mesh-sdp string mld-snooping send-queries boolean</b>
Tree	<a href="#">send-queries</a>
Default	false
Introduced	16.0.R1

Platforms All

## static

Synopsis Enter the **static** context

Context **configure service vpls string mesh-sdp string mld-snooping static**

Tree **static**

Introduced 16.0.R1

Platforms All

## group [group-address] string

Synopsis Enter the **group** list instance

Context **configure service vpls string mesh-sdp string mld-snooping static group string**

Tree **group**

Introduced 16.0.R1

Platforms All

## [group-address] string

Synopsis Group address of multicast channel

Context **configure service vpls string mesh-sdp string mld-snooping static group string**

Tree **group**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

## source [source-address] string

Synopsis Add a list entry for **source**

Context **configure service vpls string mesh-sdp string mld-snooping static group string source string**

Tree **source**

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 16.0.R1

Platforms All

### **[source-address]** *string*

Synopsis Source IP address

Context **configure service vpls string mesh-sdp string mld-snooping static group string source string**

Tree [source](#)

Notes This element is part of a list key.

Introduced 16.0.R2

Platforms All

### **starg**

Synopsis any source address (\*,G)

Context **configure service vpls string mesh-sdp string mld-snooping static group string starg**

Tree [starg](#)

Notes The following elements are part of a mandatory choice: **source** or **starg**.

Introduced 16.0.R2

Platforms All

### **version** *keyword*

Synopsis Version of MLD running on the SAP or SDP

Context **configure service vpls string mesh-sdp string mld-snooping version keyword**

Tree [version](#)

Options 1, 2

Default 2

Introduced 16.0.R1

Platforms All

### **mrp**

Synopsis Enter the **mrp** context

Context **configure service vpls string mesh-sdp string mrp**



Tree	<a href="#">mrp</a>
Introduced	20.10.R1
Platforms	All

### **join-time** *number*

Synopsis	Maximum rate for attribute join messages sent on SDP
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string mrp join-time number</a>
Tree	<a href="#">join-time</a>
Range	1 to 10
Units	deciseconds
Default	2
Introduced	20.10.R1
Platforms	All

### **leave-all-time** *number*

Synopsis	Frequency of LeaveAll PDUs by LeaveAll state machine
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string mrp leave-all-time number</a>
Tree	<a href="#">leave-all-time</a>
Range	60 to 300
Units	deciseconds
Default	100
Introduced	20.10.R1
Platforms	All

### **leave-time** *number*

Synopsis	Time in LV state before transition to MT state
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string mrp leave-time number</a>
Tree	<a href="#">leave-time</a>
Range	30 to 60
Units	deciseconds
Default	30
Introduced	20.10.R1

Platforms All

### **periodic-time** *number*

Synopsis Frequency of periodic events generated by state machine  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mrp](#) **periodic-time** *number*  
 Tree [periodic-time](#)  
 Range 10 to 100  
 Units deciseconds  
 Default 10  
 Introduced 20.10.R1  
 Platforms All

### **periodic-timer** *boolean*

Synopsis Enable the Periodic Transmission Timer  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mrp](#) **periodic-timer** *boolean*  
 Tree [periodic-timer](#)  
 Default false  
 Introduced 20.10.R1  
 Platforms All

### **policy** *reference*

Synopsis MRP policy to control Group B-MAC attributes  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* [mrp](#) **policy** *reference*  
 Tree [policy](#)  
 Reference **configure** [service mrp](#) **policy** *string*  
 Introduced 20.10.R1  
 Platforms All

### **pbb**

Synopsis Enter the **pbb** context  
 Context **configure** [service vpls](#) *string* [mesh-sdp](#) *string* **pbb**

Tree	<a href="#">pbb</a>
Introduced	20.10.R1
Platforms	All

## fault-propagation

Synopsis	Enter the <b>fault-propagation</b> context
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string pbb</a> <b>fault-propagation</b>
Tree	<a href="#">fault-propagation</a>
Introduced	20.10.R1
Platforms	All

## backbone-mac-address [[address](#)] *string*

Synopsis	Add a list entry for <b>backbone-mac-address</b>
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string pbb</a> <b>fault-propagation backbone-mac-address</b> <i>string</i>
Tree	<a href="#">backbone-mac-address</a>
Introduced	20.10.R1
Platforms	All

## [\[address\]](#) *string*

Synopsis	Backbone MAC address
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string pbb</a> <b>fault-propagation backbone-mac-address</b> <i>string</i>
Tree	<a href="#">backbone-mac-address</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

## backbone-mac-name [[name](#)] *reference*

Synopsis	Add a list entry for <b>backbone-mac-name</b>
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string pbb</a> <b>fault-propagation backbone-mac-name</b> <i>reference</i>

Tree	<a href="#">backbone-mac-name</a>
Introduced	20.10.R1
Platforms	All

**[name]** *reference*

Synopsis	Backbone MAC address name
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string pbb fault-propagation backbone-mac-name reference</a>
Tree	<a href="#">backbone-mac-name</a>
Reference	<b>configure</b> <a href="#">service pbb mac string</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**vc-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string vc-type keyword</a>
Tree	<a href="#">vc-type</a>
Options	ether, vlan
Default	ether
Introduced	16.0.R1
Platforms	All

**vlan-vc-tag** *number*

Synopsis	SDP bind VC tag
Context	<b>configure</b> <a href="#">service vpls string mesh-sdp string vlan-vc-tag number</a>
Tree	<a href="#">vlan-vc-tag</a>
Range	0 to 4094
Introduced	16.0.R1

Platforms All

## **mfib**

Synopsis Enter the **mfib** context  
Context **configure service vpls string mfib**  
Tree **mfib**  
Introduced 16.0.R1  
Platforms All

## **table**

Synopsis Enter the **table** context  
Context **configure service vpls string mfib table**  
Tree **table**  
Introduced 16.0.R1  
Platforms All

## **high-wmark** *number*

Synopsis High watermark for the MFIB table  
Context **configure service vpls string mfib table high-wmark number**  
Tree **high-wmark**  
Range 0 to 100  
Default 95  
Introduced 16.0.R1  
Platforms All

## **low-wmark** *number*

Synopsis Low watermark for the MFIB table  
Context **configure service vpls string mfib table low-wmark number**  
Tree **low-wmark**  
Range 0 to 100  
Default 90

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Introduced	16.0.R1
Platforms	All

### **size number**

Synopsis	Maximum SG entries in the MFIB
Context	<b>configure service vpls string mfib table size number</b>
Tree	<a href="#">size</a>
Range	1 to 40959
Introduced	16.0.R1
Platforms	All

### **mld-snooping**

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure service vpls string mld-snooping</b>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of snooping
Context	<b>configure service vpls string mld-snooping admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **evpn-proxy**

Synopsis	Enter the <b>evpn-proxy</b> context
Context	<b>configure service vpls string mld-snooping evpn-proxy</b>
Tree	<a href="#">evpn-proxy</a>

Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of EVPN proxy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">evpn-proxy</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

**mvr**

Synopsis	Enter the <b>mvr</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">mvr</a>
Tree	<a href="#">mvr</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MVR
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">mvr</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">mvr</a> <a href="#">description</a> <i>string</i>

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Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **group-policy** *string*

Synopsis	Policy that applies MVR
Context	<b>configure</b> <a href="#">service vpls string mld-snooping mvr group-policy string</a>
Tree	<a href="#">group-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service vpls string mld-snooping query-interval number</a>
Tree	<a href="#">query-interval</a>
Range	1 to 65535
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

### **query-source-address** (*keyword* | *ipv6-address*)

Synopsis	Source IP address used in MLD queries
Context	<b>configure</b> <a href="#">service vpls string mld-snooping query-source-address (keyword   ipv6-address)</a>
Tree	<a href="#">query-source-address</a>
Options	system
Default	system
Introduced	16.0.R1
Platforms	All



**report-source-address** *string*

Synopsis	Source IP address used when generating MLD reports
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">report-source-address</a> <i>string</i>
Tree	<a href="#">report-source-address</a>
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">robust-count</a> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	1 to 255
Default	2
Introduced	16.0.R1
Platforms	All

**mrp**

Synopsis	Enter the <b>mrp</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp</a>
Tree	<a href="#">mrp</a>
Introduced	20.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MRP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	All

## **mmp**

Synopsis	Enter the <b>mmp</b> context
Context	<b>configure service vpls string mmp mmp</b>
Tree	<b>mmp</b>
Introduced	20.10.R1
Platforms	All

## **admin-state keyword**

Synopsis	Administrative state of MMRP
Context	<b>configure service vpls string mmp mmp admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	20.10.R1
Platforms	All

## **attribute-table**

Synopsis	Enter the <b>attribute-table</b> context
Context	<b>configure service vpls string mmp mmp attribute-table</b>
Tree	<b>attribute-table</b>
Introduced	20.10.R1
Platforms	All

## **high-wmark number**

Synopsis	High watermark for the MMRP attribute table
Context	<b>configure service vpls string mmp mmp attribute-table high-wmark number</b>
Tree	<b>high-wmark</b>
Range	0 to 100
Default	95
Introduced	20.10.R1
Platforms	All

**low-wmark** *number*

Synopsis	Low watermark for the MMRP attribute table
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp mmp attribute-table</a> <a href="#">low-wmark</a> <i>number</i>
Tree	<a href="#">low-wmark</a>
Range	0 to 100
Default	90
Introduced	20.10.R1
Platforms	All

**size** *number*

Synopsis	Maximum number of attributes accepted by B-VPLS
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp mmp attribute-table</a> <a href="#">size</a> <i>number</i>
Tree	<a href="#">size</a>
Range	1 to 8192
Default	2048
Introduced	20.10.R1
Platforms	All

**end-station-only** *boolean*

Synopsis	Prevent generation or processing of MMRP messages
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp mmp end-station-only</a> <i>boolean</i>
Tree	<a href="#">end-station-only</a>
Default	false
Introduced	20.10.R1
Platforms	All

**flood-time** *number*

Synopsis	Time when traffic is flooded after status change
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">mrp mmp flood-time</a> <i>number</i>
Tree	<a href="#">flood-time</a>
Range	3 to 600

Introduced 20.10.R1  
 Platforms All

### **multicast-info-policy** *reference*

Synopsis Multicast information policy  
 Context **configure** [service vpls string multicast-info-policy reference](#)  
 Tree [multicast-info-policy](#)  
 Reference **configure** [multicast-management multicast-info-policy string](#)  
 Introduced 16.0.R1  
 Platforms All

### **pbb**

Synopsis Enter the **pbb** context  
 Context **configure** [service vpls string pbb](#)  
 Tree [pbb](#)  
 Introduced 16.0.R1  
 Platforms All

### **backbone-vpls** [[backbone-vpls-service-name](#)] *reference*

Synopsis Enter the **backbone-vpls** list instance  
 Context **configure** [service vpls string pbb backbone-vpls reference](#)  
 Tree [backbone-vpls](#)  
 Max. Instances 1  
 Introduced 16.0.R1  
 Platforms All

### **[backbone-vpls-service-name]** *reference*

Synopsis Service name  
 Context **configure** [service vpls string pbb backbone-vpls reference](#)  
 Tree [backbone-vpls](#)

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Reference	<b>configure service vpls string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## **fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure service vpls string pbb backbone-vpls reference fdb</b>
Tree	<a href="#">fdb</a>
Introduced	20.2.R1
Platforms	All

## **protected-src-mac-violation-action keyword**

Synopsis	Action taken upon a relearn request for protected MAC
Context	<b>configure service vpls string pbb backbone-vpls reference fdb protected-src-mac-violation-action keyword</b>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	discard
Introduced	20.5.R1
Platforms	All

## **igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure service vpls string pbb backbone-vpls reference igmp-snooping</b>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

## **mrouter-destination [mac-reference] reference**

Synopsis	Add a list entry for <b>mrouter-destination</b>
Context	<b>configure service vpls string pbb backbone-vpls reference igmp-snooping mrouter-destination reference</b>

Tree	<a href="#">mrouter-destination</a>
Introduced	16.0.R1
Platforms	All

### [**mac-reference**] *reference*

Synopsis	Mac name reference
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference igmp-snooping mrouter-destination reference</a>
Tree	<a href="#">mrouter-destination</a>
Reference	<b>configure</b> <a href="#">service pbb mac string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **isid** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Backbone VPLS ISID
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference isid number</a>
Tree	<a href="#">isid</a>
Range	0 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **mesh-sdp** [[sdp-bind-id](#)] *reference*

Synopsis	Enter the <b>mesh-sdp</b> list instance
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference</a>
Tree	<a href="#">mesh-sdp</a>
Introduced	16.0.R1
Platforms	All

**[sdp-bind-id] reference**

Synopsis	Backbone VPLS SDP Binding ID
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference</a>
Tree	<a href="#">mesh-sdp</a>
Reference	<b>configure</b> <a href="#">service vpls string mesh-sdp string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

**mrouter-port boolean**

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference igmp-snooping mrouter-port boolean</a>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mld-snooping**

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference mesh-sdp reference mld-snooping</a>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1

Platforms All

### **mrouter-port** *boolean*

Synopsis Operate port as a multicast router port

Context **configure** [service vpls string pbb backbone-vpls reference mesh-sdp reference mld-snooping mrouter-port boolean](#)

Tree [mrouter-port](#)

Default false

Introduced 16.0.R1

Platforms All

### **mld-snooping**

Synopsis Enter the **mld-snooping** context

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping](#)

Tree [mld-snooping](#)

Introduced 16.0.R1

Platforms All

### **mrouter-destination** [[mac-reference](#)] *reference*

Synopsis Add a list entry for **mrouter-destination**

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping mrouter-destination reference](#)

Tree [mrouter-destination](#)

Introduced 16.0.R1

Platforms All

### [[mac-reference](#)] *reference*

Synopsis Mac name reference

Context **configure** [service vpls string pbb backbone-vpls reference mld-snooping mrouter-destination reference](#)

Tree [mrouter-destination](#)

Reference **configure** [service pbb mac string](#)



Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **sap** [[sap-id](#)] *reference*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference</a>
Tree	<a href="#">sap</a>
Introduced	16.0.R1
Platforms	All

### **[sap-id]** *reference*

Synopsis	Backbone VPLS SAP
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference</a>
Tree	<a href="#">sap</a>
Reference	<b>configure</b> <a href="#">service vpls string sap string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

### **mrouter-port** *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference igmp-snooping mrouter-port boolean</a>

Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

## mld-snooping

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference mld-snooping</a>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

## mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference sap reference mld-snooping mrouter-port boolean</a>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

## spoke-sdp [[sdp-bind-id](#)] *reference*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference</a>
Tree	<a href="#">spoke-sdp</a>
Introduced	16.0.R1
Platforms	All

## [[sdp-bind-id](#)] *reference*

Synopsis	Backbone VPLS SDP Binding ID
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference</a>
Tree	<a href="#">spoke-sdp</a>

---

Reference	<b>configure</b> <a href="#">service vpls string spoke-sdp string</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## igmp-snooping

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

## mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference igmp-snooping mrouter-port boolean</a>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

## mld-snooping

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb backbone-vpls reference spoke-sdp reference mld-snooping</a>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

## mrouter-port *boolean*

Synopsis	Operate port as a multicast router port
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Context	<b>configure service vpls string pbb backbone-vpls reference spoke-sdp reference mld-snooping mrouter-port boolean</b>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **force-qtag-forwarding boolean**

Synopsis	Add an IEEE 802.1q tag after C-MAC addresses PBB header
Context	<b>configure service vpls string pbb force-qtag-forwarding boolean</b>
Tree	<a href="#">force-qtag-forwarding</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **i-vpls-mac-flush**

Synopsis	Enter the <b>i-vpls-mac-flush</b> context
Context	<b>configure service vpls string pbb i-vpls-mac-flush</b>
Tree	<a href="#">i-vpls-mac-flush</a>
Introduced	16.0.R1
Platforms	All

### **bgp-evpn**

Synopsis	Enter the <b>bgp-evpn</b> context
Context	<b>configure service vpls string pbb i-vpls-mac-flush bgp-evpn</b>
Tree	<a href="#">bgp-evpn</a>
Introduced	16.0.R1
Platforms	All

### **send-to-bvpls boolean**

Synopsis	Send b-VPLS EVPN flush
Context	<b>configure service vpls string pbb i-vpls-mac-flush bgp-evpn send-to-bvpls boolean</b>

Tree	<a href="#">send-to-bvpls</a>
Default	false
Introduced	16.0.R1
Platforms	All

## tldp

Synopsis	Enter the <b>tldp</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp</a>
Tree	<a href="#">tldp</a>
Introduced	16.0.R1
Platforms	All

## propagate-from-bvpls *boolean*

Synopsis	Propagate MAC flush message from B-VPLS into local I-VPLS
Context	<b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp propagate-from-bvpls boolean</a>
Tree	<a href="#">propagate-from-bvpls</a>
Default	false
Introduced	16.0.R1
Platforms	All

## send-on-bvpls-failure *boolean*

Synopsis	Send negative flush message (flush-all-from-me) on B-VPLS failure
Context	<b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp send-on-bvpls-failure boolean</a>
Tree	<a href="#">send-on-bvpls-failure</a>
Default	false
Introduced	16.0.R1
Platforms	All

## send-to-bvpls

Synopsis	Enter the <b>send-to-bvpls</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls</a>

Tree	<a href="#">send-to-bvpls</a>
Introduced	16.0.R1
Platforms	All

**all-but-mine** *boolean*

Synopsis	Generate LDP MAC withdraw message to b-VPLS
Context	<b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls all-but-mine</a> <i>boolean</i>
Tree	<a href="#">all-but-mine</a>
Default	false
Introduced	16.0.R1
Platforms	All

**all-from-me** *boolean*

Synopsis	Generate LDP MAC withdraw all from me message to b-VPLS
Context	<b>configure</b> <a href="#">service vpls string pbb i-vpls-mac-flush tldp send-to-bvpls all-from-me</a> <i>boolean</i>
Tree	<a href="#">all-from-me</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mac-notification**

Synopsis	Enter the <b>mac-notification</b> context
Context	<b>configure</b> <a href="#">service vpls string pbb mac-notification</a>
Tree	<a href="#">mac-notification</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MAC notification messages
Context	<b>configure</b> <a href="#">service vpls string pbb mac-notification admin-state keyword</a>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**count** *number*

Synopsis	MAC notification messages count
Context	<b>configure</b> <a href="#">service vpls string pbb mac-notification count number</a>
Tree	<a href="#">count</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Interval for MAC notification messages
Context	<b>configure</b> <a href="#">service vpls string pbb mac-notification interval number</a>
Tree	<a href="#">interval</a>
Range	1 to 100
Units	deciseconds
Introduced	16.0.R1
Platforms	All

**renotify** (*number* | *keyword*)

Synopsis	Re-notify interval for MAC-notification messages
Context	<b>configure</b> <a href="#">service vpls string pbb mac-notification renotify (number   keyword)</a>
Tree	<a href="#">renotify</a>
Range	240 to 840
Units	seconds
Options	none
Default	none
Introduced	16.0.R1

Platforms All

### source-bmac

Synopsis Enter the **source-bmac** context  
Context **configure service vpls string pbb source-bmac**  
Tree [source-bmac](#)  
Introduced 16.0.R1  
Platforms All

### address *string*

Synopsis Base source B-MAC address for the B-VPLS  
Context **configure service vpls string pbb source-bmac address string**  
Tree [address](#)  
Introduced 16.0.R1  
Platforms All

### use-es-bmac-lsb *boolean*

Synopsis Use LSB from Ethernet-segment backbone MAC  
Context **configure service vpls string pbb source-bmac use-es-bmac-lsb boolean**  
Tree [use-es-bmac-lsb](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### use-mclag-bmac-lsb *boolean*

Synopsis Use MC LAG backbone MAC LSB  
Context **configure service vpls string pbb source-bmac use-mclag-bmac-lsb boolean**  
Tree [use-mclag-bmac-lsb](#)  
Default false  
Introduced 16.0.R1  
Platforms All



**pbb-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PBB VPLS type
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>pbb-type</b> <i>keyword</i>
Tree	<a href="#">pbb-type</a>
Options	b-vpls, i-vpls
Introduced	16.0.R1
Platforms	All

**pim-snooping**

Synopsis	Enable the <b>pim-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>pim-snooping</b>
Tree	<a href="#">pim-snooping</a>
Introduced	16.0.R1
Platforms	All

**group-policy** *string*

Synopsis	Group policy name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>pim-snooping</b> <b>group-policy</b> <i>string</i>
Tree	<a href="#">group-policy</a>
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**hold-time** *number*

Synopsis	Duration that allows the PIM-snooping switch to snoop all the PIM states in the VPLS
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Context	<b>configure service vpls string pim-snooping hold-time number</b>
Tree	<b>hold-time</b>
Range	0 to 300
Units	seconds
Default	90
Introduced	16.0.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service vpls string pim-snooping ipv4</b>
Tree	<b>ipv4</b>
Introduced	16.0.R1
Platforms	All

## admin-state keyword

Synopsis	Administrative state of snooping for multicast traffic
Context	<b>configure service vpls string pim-snooping ipv4 admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure service vpls string pim-snooping ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of snooping for multicast traffic
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">pim-snooping ipv6</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**provider-tunnel**

Synopsis	Enable the <b>provider-tunnel</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel</a>
Tree	<a href="#">provider-tunnel</a>
Introduced	19.7.R1
Platforms	All

**inclusive****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>inclusive</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel</a> <b>inclusive</b>
Tree	<a href="#">inclusive</a>
Introduced	19.7.R1
Platforms	All

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of P2MP LSP as the I-PMSI
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel</a> <b>inclusive</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	All

### **data-delay-interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	I-PMSI data delay timer
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel inclusive data-delay-interval</a> <i>number</i>
Tree	<a href="#">data-delay-interval</a>
Range	3 to 180
Units	seconds
Default	15
Introduced	19.7.R1
Platforms	All

### **mldp**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable/Disable MLDP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">provider-tunnel inclusive mldp</a>
Tree	<a href="#">mldp</a>
Notes	The following elements are part of a choice: <b>mldp</b> or <b>rsvp</b> .
Introduced	19.7.R1
Platforms	All

**owner** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure provider-tunnel owner
Context	<b>configure</b> <i>service vpls string provider-tunnel inclusive owner keyword</i>
Tree	<i>owner</i>
Options	bgp-ad, bgp-vpls, bgp-evpn-mpls
Introduced	19.7.R1
Platforms	All

**root-and-leaf** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure whether the provider tunnel acts as a leaf or both a root and leaf
Context	<b>configure</b> <i>service vpls string provider-tunnel inclusive root-and-leaf boolean</i>
Tree	<i>root-and-leaf</i>
Default	false
Introduced	19.7.R1
Platforms	All

**rsvp****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure</b> <i>service vpls string provider-tunnel inclusive rsvp</i>
Tree	<i>rsvp</i>
Notes	The following elements are part of a choice: <b>mldp</b> or <b>rsvp</b> .
Introduced	19.7.R1
Platforms	All

## Isp-template *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Configure LSP template name
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">provider-tunnel inclusive rsvp</a> <a href="#">Isp-template reference</a>
Tree	<a href="#">Isp-template</a>
Reference	<b>configure</b> <a href="#">router string</a> <a href="#">mpls Isp-template string</a>
Introduced	19.7.R1
Platforms	All

## selective

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>selective</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">provider-tunnel selective</a>
Tree	<a href="#">selective</a>
Introduced	23.3.R1
Platforms	All

## admin-state *keyword*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the selective provider tunnel
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">provider-tunnel selective</a> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	23.3.R1

Platforms All

## data-delay-interval *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis S-PMSI data delay timer

Context **configure** *service vpls string provider-tunnel selective data-delay-interval number*

Tree [data-delay-interval](#)

Description This command configures the S-PMSI data delay timer.

The data delay interval determines the time the router takes to switch over the traffic from the Ingress Replication binds to the wildcard S-PMSI or from the wildcard S-PMSI to the S-PMSI, after the S-PMSI is created. This time should account for the time it takes for BGP to propagate the S-PMSI A-D route to the downstream PEs and the time it takes the downstream PEs to join the tree all the way up to the root.

Range 3 to 180

Units seconds

Default 3

Introduced 23.3.R1

Platforms All

## data-threshold



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **data-threshold** context

Context **configure** *service vpls string provider-tunnel selective data-threshold*

Tree [data-threshold](#)

Description Commands in this context specify the data rate threshold that triggers the switch from the inclusive provider tunnel to the selective provider tunnel for (C-S, C-G) within the group range.

Optionally, PE thresholds to create or delete ng-MVPN S-PMSI may also be specified. Omitting the PE thresholds preserves the currently set value (or defaults if never set). Multiple statements (one per a unique group) are allowed in the configuration.

This command is not applicable to multistream S-PMSI.

This command for S-PMSI trees can also be used in EVPN services. The command options are used in the same way as in MVPN when applied to EVPN, in particular the rate and PE thresholds.

Introduced 23.3.R1

Platforms All

### **group-prefix** [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **group-prefix** list instance

Context **configure service vpls string provider-tunnel selective data-threshold group-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Tree [group-prefix](#)

Introduced 23.3.R1

Platforms All

### **[ip-group-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Multicast group prefix

Context **configure service vpls string provider-tunnel selective data-threshold group-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Tree [group-prefix](#)

Notes This element is part of a list key.

Introduced 23.3.R1

Platforms All

### **pe-threshold-add** *number*

Synopsis Number of receiver PEs for S-PMSI tunnel creation

Context **configure service vpls string provider-tunnel selective data-threshold group-prefix** (*ipv4-prefix* | *ipv6-prefix*) **pe-threshold-add** *number*

Tree [pe-threshold-add](#)

Description This command specifies the number of Receiver PEs for creating S-PMSI.

A S-PMSI is created when the following apply:

- The number of receiver PEs for a multicast group is non-zero.
- The number of receiver PEs is below the threshold.
- The BW threshold is satisfied.

Range 1 to 65535



Default	65535
Introduced	23.3.R1
Platforms	All

### **pe-threshold-delete** *number*

Synopsis	Number of receiver PEs for S-PMSI tunnel deletion
Context	<b>configure service vpls</b> <i>string</i> <b>provider-tunnel selective data-threshold group-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>pe-threshold-delete</b> <i>number</i>
Tree	<b>pe-threshold-delete</b>
Description	This command specifies the number of Receiver PEs to delete S-PMSI. When the number of receiver PEs for a multicast group configuration is above the threshold, S-PMSI is deleted and the multicast group is moved to IR or a wildcard S-PMSI. Nokia recommends that the delete threshold be configured to be significantly larger than the add threshold to avoid re-signaling of S-PMSI as the Receiver PE count fluctuates
Range	2 to 65535
Default	65535
Introduced	23.3.R1
Platforms	All

### **threshold** *number*

Synopsis	Threshold rate for a group prefix
Context	<b>configure service vpls</b> <i>string</i> <b>provider-tunnel selective data-threshold group-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Description	This command specifies the threshold rate for a group prefix. If the rate for a (C-S, C-G) within the specified group range exceeds the threshold, traffic for the (C-S, C-G) is switched to the selective provider tunnel.
Range	0 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	23.3.R1
Platforms	All

**maximum-p2mp-spmsi** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of P2MP S-PMSI tunnels
Context	<b>configure</b> <i>service vpls string provider-tunnel selective maximum-p2mp-spmsi number</i>
Tree	<a href="#">maximum-p2mp-spmsi</a>
Description	This command specifies the maximum number of S-PMSI tunnels for the EVPN service. When the limit is reached, no more RSVP P2MP S-PMSI or LDP P2MP S-PMSI are created and traffic over the data threshold value stays on I-PMSI
Range	1 to 4000
Default	10
Introduced	23.3.R1
Platforms	All

**mldp** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MLDP
Context	<b>configure</b> <i>service vpls string provider-tunnel selective mldp boolean</i>
Tree	<a href="#">mldp</a>
Description	When configured to <b>true</b> , this command enables the use of MLDP as a protocol for an LDP P2MP LSP that is used for forwarding Broadcast, Unicast unknown, and Multicast (BUM) packets of a VPLS or B-VPLS instance. This command is also used for forwarding IP multicast packets of an EVPN VPLS or R-VPLS service.  When configured to <b>false</b> , this command disables the use of MLDP as a protocol to set up the P2MP LSP.
Default	false
Introduced	23.3.R1
Platforms	All

**owner keyword****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Provider-tunnel selective owner
Context	<b>configure service vpls string provider-tunnel selective owner keyword</b>
Tree	<b>owner</b>
Description	This command selects the owner protocol of the S-PMSI tunnel in the service. The owner must be explicitly set before the provider tunnel can be enabled.
Options	bgp-evpn-mpls
Introduced	23.3.R1
Platforms	All

**wildcard-spmsi boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable wildcard S-PMSI support
Context	<b>configure service vpls string provider-tunnel selective wildcard-spmsi boolean</b>
Tree	<b>wildcard-spmsi</b>
Description	When configured to <b>true</b> , the system enables RFC 6625 (C-*, C-*) S-PMSI functionality for EVPN VPLS or R-VPLS services. When enabled, (C-*, C-*) S-PMSI is used instead of I-PMSI for this EVPN VPLS or RVPLS service.  The <b>configure service vprn pim rp auto-rp-discovery</b> command and this command are mutually exclusive.  When configured to <b>false</b> , the system disables the (C-*, C-*) S-PMSI functionality.
Default	false
Introduced	23.3.R1
Platforms	All

**proxy-arp**

Synopsis	Enable the <b>proxy-arp</b> context
Context	<b>configure service vpls string proxy-arp</b>

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Tree	<a href="#">proxy-arp</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the proxy
Context	<b>configure</b> <a href="#">service vpls string proxy-arp admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **age-time** (*number* | *keyword*)

Synopsis	Aging timer for proxy entries, where entries are flushed upon timer expiry
Context	<b>configure</b> <a href="#">service vpls string proxy-arp age-time (number   keyword)</a>
Tree	<a href="#">age-time</a>
Range	60 to 86400
Units	seconds
Options	never
Default	never
Introduced	16.0.R1
Platforms	All

### **duplicate-detect**

Synopsis	Enter the <b>duplicate-detect</b> context
Context	<b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect</a>
Tree	<a href="#">duplicate-detect</a>
Introduced	16.0.R1
Platforms	All

**anti-spoof-mac** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address to replace the proxy-ARP/ND offending entry's MAC
Context	<b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect anti-spoof-mac string</a>
Tree	<a href="#">anti-spoof-mac</a>
Introduced	16.0.R1
Platforms	All

**hold-down-time** (*number | keyword*)

Synopsis	Hold down time for a duplicate entry
Context	<b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect hold-down-time (number   keyword)</a>
Tree	<a href="#">hold-down-time</a>
Range	2 to 60
Units	minutes
Options	max
Default	9
Introduced	16.0.R1
Platforms	All

**num-moves** *number*

Synopsis	Number of moves required to declare a duplicate entry
Context	<b>configure</b> <a href="#">service vpls string proxy-arp duplicate-detect num-moves number</a>
Tree	<a href="#">num-moves</a>
Range	3 to 10
Default	5
Introduced	16.0.R1
Platforms	All

**static-blackhole** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Consider anti-spoof MAC as black-hole static MAC in FDB
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">proxy-arp</a> <a href="#">duplicate-detect</a> <a href="#">static-blackhole</a> <i>boolean</i>
Tree	<a href="#">static-blackhole</a>
Default	false
Introduced	16.0.R1
Platforms	All

**window** *number*

Synopsis	Time to monitor the MAC address in the anti-spoofing mechanism
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">proxy-arp</a> <a href="#">duplicate-detect</a> <a href="#">window</a> <i>number</i>
Tree	<a href="#">window</a>
Range	1 to 15
Units	minutes
Default	3
Introduced	16.0.R1
Platforms	All

**dynamic-arp**

Synopsis	Enter the <b>dynamic-arp</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">proxy-arp</a> <a href="#">dynamic-arp</a>
Tree	<a href="#">dynamic-arp</a>
Introduced	16.0.R1
Platforms	All

**ip-address** [[ipv4-address](#)] *string*

Synopsis	Enter the <b>ip-address</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">proxy-arp</a> <a href="#">dynamic-arp</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>

Introduced 16.0.R1  
 Platforms All

### **[ipv4-address]** *string*

Synopsis Proxy ARP IPv4 address  
 Context **configure** [service](#) [vpls](#) *string* [proxy-arp](#) [dynamic-arp](#) [ip-address](#) *string*  
 Tree [ip-address](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **mac-list** *reference*

Synopsis MAC list for the dynamic entry  
 Context **configure** [service](#) [vpls](#) *string* [proxy-arp](#) [dynamic-arp](#) [ip-address](#) *string* **mac-list** *reference*  
 Tree [mac-list](#)  
 Reference **configure** [service](#) [proxy-arp-nd](#) [mac-list](#) *list* *string*  
 Introduced 16.0.R1  
 Platforms All

### **resolve-retry-time** *number*

Synopsis Frequency at which the resolve messages are sent  
 Context **configure** [service](#) [vpls](#) *string* [proxy-arp](#) [dynamic-arp](#) [ip-address](#) *string* **resolve-retry-time** *number*  
 Tree [resolve-retry-time](#)  
 Range 1 to 60  
 Units minutes  
 Default 5  
 Introduced 16.0.R1  
 Platforms All

**dynamic-populate** *boolean*

Synopsis	Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-arp dynamic-populate</a> <i>boolean</i>
Tree	<a href="#">dynamic-populate</a>
Default	false
Introduced	16.0.R1
Platforms	All

**evpn**

Synopsis	Enter the <b>evpn</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-arp evpn</a>
Tree	<a href="#">evpn</a>
Introduced	16.0.R1
Platforms	All

**flood**

Synopsis	Enter the <b>flood</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-arp evpn flood</a>
Tree	<a href="#">flood</a>
Introduced	16.0.R1
Platforms	All

**gratuitous-arp** *boolean*

Synopsis	Flood GARP-requests/GARP-replies to the EVPN
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-arp evpn flood gratuitous-arp</a> <i>boolean</i>
Tree	<a href="#">gratuitous-arp</a>
Default	true
Introduced	16.0.R1
Platforms	All



**unknown-arp-req** *boolean*

Synopsis	Flood ARP-requests (with source squelching) if there is no active proxy-ARP entry for requested IP
Context	<b>configure</b> <a href="#">service vpls string proxy-arp evpn flood unknown-arp-req</a> <i>boolean</i>
Tree	<a href="#">unknown-arp-req</a>
Default	true
Introduced	16.0.R1
Platforms	All

**route-tag** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module
Context	<b>configure</b> <a href="#">service vpls string proxy-arp evpn route-tag</a> <i>number</i>
Tree	<a href="#">route-tag</a>
Range	0   1 to 255
Default	0
Introduced	16.0.R1
Platforms	All

**process-arp-probes** *boolean*

Synopsis	Enable replies to DAD ARP probes
Context	<b>configure</b> <a href="#">service vpls string proxy-arp process-arp-probes</a> <i>boolean</i>
Tree	<a href="#">process-arp-probes</a>
Default	true
Introduced	22.7.R1
Platforms	All

**send-refresh** (*number* | *keyword*)

Synopsis	Time at which to send a refresh message
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Context	<b>configure service vpls string proxy-arp send-refresh</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">send-refresh</a>
Range	120 to 86400
Options	never
Default	never
Introduced	16.0.R1
Platforms	All

### **static-arp**

Synopsis	Enter the <b>static-arp</b> context
Context	<b>configure service vpls string proxy-arp static-arp</b>
Tree	<a href="#">static-arp</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** [[ipv4-address](#)] *string*

Synopsis	Enter the <b>ip-address</b> list instance
Context	<b>configure service vpls string proxy-arp static-arp ip-address string</b>
Tree	<a href="#">ip-address</a>
Introduced	16.0.R1
Platforms	All

### **[ipv4-address]** *string*

Synopsis	Proxy ARP IPv4 address
Context	<b>configure service vpls string proxy-arp static-arp ip-address string</b>
Tree	<a href="#">ip-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**mac string**

Synopsis	Proxy ARP MAC address for static entry
Context	<b>configure</b> <a href="#">service vpls string proxy-arp static-arp ip-address string mac string</a>
Tree	<a href="#">mac</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**table-size number**

Synopsis	Maximum number of learned and static entries allowed in the proxy table of this service
Context	<b>configure</b> <a href="#">service vpls string proxy-arp table-size number</a>
Tree	<a href="#">table-size</a>
Range	1 to 16383
Default	250
Introduced	16.0.R1
Platforms	All

**proxy-nd**

Synopsis	Enable the <b>proxy-nd</b> context
Context	<b>configure</b> <a href="#">service vpls string proxy-nd</a>
Tree	<a href="#">proxy-nd</a>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the proxy
Context	<b>configure</b> <a href="#">service vpls string proxy-nd admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**age-time** (*number* | *keyword*)

Synopsis	Aging timer for proxy entries, where entries are flushed upon timer expiry
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd age-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">age-time</a>
Range	60 to 86400
Units	seconds
Options	never
Default	never
Introduced	16.0.R1
Platforms	All

**duplicate-detect**

Synopsis	Enter the <b>duplicate-detect</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd duplicate-detect</a>
Tree	<a href="#">duplicate-detect</a>
Introduced	16.0.R1
Platforms	All

**anti-spoof-mac** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address to replace the proxy-ARP/ND offending entry's MAC
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd duplicate-detect anti-spoof-mac</a> <i>string</i>
Tree	<a href="#">anti-spoof-mac</a>
Introduced	16.0.R1
Platforms	All

**hold-down-time** (*number* | *keyword*)

Synopsis	Hold down time for a duplicate entry
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Context	<b>configure service vpls string proxy-nd duplicate-detect hold-down-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hold-down-time</a>
Range	2 to 60
Units	minutes
Options	max
Default	9
Introduced	16.0.R1
Platforms	All

### **num-moves** *number*

Synopsis	Number of moves required to declare a duplicate entry
Context	<b>configure service vpls string proxy-nd duplicate-detect num-moves</b> <i>number</i>
Tree	<a href="#">num-moves</a>
Range	3 to 10
Default	5
Introduced	16.0.R1
Platforms	All

### **static-blackhole** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Consider anti-spoof MAC as black-hole static MAC in FDB
Context	<b>configure service vpls string proxy-nd duplicate-detect static-blackhole</b> <i>boolean</i>
Tree	<a href="#">static-blackhole</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **window** *number*

Synopsis	Time to monitor the MAC address in the anti-spoofing mechanism
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Context	<b>configure service vpls string proxy-nd duplicate-detect window number</b>
Tree	<b>window</b>
Range	1 to 15
Units	minutes
Default	3
Introduced	16.0.R1
Platforms	All

## dynamic-neighbor

Synopsis	Enter the <b>dynamic-neighbor</b> context
Context	<b>configure service vpls string proxy-nd dynamic-neighbor</b>
Tree	<b>dynamic-neighbor</b>
Introduced	16.0.R1
Platforms	All

## ip-address [ipv6-address] string

Synopsis	Enter the <b>ip-address</b> list instance
Context	<b>configure service vpls string proxy-nd dynamic-neighbor ip-address string</b>
Tree	<b>ip-address</b>
Introduced	16.0.R1
Platforms	All

## [ipv6-address] string

Synopsis	Proxy ND IPv6 address
Context	<b>configure service vpls string proxy-nd dynamic-neighbor ip-address string</b>
Tree	<b>ip-address</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## mac-list *reference*

Synopsis	MAC list for the dynamic entry
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd dynamic-neighbor ip-address</a> <i>string</i> <a href="#">mac-list reference</a>
Tree	<a href="#">mac-list</a>
Reference	<b>configure</b> <a href="#">service proxy-arp-nd mac-list list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## resolve-retry-time *number*

Synopsis	Frequency at which the resolve messages are sent
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd dynamic-neighbor ip-address</a> <i>string</i> <a href="#">resolve-retry-time number</a>
Tree	<a href="#">resolve-retry-time</a>
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

## dynamic-populate *boolean*

Synopsis	Populate proxy ARP entries from snooped GARP/ARP/ND messages on SAPs/SDP-bindings
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd dynamic-populate boolean</a>
Tree	<a href="#">dynamic-populate</a>
Default	false
Introduced	16.0.R1
Platforms	All

## evpn

Synopsis	Enter the <b>evpn</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd evpn</a>
Tree	<a href="#">evpn</a>

Introduced	16.0.R1
Platforms	All

### **advertise-neighbor-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertisement type of static or dynamic entries in EVPN
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd evpn</a> <b>advertise-neighbor-type</b> <i>keyword</i>
Tree	<a href="#">advertise-neighbor-type</a>
Description	<p>This command enables the advertisement of static or dynamic entries that are learned as host, router, or host and router (only one option is possible in a specified service). It also determines the R flag (host or router) when sending Neighbor Advertisement (NA) messages for existing EVPN entries in the proxy-ND table.</p> <p>The <b>router-host</b> command option is only possible when the ARP/ND extended community is advertised along with the MAC/IP routes. It determines that both host and router (dynamic and static) entries are advertised in MAC/IP routes, with an indication whether the entry is host or router in the R flag. These EVPN entries are installed as host or router entries depending on the R flag of the route, and NA messages for them are sent with the proper host or router indication.</p>
Options	router, host, router-host
Default	router
Introduced	16.0.R1
Platforms	All

### **flood**

Synopsis	Enter the <b>flood</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd evpn</a> <b>flood</b>
Tree	<a href="#">flood</a>
Introduced	16.0.R1
Platforms	All

### **unknown-neighbor-advertise-host** *boolean*

Synopsis	Flood host unsolicited Neighbor Advertisement (NA) replies to EVPN
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Context	<b>configure service vpls string proxy-nd evpn flood unknown-neighbor-advertise-host</b> <i>boolean</i>
Tree	<a href="#">unknown-neighbor-advertise-host</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **unknown-neighbor-advertise-router** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Flood router unsolicited Neighbor Advertisement (NA) replies to EVPN
Context	<b>configure service vpls string proxy-nd evpn flood unknown-neighbor-advertise-router</b> <i>boolean</i>
Tree	<a href="#">unknown-neighbor-advertise-router</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **unknown-neighbor-solicitation** *boolean*

Synopsis	Flood unsolicited Neighbor Solicitation messages (with source squelching) into EVPN network
Context	<b>configure service vpls string proxy-nd evpn flood unknown-neighbor-solicitation</b> <i>boolean</i>
Tree	<a href="#">unknown-neighbor-solicitation</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **route-tag** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route tag used on export policies to match MAC/IP routes generated by proxy-ARP or proxy-ND module
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>proxy-nd evpn route-tag</b> <i>number</i>
Tree	<b>route-tag</b>
Range	0   1 to 255
Default	0
Introduced	16.0.R1
Platforms	All

### **process-dad-neighbor-solicitations** *boolean*

Synopsis	Enable replies to DAD neighbor solicitations
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>proxy-nd process-dad-neighbor-solicitations</b> <i>boolean</i>
Tree	<b>process-dad-neighbor-solicitations</b>
Default	true
Introduced	22.7.R1
Platforms	All

### **send-refresh** (*number* | *keyword*)

Synopsis	Time at which to send a refresh message
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>proxy-nd send-refresh</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>send-refresh</b>
Range	120 to 86400
Options	never
Default	never
Introduced	16.0.R1
Platforms	All

### **static-neighbor**

Synopsis	Enter the <b>static-neighbor</b> context
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>proxy-nd static-neighbor</b>
Tree	<b>static-neighbor</b>
Introduced	16.0.R1

Platforms All

### **ip-address** [[ipv6-address](#)] *string*

Synopsis Enter the **ip-address** list instance

Context **configure** [service vpls](#) *string* [proxy-nd static-neighbor ip-address](#) *string*

Tree [ip-address](#)

Introduced 16.0.R1

Platforms All

### **[ipv6-address]** *string*

Synopsis Proxy ND IPv6 address

Context **configure** [service vpls](#) *string* [proxy-nd static-neighbor ip-address](#) *string*

Tree [ip-address](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **mac** *string*

Synopsis Proxy ARP MAC address for static entry

Context **configure** [service vpls](#) *string* [proxy-nd static-neighbor ip-address](#) *string* **mac** *string*

Tree [mac](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **type** *keyword*

Synopsis Entry type

Context **configure** [service vpls](#) *string* [proxy-nd static-neighbor ip-address](#) *string* **type** *keyword*

Tree [type](#)

Options host, router

Default router

Introduced	16.0.R1
Platforms	All

### **table-size** *number*

Synopsis	Maximum number of learned and static entries allowed in the proxy table of this service
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">proxy-nd</a> <b>table-size</b> <i>number</i>
Tree	<a href="#">table-size</a>
Range	1 to 16383
Default	250
Introduced	16.0.R1
Platforms	All

### **routed-vpls**

Synopsis	Enable the <b>routed-vpls</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a>
Tree	<a href="#">routed-vpls</a>
Introduced	16.0.R1
Platforms	All

### **evpn-mpls-ecmp** *boolean*

Synopsis	Enable ECMP behavior on R-VPLS services
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <b>evpn-mpls-ecmp</b> <i>boolean</i>
Tree	<a href="#">evpn-mpls-ecmp</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **multicast**

Synopsis	Enter the <b>multicast</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <b>multicast</b>
Tree	<a href="#">multicast</a>

Introduced	16.0.R1
Platforms	All

## evpn-gateway

Synopsis	Enable the <b>evpn-gateway</b> context
Context	<b>configure</b> <a href="#">service vpls string routed-vpls multicast evpn-gateway</a>
Tree	<a href="#">evpn-gateway</a>
Introduced	21.10.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the multicast EVPN gateway
Context	<b>configure</b> <a href="#">service vpls string routed-vpls multicast evpn-gateway admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

## advertise *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of the multicast EVPN gateway
Context	<b>configure</b> <a href="#">service vpls string routed-vpls multicast evpn-gateway advertise keyword</a>
Tree	<a href="#">advertise</a>
Description	This command configures EVPN OISM to advertise the type of OISM gateway function in the Inclusive Multicast Ethernet Tag routes.
Options	mvpn-pim, mvpn-only, pim-only
Default	mvpn-pim
Introduced	21.10.R1
Platforms	All

**dr-activation-timer** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DR activation timer for the EVPN gateway
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">routed-vpls multicast evpn-gateway dr-activation-timer</a> <i>number</i>
Tree	<a href="#">dr-activation-timer</a>
Description	This command configures the the designated router (DR) activation timer for the EVPN gateway.  After the DR activation timer expires, each provider edge router (PE) runs the MEG or PEG DR election. The timer allows the PE to collect Inclusive Multicast Ethernet Tag routes from other MEG or PEG gateways and avoids running the DR election multiple times.
Range	0 to 100
Units	seconds
Default	3
Introduced	21.10.R1
Platforms	All

**non-dr-attract-traffic** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Multicast traffic attraction option on non-DR router GW
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">routed-vpls multicast evpn-gateway non-dr-attract-traffic</a> <i>keyword</i>
Tree	<a href="#">non-dr-attract-traffic</a>
Options	none, from-evpn, from-pim-mvpn, from-evpn-pim-mvpn
Default	from-pim-mvpn
Introduced	21.10.R1
Platforms	All

### **ip-multicast-ecmp** *boolean*

Synopsis	ECMP behaviour for multicast traffic on bgp-evpn mpls and vxlan
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ip-multicast-ecmp</a> <i>boolean</i>
Tree	<a href="#">ip-multicast-ecmp</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

### **forward-to-ip-interface** *boolean*

Synopsis	Forward IPv4 multicast from RVPLS to L3 interface
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv4</a> <a href="#">forward-to-ip-interface</a> <i>boolean</i>
Tree	<a href="#">forward-to-ip-interface</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv4</a> <a href="#">igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

### **mrouter-port** *boolean*

Synopsis	Operate VPLS L3 interface as a multicast router port
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv4</a> <a href="#">igmp-snooping</a> <a href="#">mrouter-port</a> <i>boolean</i>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

### **forward-to-ip-interface** *boolean*

Synopsis	Forward IPv6 multicast from RVPLS to L3 interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv6</a> <a href="#">forward-to-ip-interface</a> <i>boolean</i>
Tree	<a href="#">forward-to-ip-interface</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mld-snooping**

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv6</a> <a href="#">mld-snooping</a>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All



**mrouter-port** *boolean*

Synopsis	Operate VPLS L3 interface as a multicast router port
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <a href="#">multicast</a> <a href="#">ipv6</a> <a href="#">mld-snooping</a> <b>mrouter-port</b> <i>boolean</i>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vxlan-ipv4-tep-ecmp** *boolean*

Synopsis	Use ECMP on VXLAN IPv4 destinations for R-VPLS services
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">routed-vpls</a> <b>vxlan-ipv4-tep-ecmp</b> <i>boolean</i>
Tree	<a href="#">vxlan-ipv4-tep-ecmp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sap** [[sap-id](#)] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
Introduced	16.0.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP identifier
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**anti-spoof** *keyword*

Synopsis	Type of anti-spoof filtering
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">anti-spoof</a> <i>keyword</i>
Tree	<a href="#">anti-spoof</a>
Options	source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	16.0.R2

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## arp-host

Synopsis Enter the **arp-host** context

Context **configure service vpls string sap string arp-host**

Tree [arp-host](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of ARP hosts

Context **configure service vpls string sap string arp-host admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-limit *number*

Synopsis Maximum number of ARP triggered hosts

Context **configure service vpls string sap string arp-host host-limit number**

Tree [host-limit](#)

Range 1 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## min-auth-interval *number*

Synopsis Minimum authentication interval

Context **configure service vpls string sap string arp-host min-auth-interval number**

Tree [min-auth-interval](#)

Range 1 to 6000

Units minutes

Default	15
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **arp-reply-agent** *keyword*

Synopsis	Enable arp-reply-agent function
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">arp-reply-agent</a> <i>keyword</i>
Tree	<a href="#">arp-reply-agent</a>
Options	true, with-subscr-ident
Introduced	16.0.R1
Platforms	All

### **bandwidth** *number*

Synopsis	SAP bandwidth
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">bandwidth</a> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

### **bgp-vpls-mh-veid** *number*

Synopsis	BGP-VPLS multi-homing VE-ID
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">bgp-vpls-mh-veid</a> <i>number</i>
Tree	<a href="#">bgp-vpls-mh-veid</a>
Description	<p>This command specifies a VE ID that is configured on SAPs that are part of an EVPN single-active Ethernet Segment. The configuration of this command allows the advertisement of L2VPN routes that indicate the state of multi-homed SAPs to the remote BGP-VPLS PEs, which can trigger a MAC flush operation on the service to avoid traffic from being blackholed when a failure occurs in the active PE.</p> <p>When unconfigured from the SAP, L2VPN routes are withdrawn, which causes MAC flush processing on the remote BGP-VPLS.</p>
Range	1 to 65535
Introduced	20.5.R1

Platforms All

### **bpdu-translation** *keyword*

Synopsis Bpdu translation on this SAP  
Context **configure** [service vpls string sap string bpdu-translation keyword](#)  
Tree [bpdu-translation](#)  
Options auto, pvst, stp, pvst-rw, auto-rw  
Introduced 16.0.R1  
Platforms All

### **calling-station-id** *string*

Synopsis Calling station ID  
Context **configure** [service vpls string sap string calling-station-id string](#)  
Tree [calling-station-id](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cflowd** *boolean*

Synopsis Enable Cflowd collection and analysis on this SAP  
Context **configure** [service vpls string sap string cflowd boolean](#)  
Tree [cflowd](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **collect-stats** *boolean*

Synopsis Collect accounting statistics  
Context **configure** [service vpls string sap string collect-stats boolean](#)  
Tree [collect-stats](#)  
Default false

Introduced 16.0.R1  
Platforms All

## cpu-protection

Synopsis Enter the **cpu-protection** context  
Context **configure** [service vpls string sap string cpu-protection](#)  
Tree [cpu-protection](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis Enable the **eth-cfm-monitoring** context  
Context **configure** [service vpls string sap string cpu-protection eth-cfm-monitoring](#)  
Tree [eth-cfm-monitoring](#)  
Notes The following elements are part of a choice: **eth-cfm-monitoring** or **mac-monitoring**.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis Apply rate limit to the sum of the per peer packet rates  
Context **configure** [service vpls string sap string cpu-protection eth-cfm-monitoring aggregate](#)  
Tree [aggregate](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis Ignore Ethernet CFM packets when enforcing overall rate  
Context **configure** [service vpls string sap string cpu-protection eth-cfm-monitoring car](#)  
Tree [car](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## policy-id *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

## dhcp

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dhcp</a>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of DHCP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dhcp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dhcp</a> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**lease-populate**

Synopsis	Enter the <b>lease-populate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dhcp</a> <b>lease-populate</b>
Tree	<a href="#">lease-populate</a>
Introduced	16.0.R1
Platforms	All

**max-leases** *number*

Synopsis	Maximum number of DHCPv4 leases
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dhcp</a> <a href="#">lease-populate</a> <b>max-leases</b> <i>number</i>
Tree	<a href="#">max-leases</a>
Range	0 to 131071
Introduced	16.0.R1
Platforms	All



## option-82

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure service vpls string sap string dhcp option-82</b>
Tree	<a href="#">option-82</a>
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

## action keyword

Synopsis	Action to take with received DHCP Option 82
Context	<b>configure service vpls string sap string dhcp option-82 action keyword</b>
Tree	<a href="#">action</a>
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	All

## circuit-id

Synopsis	Enter the <b>circuit-id</b> context
Context	<b>configure service vpls string sap string dhcp option-82 circuit-id</b>
Tree	<a href="#">circuit-id</a>
Introduced	16.0.R1
Platforms	All

## ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	<b>configure service vpls string sap string dhcp option-82 circuit-id ascii-tuple</b>
Tree	<a href="#">ascii-tuple</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>hex-string</b> , <b>none</b> , or <b>vlan-ascii-tuple</b> .

Introduced	16.0.R1
Platforms	All

### **hex-string** *string*

Synopsis	User-defined hexadecimal value of the option
Context	<b>configure</b> <a href="#">service vpls string sap string dhcp option-82 circuit-id hex-string string</a>
Tree	<a href="#">hex-string</a>
String Length	1 to 66
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>hex-string</b> , <b>none</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

### **none**

Synopsis	Do not include the circuit ID
Context	<b>configure</b> <a href="#">service vpls string sap string dhcp option-82 circuit-id none</a>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>hex-string</b> , <b>none</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

### **vlan-ascii-tuple**

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	<b>configure</b> <a href="#">service vpls string sap string dhcp option-82 circuit-id vlan-ascii-tuple</a>
Tree	<a href="#">vlan-ascii-tuple</a>
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>hex-string</b> , <b>none</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1

Platforms All

## remote-id

Synopsis Enter the **remote-id** context

Context **configure service vpls string sap string dhcp option-82 remote-id**

Tree [remote-id](#)

Description Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).

Introduced 16.0.R1

Platforms All

## ascii-string *string*

Synopsis User-defined ASCII string for the remote ID

Context **configure service vpls string sap string dhcp option-82 remote-id ascii-string string**

Tree [ascii-string](#)

String Length 1 to 32

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

## hex-string *string*

Synopsis Option as a hexadecimal string

Context **configure service vpls string sap string dhcp option-82 remote-id hex-string string**

Tree [hex-string](#)

String Length 1 to 66

Notes The following elements are part of a choice: **ascii-string**, **hex-string**, **mac**, or **none**.

Introduced 16.0.R1

Platforms All

## mac

Synopsis Use the MAC address for the remote ID

Context	<b>configure service vpls string sap string dhcp option-82 remote-id mac</b>
Tree	<a href="#">mac</a>
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>hex-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	All

### none

Synopsis	Do not include the remote ID
Context	<b>configure service vpls string sap string dhcp option-82 remote-id none</b>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>hex-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	All

### vendor-specific-option

Synopsis	Enter the <b>vendor-specific-option</b> context
Context	<b>configure service vpls string sap string dhcp option-82 vendor-specific-option</b>
Tree	<a href="#">vendor-specific-option</a>
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	All

### client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	<b>configure service vpls string sap string dhcp option-82 vendor-specific-option client-mac-address <i>boolean</i></b>
Tree	<a href="#">client-mac-address</a>
Default	false
Introduced	16.0.R1
Platforms	All

**sap-id** *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string dhcp option-82 vendor-specific-option sap-id</a> <i>boolean</i>
Tree	<a href="#">sap-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**service-id** *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string dhcp option-82 vendor-specific-option service-id</a> <i>boolean</i>
Tree	<a href="#">service-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**string** *string*

Synopsis	User-defined ASCII string for the VSO
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string dhcp option-82 vendor-specific-option string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**system-id** *boolean*

Synopsis	Send the system ID in the VSO
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string dhcp option-82 vendor-specific-option system-id</a> <i>boolean</i>
Tree	<a href="#">system-id</a>
Default	false

Introduced	16.0.R1
Platforms	All

## proxy-server

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string dhcp proxy-server</a>
Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	<b>configure</b> <a href="#">service vpls string sap string dhcp proxy-server admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## emulated-server *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	<b>configure</b> <a href="#">service vpls string sap string dhcp proxy-server emulated-server string</a>
Tree	<a href="#">emulated-server</a>
Introduced	16.0.R1
Platforms	All

## lease-time

Synopsis	Enter the <b>lease-time</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string dhcp proxy-server lease-time</a>
Tree	<a href="#">lease-time</a>
Introduced	16.0.R1

Platforms All

### **radius-override** *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure service vpls string sap string dhcp proxy-server lease-time radius-override boolean**

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms All

### **value** *number*

Synopsis DHCP lease time

Context **configure service vpls string sap string dhcp proxy-server lease-time value number**

Tree [value](#)

Range 300 to 315446399

Units seconds

Introduced 16.0.R1

Platforms All

### **snoop** *boolean*

Synopsis Enable DHCP snooping on the SAP

Context **configure service vpls string sap string dhcp snoop boolean**

Tree [snoop](#)

Default false

Introduced 16.0.R1

Platforms All

### **dhcp6**

Synopsis Enter the **dhcp6** context

Context **configure service vpls string sap string dhcp6**

Tree [dhcp6](#)

Introduced	23.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp6</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	23.10.R1
Platforms	All

### **ldra**

Synopsis	Enable the <b>ldra</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp6</a> <a href="#">ldra</a>
Tree	<a href="#">ldra</a>
Introduced	23.10.R1
Platforms	All

### **interface-type** *keyword*

Synopsis	LDRA interface type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp6</a> <a href="#">ldra</a> <a href="#">interface-type</a> <a href="#">keyword</a>
Tree	<a href="#">interface-type</a>
Description	<p>This command specifies the LDRA interface type.</p> <p><b>client-facing</b> - configure the SAP as an untrusted client-facing interface. Only DHCPv6 client messages are accepted and encapsulated in a Relay-Forward message. It is mandatory to configure an interface ID for client-facing SAPs. Relay-Forward, Relay-Reply, and DHCPv6 server messages are silently dropped when received on a client-facing SAP.</p> <p><b>network-facing</b> - configure the SAP as a network-facing interface. Only Relay-Reply messages are accepted: the server message is extracted from the Relay-Reply message and forwarded in the VPLS. All other DHCPv6 message types are silently dropped when received on a network-facing SAP.</p>
Options	client-facing, network-facing
Notes	This element is mandatory.



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Introduced	23.10.R1
Platforms	All

## options

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp6</a> <a href="#">ldra</a> <a href="#">options</a>
Tree	<a href="#">options</a>
Introduced	23.10.R1
Platforms	All

## interface-id

Synopsis	Enable the <b>interface-id</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp6</a> <a href="#">ldra</a> <a href="#">options</a> <a href="#">interface-id</a>
Tree	<a href="#">interface-id</a>
Introduced	23.10.R1
Platforms	All

## ascii-tuple

Synopsis	Use an ASCII-encoded concatenated tuple
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp6</a> <a href="#">ldra</a> <a href="#">options</a> <a href="#">interface-id</a> <a href="#">ascii-tuple</a>
Tree	<a href="#">ascii-tuple</a>
Description	This command specifies the use of the ASCII-encoded concatenated tuple, which consists of the system name, service ID, and SAP ID separated by " ".
Notes	The following elements are part of a mandatory choice: <b>ascii-tuple</b> or <b>vlan-ascii-tuple</b> .
Introduced	23.10.R1
Platforms	All

## vlan-ascii-tuple

Synopsis	Use an enhanced ASCII-encoded concatenated tuple
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">dhcp6</a> <a href="#">ldra</a> <a href="#">options</a> <a href="#">interface-id</a> <a href="#">vlan-ascii-tuple</a>
Tree	<a href="#">vlan-ascii-tuple</a>

Description	This command specifies the use of the ASCII-encoded concatenated tuple enhanced with VLAN ID and dot1p bits, consisting of the system name, service ID, SAP ID, dot1p inner VLAN, and inner VLAN ID separated by " ".
Notes	The following elements are part of a mandatory choice: <b>ascii-tuple</b> or <b>vlan-ascii-tuple</b> .
Introduced	23.10.R1
Platforms	All

## remote-id

Synopsis	Enter the <b>remote-id</b> context
Context	<b>configure service vpls string sap string dhcp6 ldra options remote-id</b>
Tree	<a href="#">remote-id</a>
Description	Commands in this context configure the Relay-Agent remote ID contents inserted by the LDRA.
Introduced	23.10.R1
Platforms	All

## mac

Synopsis	Use the DHCPv6 client source MAC address
Context	<b>configure service vpls string sap string dhcp6 ldra options remote-id mac</b>
Tree	<a href="#">mac</a>
Description	This command sets the enterprise number field of the Relay Agent remote ID to 6527 and configures the DHCPv6 client source MAC address as six hexadecimal numbers.
Notes	The following elements are part of a choice: <b>mac</b> or <b>string</b> .
Introduced	23.10.R1
Platforms	All

## string string

Synopsis	User-defined ASCII string
Context	<b>configure service vpls string sap string dhcp6 ldra options remote-id string string</b>
Tree	<a href="#">string</a>
Description	This command sets the enterprise number field of the Relay-Agent remote ID to 6527 and configures the ASCII-encoded string.
String Length	1 to 32

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Notes	The following elements are part of a choice: <b>mac</b> or <b>string</b> .
Introduced	23.10.R1
Platforms	All

### **dist-cpu-protection** *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">dist-cpu-protection</a> <i>policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

### **agg-rate**

Synopsis	Enter the <b>agg-rate</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a>
Tree	<a href="#">agg-rate</a>
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>percent-agg-rate</b> .
Introduced	16.0.R1
Platforms	All

### **adaptation-rule** *keyword*

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <a href="#">adaptation-rule</a> <i>keyword</i>
Tree	<a href="#">adaptation-rule</a>

Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

### **burst-limit** (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress agg-rate</a> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

### **limit-unused-bandwidth** *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress agg-rate</a> <b>limit-unused-bandwidth</b> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **queue-frame-based-accounting** *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress agg-rate</a> <b>queue-frame-based-accounting</b> <i>boolean</i>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

**rate number**

Synopsis	Enforced aggregate rate for all queues
Context	<b>configure</b> <a href="#">service vpls string sap string egress agg-rate rate number</a>
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

**dest-mac-rewrite string**

Synopsis	Destination MAC overwrite for unicast
Context	<b>configure</b> <a href="#">service vpls string sap string egress dest-mac-rewrite string</a>
Tree	<a href="#">dest-mac-rewrite</a>
Introduced	16.0.R5
Platforms	All

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string egress filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

**ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service vpls string sap string egress filter ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter string</a>
Introduced	16.0.R1
Platforms	All

### ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service vpls string sap string egress filter ipv6 reference</a>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter string</a>
Introduced	16.0.R1
Platforms	All

### mac reference

Synopsis	MAC filter policy name
Context	<b>configure</b> <a href="#">service vpls string sap string egress filter mac reference</a>
Tree	<a href="#">mac</a>
Reference	<b>configure</b> <a href="#">filter mac-filter string</a>
Introduced	16.0.R1
Platforms	All

### qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

### policer-control-policy

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure service vpls string sap string egress qos policer-control-policy overrides</b>
Tree	<b>overrides</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## root

Synopsis	Enter the <b>root</b> context
Context	<b>configure service vpls string sap string egress qos policer-control-policy overrides root</b>
Tree	<b>root</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure service vpls string sap string egress qos policer-control-policy overrides root max-rate (<i>number</i>   <i>keyword</i>)</b>
Tree	<b>max-rate</b>
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure service vpls string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds</b>
Tree	<b>priority-mbs-thresholds</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority** [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )



Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos policer-control-policy policy-name reference</a>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos policer-control-policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **qinq-mark-top-only** *boolean*

Synopsis	Mark top Q-tags
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos qinq-mark-top-only boolean</a>
Tree	<a href="#">qinq-mark-top-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress</a>
Tree	<a href="#">sap-egress</a>
Introduced	16.0.R1
Platforms	All

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure service vpls string sap string egress qos sap-egress overrides</b>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

**hs-secondary-shaper string**

Synopsis	HS Secondary Shaper
Context	<b>configure service vpls string sap string egress qos sap-egress overrides hs-secondary-shaper string</b>
Tree	<a href="#">hs-secondary-shaper</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-wrr-group [group-id] reference**

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference</b>
Tree	<a href="#">hs-wrr-group</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[group-id] reference**

Synopsis	HS WRR group identifier
Context	<b>configure service vpls string sap string egress qos sap-egress overrides hs-wrr-group reference</b>
Tree	<a href="#">hs-wrr-group</a>
Reference	<b>configure qos sap-egress string hs-wrr-group number</b>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis Class weight override of the WRR group

Context **configure service vpls string sap string egress qos sap-egress overrides hs-wrr-group**  
*reference hs-class-weight number*

Tree [hs-class-weight](#)

Range 1 | 2 | 4 | 8

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **percent-rate** *decimal-number*

Synopsis Percent rate override applied to the HS WRR group

Context **configure service vpls string sap string egress qos sap-egress overrides hs-wrr-group**  
*reference percent-rate decimal-number*

Tree [percent-rate](#)

Range 0.01 to 100.00

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis Scheduling rate override applied to the HS WRR group

Context **configure service vpls string sap string egress qos sap-egress overrides hs-wrr-group**  
*reference rate (number | keyword)*

Tree [rate](#)

Range 1 to 2000000000

Units kilobps

Options max

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

**policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference</a>
Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference</a>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos sap-egress string policer number</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference cbs (number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs** (*number* | *keyword*)

Synopsis	MBS
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Context	<b>configure service vpls string sap string egress qos sap-egress overrides policer reference mbs</b> ( <i>number   keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure service vpls string sap string egress qos sap-egress overrides policer reference packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure service vpls string sap string egress qos sap-egress overrides policer reference percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure service vpls string sap string egress qos sap-egress overrides policer reference percent-rate cir</b> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">percent-rate</a> <b>pir</b> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <b>rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <a href="#">reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference rate pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides policer reference stat-mode keyword</a>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference</a>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference</a>

Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## adaptation-rule

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

## cir keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">cir</a> <i>keyword</i>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

## pir keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a> <a href="#">pir</a> <i>keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All



**avg-frame-overhead** *decimal-number*

Synopsis	Average packet-to-frame encapsulation overhead
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference avg-frame-overhead decimal-number</a>
Tree	<a href="#">avg-frame-overhead</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

**burst-limit** (*number | keyword*)

Synopsis	Explicit shaping burst size for the queue
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference burst-limit (number   keyword)</a>
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

**cbs** (*number | keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">service vpls string sap string egress qos sap-egress overrides queue reference cbs (number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
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Context	<b>configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail low</b>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number | keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure service vpls string sap string egress qos sap-egress overrides queue reference drop-tail low percent-reduction-from-mbs</b> ( <i>number   keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

**hs-class-weight** *number*

Synopsis	Class weight override for the queue
Context	<b>configure service vpls string sap string egress qos sap-egress overrides queue reference hs-class-weight</b> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-wred-queue**

Synopsis	Enter the <b>hs-wred-queue</b> context
Context	<b>configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wred-queue</b>
Tree	<a href="#">hs-wred-queue</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**policy reference**

Synopsis	Slope policy applied to the HSQ queue group queue
Context	<b>configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wred-queue policy reference</b>
Tree	<a href="#">policy</a>
Reference	<b>configure qos slope-policy string</b>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-wrr-weight number**

Synopsis	WRR weight to parent with the queue into the scheduler
Context	<b>configure service vpls string sap string egress qos sap-egress overrides queue reference hs-wrr-weight number</b>
Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Default	1
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**mbs (number | keyword)**

Synopsis	MBS
Context	<b>configure service vpls string sap string egress qos sap-egress overrides queue reference mbs (number   keyword)</b>
Tree	<a href="#">mbs</a>
Range	0 to 1073741824

Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

## monitor-queue-depth

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>monitor-queue-depth</b>
Tree	<a href="#">monitor-queue-depth</a>
Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	All

## fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>fast-polling</b> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

## violation-threshold *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <b>violation-threshold</b> <i>decimal-number</i>
Tree	<a href="#">violation-threshold</a>
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99

Introduced 20.10.R1  
 Platforms All

## parent

Synopsis Enter the **parent** context  
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **parent**  
 Tree [parent](#)  
 Introduced 16.0.R1  
 Platforms All

## cir-weight *number*

Synopsis CIR parameter that overrides parent for queue group  
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **parent** **cir-weight** *number*  
 Tree [cir-weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

## weight *number*

Synopsis PIR parameter that overrides parent for queue group  
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **parent** **weight** *number*  
 Tree [weight](#)  
 Range 0 to 100  
 Introduced 16.0.R1  
 Platforms All

## percent-rate

Synopsis Enter the **percent-rate** context  
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [egress](#) [qos](#) [sap-egress](#) [overrides](#) [queue](#) [reference](#) **percent-rate**

Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

### **cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">cir</a> <i>decimal-number</i>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

### **pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">percent-rate</a> <a href="#">pir</a> <i>decimal-number</i>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue reference</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a> <a href="#">queue reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos sap-egress</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**port-redirect-group**

Synopsis	Enter the <b>port-redirect-group</b> context
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Context	<b>configure service vpls string sap string egress qos sap-egress port-redirect-group</b>
Tree	<a href="#">port-redirect-group</a>
Introduced	16.0.R1
Platforms	All

### **group-name** *reference*

Synopsis	Name of the queue group redirect list policy
Context	<b>configure service vpls string sap string egress qos sap-egress port-redirect-group group-name reference</b>
Tree	<a href="#">group-name</a>
Reference	<b>configure qos queue-group-templates egress queue-group string</b>
Introduced	16.0.R1
Platforms	All

### **instance** *number*

Synopsis	Instance of port queue group
Context	<b>configure service vpls string sap string egress qos sap-egress port-redirect-group instance number</b>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure service vpls string sap string egress qos scheduler-policy</b>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

### **overrides**

Synopsis	Enter the <b>overrides</b> context
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Context	<b>configure service vpls string sap string egress qos scheduler-policy overrides</b>
Tree	<b>overrides</b>
Introduced	16.0.R1
Platforms	All

### **scheduler** [**scheduler-name**] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure service vpls string sap string egress qos scheduler-policy overrides scheduler string</b>
Tree	<b>scheduler</b>
Introduced	16.0.R1
Platforms	All

### **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure service vpls string sap string egress qos scheduler-policy overrides scheduler string</b>
Tree	<b>scheduler</b>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

**cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <b>rate</b>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## virtual-port

Synopsis	Enter the <b>virtual-port</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">virtual-port</a>
Tree	<a href="#">virtual-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vport-name *reference*

Synopsis	Virtual port assigned to the SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">virtual-port</a> <a href="#">vport-name</a> <i>reference</i>
Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet</a> <a href="#">access</a> <a href="#">egress</a> <a href="#">virtual-port</a> <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## collect-lmm-fc-stats

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a>
Tree	<a href="#">collect-lmm-fc-stats</a>
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc** keyword

Synopsis Forwarding class name for profile-unaware counter

Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [eth-cfm](#) [collect-lmm-fc-stats](#) [fc](#) *keyword*

Tree [fc](#)

Description This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc-in-profile** keyword

Synopsis Forwarding class name for profile-aware counter

Context **configure** [service](#) [vpls](#) *string* [sap](#) *string* [eth-cfm](#) [collect-lmm-fc-stats](#) [fc-in-profile](#) *keyword*

Tree [fc-in-profile](#)

Description This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>collect-lmm-stats</b> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	<p>When configured to <b>true</b>, this command enables the collection of statistics on the facility MEPs. (Facility is at a different level of the hierarchy than the collection of LMM statistics for service SAPs and MPLS SDP bindings.)The collection of LMM statistics must be enabled if a MEP is launching or responding to ETH-LMM packets.</p> <p>This command is mutually exclusive with the <b>collect-lmm-fc-stats</b> command when there is entity resource contention.</p> <p>When configured to <b>false</b>, this command disables the collection of statistics on the facility MEPs. If LMM statistics collection is disabled, the counters in the LMM and LMR PDU do not represent accurate measurements and all measurements should be ignored.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis Maintenance Association (MA) name

Context **configure service vpls string sap string eth-cfm mep md-admin-name** *reference ma-admin-name reference mep-id number*

Tree [mep](#)

Reference **configure eth-cfm domain string association string**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis Maintenance Endpoint (MEP) ID

Context **configure service vpls string sap string eth-cfm mep md-admin-name** *reference ma-admin-name reference mep-id number*

Tree [mep](#)

Range 1 to 8191

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the MEP

Context **configure service vpls string sap string eth-cfm mep md-admin-name** *reference ma-admin-name reference mep-id number admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ais**

Synopsis	Enable the <b>ais</b> context
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais</b>
Tree	<a href="#">ais</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**client-meg-level number**

Synopsis	Client MEG level for AIS message generation
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number</b>
Tree	<a href="#">client-meg-level</a>
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interface-support boolean**

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean</b>
Tree	<a href="#">interface-support</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval number**

Synopsis	Transmission interval for AIS messages
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interval number</b>
Tree	<a href="#">interval</a>



Range	1   60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis	Priority of the AIS messages generated by the node
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a>
Tree	<a href="#">alarm-notification</a>
Description	Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.

Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm</a> <i>boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>cfm-vlan-tag</b> <i>string</i>
Tree	<a href="#">cfm-vlan-tag</a>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the <b>vc-type vlan</b> or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM

PDU's arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.

String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## csf

Synopsis	Enable the <b>csf</b> context
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</b>
Tree	<b>csf</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</b>
Tree	<b>multiplier</b>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## description *string*

Synopsis	Text description
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**direction** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">direction</a> <i>keyword</i>
Tree	<a href="#">direction</a>
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">bit-error-threshold</a> <i>number</i>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## test-pattern

Synopsis Enter the **test-pattern** context

Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [eth-test](#) **test-pattern**

Tree [test-pattern](#)

Description Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## crc-tlv *boolean*

Synopsis Generate a CRC checksum

Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [eth-test](#) **test-pattern** **crc-tlv** *boolean*

Tree [crc-tlv](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pattern *keyword*

Synopsis Test pattern for Ethernet Test frames

Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [eth-cfm](#) [mep](#) [md-admin-name](#) [reference](#) [ma-admin-name](#) [reference](#) [mep-id](#) [number](#) [eth-test](#) **test-pattern** **pattern** *keyword*

Tree [pattern](#)

Description This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.

Options all-zeros, all-ones

Default all-zeros

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fault-propagation** *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">fault-propagation</a> <i>keyword</i>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <a href="#">eth-ed</a> <a href="#">max-rx-defect-window</a> <i>number</i>
Tree	<a href="#">max-rx-defect-window</a>

Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority number**

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name</b> <i>reference ma-admin-name reference mep-id number grace eth-ed priority number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed boolean**

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name</b> <i>reference ma-admin-name reference mep-id number grace eth-ed rx-eth-ed boolean</i>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed boolean**

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure service vpls string sap string eth-cfm mep md-admin-name</b> <i>reference ma-admin-name reference mep-id number grace eth-ed tx-eth-ed boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## eth-vsm-grace

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace rx-eth-vsm-grace boolean</a>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean</a>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.  The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lbm-svc-act-responder** *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	<b>configure</b> <a href="#">service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number lbm-svc-act-responder boolean</a>
Tree	<a href="#">lbm-svc-act-responder</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect keyword</a>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <a href="#">service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number mac-address string</a>
Tree	<a href="#">mac-address</a>
Description	This command specifies the MAC address of the MEP.  When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### one-way-delay-threshold *number*

Synopsis Threshold time limit for the one-way delay test

Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number one-way-delay-threshold number**

Tree [one-way-delay-threshold](#)

Range 0 to 600

Units seconds

Default 3

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### primary-vlan *boolean*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis MEP provisioned using MA primary VLAN ID

Context **configure service vpls string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number primary-vlan boolean**

Tree [primary-vlan](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### mip primary-vlan (*number* | *keyword*)

Synopsis Enter the **mip** list instance

Context **configure service vpls string sap string eth-cfm mip primary-vlan (number | keyword)**

Tree [mip](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**primary-vlan** (*number* | *keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mip</b>
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>cfm-vlan-tag</b> <i>string</i>
Tree	<b>cfm-vlan-tag</b>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mac-address** *string*

Synopsis	MAC address of the MIP
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **snelch- ingress-ctag-levels *number***

**Synopsis** Snelch levels using additional VLAN C-Tag space

**Context** **configure service vpls string sap string eth-cfm snelch- ingress-ctag-levels *number***

**Tree** [snelch- ingress-ctag-levels](#)

**Description** This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.

**Range** 0 to 7

**Max.** 8

**Instances**

**Introduced** 21.2.R1

**Platforms** 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **snelch- ingress-levels *number***

**Synopsis** Levels for which ETH-CFM packets are silently discarded

**Context** **configure service vpls string sap string eth-cfm snelch- ingress-levels *number***

**Tree** [snelch- ingress-levels](#)

**Description** This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.

The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.

**Range** 0 to 7

**Max.** 8

**Instances**

**Introduced** 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vmep-filter** *boolean*

Synopsis Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP

Context **configure** *service vpls string sap string eth-cfm vmep-filter boolean*

Tree [vmep-filter](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-ring** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Ethernet ring operation

Context **configure** *service vpls string sap string eth-ring number*

Tree [eth-ring](#)

Range 1 to 128

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **etree-leaf** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Enable etree leaf access-circuit status

Context **configure** *service vpls string sap string etree-leaf boolean*

Tree [etree-leaf](#)

Default false

Introduced 16.0.R1

Platforms All

## etree-root-leaf-tag

Synopsis	Enable the <b>etree-root-leaf-tag</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string etree-root-leaf-tag</a>
Tree	<a href="#">etree-root-leaf-tag</a>
Introduced	16.0.R1
Platforms	All

## leaf number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Leaf tag value
Context	<b>configure</b> <a href="#">service vpls string sap string etree-root-leaf-tag leaf number</a>
Tree	<a href="#">leaf</a>
Range	1 to 4094
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## fdb

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string fdb</a>
Tree	<a href="#">fdb</a>
Introduced	16.0.R1
Platforms	All

## auto-learn-mac-protect *boolean*

Synopsis	Enable automatic update of MAC protect list
Context	<b>configure</b> <a href="#">service vpls string sap string fdb auto-learn-mac-protect boolean</a>
Tree	<a href="#">auto-learn-mac-protect</a>
Default	false

Introduced 16.0.R1  
 Platforms All

### **auto-learn-mac-protect-exclude-list** *reference*

Synopsis Referenced MAC protect exclusion list

Context **configure** [service vpls string sap string fdb auto-learn-mac-protect-exclude-list reference](#)

Tree [auto-learn-mac-protect-exclude-list](#)

Description This command references the name of a MAC protect exclusion list.  
 Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.  
 An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.

Reference **configure** [service mac-list string](#)

Introduced 20.5.R1

Platforms All

### **discard-unknown-source** *boolean*

Synopsis Discard frames with unknown source

Context **configure** [service vpls string sap string fdb discard-unknown-source boolean](#)

Tree [discard-unknown-source](#)

Default false

Introduced 16.0.R1

Platforms All

### **discard-unprotected-dest-mac** *boolean*

Synopsis Discard packet with unprotected destination MAC address

Context **configure** [service vpls string sap string fdb discard-unprotected-dest-mac boolean](#)

Tree [discard-unprotected-dest-mac](#)

Default false

Introduced 16.0.R1

Platforms All



### **limit-mac-move** *keyword*

Synopsis	MAC move
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fdb</a> <b>limit-mac-move</b> <i>keyword</i>
Tree	<a href="#">limit-mac-move</a>
Options	blockable, non-blockable
Default	blockable
Introduced	16.0.R1
Platforms	All

### **mac-learning**

Synopsis	Enter the <b>mac-learning</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fdb</a> <b>mac-learning</b>
Tree	<a href="#">mac-learning</a>
Introduced	16.0.R1
Platforms	All

### **aging** *boolean*

Synopsis	Enable aging of MAC addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fdb</a> <b>mac-learning</b> <b>aging</b> <i>boolean</i>
Tree	<a href="#">aging</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **learning** *boolean*

Synopsis	Enable learning of new MAC addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fdb</a> <b>mac-learning</b> <b>learning</b> <i>boolean</i>
Tree	<a href="#">learning</a>
Default	true
Introduced	16.0.R1
Platforms	All

**mac-pinning** *boolean*

Synopsis	Enable MAC address pinning on this SAP
Context	<b>configure</b> <a href="#">service vpls string sap string fdb mac-pinning</a> <i>boolean</i>
Tree	<a href="#">mac-pinning</a>
Default	false
Introduced	16.0.R1
Platforms	All

**maximum-mac-addresses** *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	<b>configure</b> <a href="#">service vpls string sap string fdb maximum-mac-addresses</a> <i>number</i>
Tree	<a href="#">maximum-mac-addresses</a>
Description	<p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this SAP.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.</p> <p>When the configured limit is reached and the <b>configure service pw-template fdb discard-unknown-source</b> command is set to <b>true</b> for this SAP, packets with unknown source MAC addresses are discarded. If <b>discard-unknown-source</b> is set to <b>false</b>, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.</p> <p>However, if the <b>configure service vpls fdb discard-unknown</b> command is set to <b>true</b>, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.</p> <p>When unconfigured, the SAP uses the global MAC learning limitations.</p>
Range	1 to 511999
Introduced	16.0.R1
Platforms	All

**protected-src-mac-violation-action** *keyword*

Synopsis	Action to take whenever a relearn request for a protected MAC is received
Context	<b>configure</b> <a href="#">service vpls string sap string fdb protected-src-mac-violation-action</a> <i>keyword</i>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	sap-oper-down, alarm-only, discard

Introduced 16.0.R1  
 Platforms All

### **host-admin-state** *keyword*

Synopsis Administrative state of the hosts  
 Context **configure** [service vpls string sap string host-admin-state keyword](#)  
 Tree [host-admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-lockout-policy** *reference*

Synopsis Host lockout policy  
 Context **configure** [service vpls string sap string host-lockout-policy reference](#)  
 Tree [host-lockout-policy](#)  
 Reference **configure** [subscriber-mgmt host-lockout-policy string](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **i-vpls-mac-flush**

Synopsis Enter the **i-vpls-mac-flush** context  
 Context **configure** [service vpls string sap string i-vpls-mac-flush](#)  
 Tree [i-vpls-mac-flush](#)  
 Introduced 16.0.R1  
 Platforms All

### **bgp-evpn**

Synopsis Enter the **bgp-evpn** context  
 Context **configure** [service vpls string sap string i-vpls-mac-flush bgp-evpn](#)  
 Tree [bgp-evpn](#)

Introduced 16.0.R1  
 Platforms All

### **send-to-bvpls** *boolean*

Synopsis Send B-VPLS EVPN flush  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [i-vpls-mac-flush](#) [bgp-evpn](#) [send-to-bvpls](#) *boolean*  
 Tree [send-to-bvpls](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **igmp-host-tracking**

Synopsis Enter the **igmp-host-tracking** context  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#)  
 Tree [igmp-host-tracking](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **expiry-time** *number*

Synopsis Time that the system continues to track inactive hosts  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#) [expiry-time](#) *number*  
 Tree [expiry-time](#)  
 Range 1 to 65535  
 Units seconds  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy that filters IGMP packets  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [igmp-host-tracking](#) [import-policy](#) *reference*  
 Tree [import-policy](#)

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Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of multicast groups to track per group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-alert-check** *boolean*

Synopsis	Enable IGMP router alert check option
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

**fast-leave** *boolean*

Synopsis	Allow IGMP fast leave processing
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">fast-leave</a> <i>boolean</i>
Tree	<a href="#">fast-leave</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**maximum-number-group-sources** *number*

Synopsis	Maximum group source combinations
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

**maximum-number-groups** *number*

Synopsis	Maximum groups allowed
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

**maximum-number-sources** *number*

Synopsis	Maximum sources that are allowed per group
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

**mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <b>mcac</b>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

**bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure service vpls string sap string igmp-snooping mcac bandwidth</b>
Tree	<b>bandwidth</b>
Introduced	16.0.R1
Platforms	All

**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure service vpls string sap string igmp-snooping mcac bandwidth mandatory</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mandatory</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure service vpls string sap string igmp-snooping mcac bandwidth total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>total</b>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure service vpls string sap string igmp-snooping mcac interface-policy</b> <i>reference</i>



Tree	<a href="#">interface-policy</a>
Reference	<b>configure mcac interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## mc-constraints

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure service vpls</b> <i>string sap string igmp-snooping mcac mc-constraints</i>
Tree	<a href="#">mc-constraints</a>
Introduced	16.0.R1
Platforms	All

## level [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure service vpls</b> <i>string sap string igmp-snooping mcac mc-constraints level number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All

## [[level-id](#)] *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure service vpls</b> <i>string sap string igmp-snooping mcac mc-constraints level number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## bandwidth *number*

Synopsis	Bandwidth available for this level
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Context	<b>configure service vpls string sap string igmp-snooping mcac mc-constraints level number bandwidth number</b>
Tree	<a href="#">bandwidth</a>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **number-down** [[number-lag-port-down](#)] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure service vpls string sap string igmp-snooping mcac mc-constraints number-down number</b>
Tree	<a href="#">number-down</a>
Introduced	16.0.R1
Platforms	All

### **[number-lag-port-down]** *number*

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure service vpls string sap string igmp-snooping mcac mc-constraints number-down number</b>
Tree	<a href="#">number-down</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level** *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure service vpls string sap string igmp-snooping mcac mc-constraints number-down number level number</b>
Tree	<a href="#">level</a>

Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **use-lag-port-weight** *boolean*

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping mcac mc-constraints use-lag-port-weight</a> <i>boolean</i>
Tree	<a href="#">use-lag-port-weight</a>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping mcac policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the</p>

policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	<b>configure mcac policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mrouter-port** *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-snooping mrouter-port</b> <i>boolean</i>
Tree	<b>mrouter-port</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **mvr**

Synopsis	Enter the <b>mvr</b> context
Context	<b>configure service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-snooping mvr</b>
Tree	<b>mvr</b>
Introduced	16.0.R1
Platforms	All

### **from-vpls** *reference*

Synopsis	MVR VPLS from which the multicast channels are taken
Context	<b>configure service vpls</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-snooping mvr from-vpls</b> <i>reference</i>
Tree	<b>from-vpls</b>
Reference	<b>configure service vpls</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **to-sap** *string*

Synopsis	Multicast channels copied to SAP
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Context	<b>configure service vpls string sap string igmp-snooping mvr to-sap string</b>
Tree	<b>to-sap</b>
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure service vpls string sap string igmp-snooping query-interval number</b>
Tree	<b>query-interval</b>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure service vpls string sap string igmp-snooping query-last-member-interval number</b>
Tree	<b>query-last-member-interval</b>
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure service vpls string sap string igmp-snooping query-response-interval number</b>
Tree	<b>query-response-interval</b>
Range	1 to 1023

Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <b>robust-count</b> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

**router-alert-check** *boolean*

Synopsis	Enable IP router alert check option
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <b>router-alert-check</b> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

**send-queries** *boolean*

Synopsis	Generate IGMP general queries
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-snooping</a> <b>send-queries</b> <i>boolean</i>
Tree	<a href="#">send-queries</a>
Default	false
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure service vpls string sap string igmp-snooping static</b>
Tree	<b>static</b>
Introduced	16.0.R1
Platforms	All

**group [group-address] string**

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure service vpls string sap string igmp-snooping static group string</b>
Tree	<b>group</b>
Introduced	16.0.R1
Platforms	All

**[group-address] string**

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure service vpls string sap string igmp-snooping static group string</b>
Tree	<b>group</b>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source [source-address] string**

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure service vpls string sap string igmp-snooping static group string source string</b>
Tree	<b>source</b>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">service vpls string sap string igmp-snooping static group string source string</a>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	any source address (*,G)
Context	<b>configure</b> <a href="#">service vpls string sap string igmp-snooping static group string starg</a>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <a href="#">service vpls string sap string igmp-snooping version keyword</a>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All



## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ipv6</a> <i>reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## mac reference

Synopsis	MAC filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">mac</a> <i>reference</i>
Tree	<a href="#">mac</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">mac-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

## match-qinq-dot1p *keyword*

Synopsis	Ingress match QinQ Dot1p
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">match-qinq-dot1p</a> <i>keyword</i>
Tree	<a href="#">match-qinq-dot1p</a>
Options	top, bottom
Introduced	16.0.R1
Platforms	All

## policer-control-policy

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**root**

Synopsis	Enter the <b>root</b> context
Context	<b>configure service vpls string sap string ingress qos policer-control-policy overrides root</b>
Tree	<b>root</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure service vpls string sap string ingress qos policer-control-policy overrides root max-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>max-rate</b>
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority-mbs-thresholds**

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds</b>
Tree	<b>priority-mbs-thresholds</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure service vpls string sap string ingress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>min-thresh-separation</b>
Range	0 to 16777216
Units	bytes
Options	auto

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **priority** [[priority-level](#)] *number*

Synopsis Enter the **priority** list instance  
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*  
 Tree [priority](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[priority-level]** *number*

Synopsis Priority level  
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number*  
 Tree [priority](#)  
 Range 1 to 8  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis Minimum amount of cumulative buffer space allowed  
 Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#) [root](#) [priority-mbs-thresholds](#) [priority](#) *number* [mbs-contribution](#) (*number* | *keyword*)  
 Tree [mbs-contribution](#)  
 Range 0 to 16777216  
 Units bytes  
 Options auto  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **sap-ingress**

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a>
Tree	<a href="#">sap-ingress</a>
Introduced	16.0.R1
Platforms	All

### **fp-redirect-group**

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a>
Tree	<a href="#">fp-redirect-group</a>
Introduced	16.0.R1
Platforms	All

### **group-name** *reference*

Synopsis	Queue group template name created on forwarding plane
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">fp-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">ingress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**instance *number***

Synopsis	Queue group instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress fp-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

**ip-criteria**

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides ip-criteria</a>
Tree	<a href="#">ip-criteria</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**activate-entry-tag *number***

Synopsis	Tag ID activated for IPv4 criteria
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides ip-criteria</a> <a href="#">activate-entry-tag</a> <i>number</i>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ipv6-criteria**

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure service vpls string sap string ingress qos sap-ingress overrides ipv6-criteria</b>
Tree	<a href="#">ipv6-criteria</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**activate-entry-tag number**

Synopsis	Tag ID activated for IPv6 criteria
Context	<b>configure service vpls string sap string ingress qos sap-ingress overrides ipv6-criteria activate-entry-tag number</b>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policer [policer-id] reference**

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure service vpls string sap string ingress qos sap-ingress overrides policer reference</b>
Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[policer-id] reference**

Synopsis	Policer unique ID
Context	<b>configure service vpls string sap string ingress qos sap-ingress overrides policer reference</b>
Tree	<a href="#">policer</a>
Reference	<b>configure qos sap-ingress string policer number</b>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cbs** (*number* | *keyword*)

Synopsis CBS

Context **configure service vpls string sap string ingress qos sap-ingress overrides policer reference cbs** (*number* | *keyword*)

Tree [cbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number* | *keyword*)

Synopsis MBS

Context **configure service vpls string sap string ingress qos sap-ingress overrides policer reference mbs** (*number* | *keyword*)

Tree [mbs](#)

Range 0 to 268435456

Units bytes

Options auto

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis Packet size modification for policing information

Context **configure service vpls string sap string ingress qos sap-ingress overrides policer reference packet-byte-offset** *number*

Tree [packet-byte-offset](#)

Range -32 to 31

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR



## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## cir decimal-number

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number</a>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## pir decimal-number

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference percent-rate pir decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference rate</a>
Tree	<a href="#">rate</a>

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference rate cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference rate pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides policer reference stat-mode keyword</a>
Tree	<a href="#">stat-mode</a>

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue** [\[queue-id\]](#) *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

### **[queue-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

### **cir** keyword

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword</a>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

### **pir** keyword

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference adaptation-rule pir keyword</a>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference cbs (number   keyword)</a>
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail</a>

Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail low</a>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference drop-tail low percent-reduction-from-mbs (number   keyword)</a>
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress overrides queue reference mbs (number   keyword)</a>
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

## monitor-queue-depth

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a>
Tree	<a href="#">monitor-queue-depth</a>
Introduced	21.7.R1
Platforms	All

## fast-polling *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">monitor-queue-depth</a> <a href="#">fast-polling</a> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Default	false
Introduced	21.7.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1

Platforms All

### **weight** *number*

Synopsis PIR parameter that overrides parent for queue group

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference](#) [parent weight number](#)

Tree [weight](#)

Range 0 to 100

Introduced 16.0.R1

Platforms All

### **percent-rate**

Synopsis Enter the **percent-rate** context

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference](#) [percent-rate](#)

Tree [percent-rate](#)

Notes The following elements are part of a choice: **percent-rate** or **rate**.

Introduced 16.0.R1

Platforms All

### **cir** *decimal-number*

Synopsis CIR percent rate

Context **configure** [service vpls string sap string ingress qos sap-ingress overrides queue reference](#) [percent-rate cir decimal-number](#)

Tree [cir](#)

Range 0.00 to 100.00

Introduced 16.0.R1

Platforms All

### **pir** *decimal-number*

Synopsis PIR percent rate

Context	<b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number</b>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate</b>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

**cir (number | keyword)**

Synopsis	CIR rate
Context	<b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate cir (number   keyword)</b>
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**pir (number | keyword)**

Synopsis	PIR rate
Context	<b>configure service vpls string sap string ingress qos sap-ingress overrides queue reference rate pir (number   keyword)</b>
Tree	<a href="#">pir</a>
Range	1 to 6400000000



Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Policy ID
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress policy-name reference</a>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-ingress string</a>
Introduced	16.0.R1
Platforms	All

### **queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos sap-ingress queuing-type keyword</a>
Tree	<a href="#">queuing-type</a>
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

### **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qos scheduler-policy overrides</a>

Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

### **scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Introduced	16.0.R1
Platforms	All

### **[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (<b>#</b>, <b>\$</b>, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure service vpls string sap string ingress qos scheduler-policy overrides scheduler string parent</b>
Tree	<b>parent</b>
Introduced	16.0.R1
Platforms	All

**cir-weight number**

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure service vpls string sap string ingress qos scheduler-policy overrides scheduler string parent cir-weight number</b>
Tree	<b>cir-weight</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure service vpls string sap string ingress qos scheduler-policy overrides scheduler string parent weight number</b>
Tree	<b>weight</b>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service vpls string sap string ingress qos scheduler-policy overrides scheduler string rate</b>
Tree	<b>rate</b>
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">string</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <a href="#">reference</a>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

## qtag-manipulation

Synopsis	Enter the <b>qtag-manipulation</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qtag-manipulation</a>
Tree	<a href="#">qtag-manipulation</a>
Introduced	16.0.R1
Platforms	All

## c-tag (*number* | *keyword*)

Synopsis	Inner ingress vlan translation for two service delimiting vlan values
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qtag-manipulation c-tag (<i>number</i>   <i>keyword</i>)</a>
Tree	<a href="#">c-tag</a>
Range	0 to 4094
Options	tag-*
Notes	The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).
Introduced	22.10.R1
Platforms	All

## push-dot1q-vlan (*number* | *keyword*)

Synopsis	VLAN translation information
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qtag-manipulation push-dot1q-vlan (<i>number</i>   <i>keyword</i>)</a>
Tree	<a href="#">push-dot1q-vlan</a>
Range	0 to 4094
Options	use-sap-svlan
Notes	The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).
Introduced	16.0.R1
Platforms	All

## s-tag *number*

Synopsis	Outer ingress VLAN translation for two service delimiting VLAN values
Context	<b>configure</b> <a href="#">service vpls string sap string ingress qtag-manipulation s-tag number</a>

Tree	<a href="#">s-tag</a>
Range	0 to 4094
Notes	The following elements are part of a choice: <b>push-dot1q-vlan</b> or ( <b>c-tag</b> and <b>s-tag</b> ).
Introduced	22.10.R1
Platforms	All

## I2pt

Synopsis	Enter the <b>I2pt</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">I2pt</a>
Tree	<a href="#">I2pt</a>
Introduced	16.0.R1
Platforms	All

## force-boundary

Synopsis	Enable the <b>force-boundary</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">I2pt</a> <a href="#">force-boundary</a>
Tree	<a href="#">force-boundary</a>
Introduced	16.0.R1
Platforms	All

## protocols

Synopsis	Enter the <b>protocols</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">I2pt</a> <a href="#">force-boundary</a> <a href="#">protocols</a>
Tree	<a href="#">protocols</a>
Introduced	16.0.R1
Platforms	All

## cdp *boolean*

Synopsis	Enable Cisco discovery protocol
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">I2pt</a> <a href="#">force-boundary</a> <a href="#">protocols</a> <a href="#">cdp</a> <i>boolean</i>
Tree	<a href="#">cdp</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **ntp boolean**

Synopsis	Enable dynamic trunking protocol
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">l2pt</a> <a href="#">force-boundary</a> <a href="#">protocols</a> <a href="#">ntp</a> <a href="#">boolean</a>
Tree	<a href="#">ntp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **pagp boolean**

Synopsis	Enable port aggregation protocol
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">l2pt</a> <a href="#">force-boundary</a> <a href="#">protocols</a> <a href="#">pagp</a> <a href="#">boolean</a>
Tree	<a href="#">pagp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **stp boolean**

Synopsis	Enable all spanning tree protocols
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">l2pt</a> <a href="#">force-boundary</a> <a href="#">protocols</a> <a href="#">stp</a> <a href="#">boolean</a>
Tree	<a href="#">stp</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **udld boolean**

Synopsis	Enable unidirectional link detection
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">l2pt</a> <a href="#">force-boundary</a> <a href="#">protocols</a> <a href="#">udld</a> <a href="#">boolean</a>

---

Tree	<a href="#">udld</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vtp *boolean***

Synopsis	Enable virtual trunk protocol
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string l2pt</a> <a href="#">force-boundary protocols vtp</a> <a href="#">boolean</a>
Tree	<a href="#">vtp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **termination**

Synopsis	Enable the <b>termination</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string l2pt</a> <a href="#">termination</a>
Tree	<a href="#">termination</a>
Introduced	16.0.R1
Platforms	All

### **protocols**

Synopsis	Enter the <b>protocols</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string l2pt</a> <a href="#">termination protocols</a>
Tree	<a href="#">protocols</a>
Introduced	16.0.R1
Platforms	All

### **cdp *boolean***

Synopsis	Enable Cisco discovery protocol
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string l2pt</a> <a href="#">termination protocols cdp</a> <a href="#">boolean</a>
Tree	<a href="#">cdp</a>



Default	false
Introduced	16.0.R1
Platforms	All

**ntp boolean**

Synopsis	Enable dynamic trunking protocol
Context	<b>configure</b> <a href="#">service vpls string sap string l2pt termination protocols ntp boolean</a>
Tree	<a href="#">ntp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**pagp boolean**

Synopsis	Enable port aggregation protocol
Context	<b>configure</b> <a href="#">service vpls string sap string l2pt termination protocols pagp boolean</a>
Tree	<a href="#">pagp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**stp boolean**

Synopsis	Enable all spanning tree protocols
Context	<b>configure</b> <a href="#">service vpls string sap string l2pt termination protocols stp boolean</a>
Tree	<a href="#">stp</a>
Default	true
Introduced	16.0.R1
Platforms	All

**udld boolean**

Synopsis	Enable unidirectional link detection
Context	<b>configure</b> <a href="#">service vpls string sap string l2pt termination protocols udld boolean</a>

---

Tree	<a href="#">udld</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **vtp** *boolean*

Synopsis	Enable virtual trunk protocol
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tp termination protocols vtp</a> <i>boolean</i>
Tree	<a href="#">vtp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **l2tpv3-session**

Synopsis	Enable the <b>l2tpv3-session</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a>
Tree	<a href="#">l2tpv3-session</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the session for the service
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">l2tpv3-session</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

## pseudo-wire



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>pseudo-wire</b> context
Context	<b>configure service vpls string sap string l2tpv3-session pseudo-wire</b>
Tree	<a href="#">pseudo-wire</a>
Introduced	16.0.R4
Platforms	All

## ethernet



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the Ethernet PW-type for the L2TPv3 session
Context	<b>configure service vpls string sap string l2tpv3-session pseudo-wire ethernet</b>
Tree	<a href="#">ethernet</a>
Notes	The following elements are part of a choice: <b>ethernet</b> or <b>ethernet-vlan-id</b> .
Introduced	16.0.R4
Platforms	All

## ethernet-vlan-id *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ethernet-VLAN PW-type ID for the L2TPv3 session
Context	<b>configure service vpls string sap string l2tpv3-session pseudo-wire ethernet-vlan-id number</b>
Tree	<a href="#">ethernet-vlan-id</a>
Range	0 to 4095
Notes	The following elements are part of a choice: <b>ethernet</b> or <b>ethernet-vlan-id</b> .
Introduced	16.0.R4

Platforms All

## router



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **router** context

Context **configure service vpls string sap string l2tpv3-session router**

Tree **router**

Introduced 16.0.R4

Platforms All

## group *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Tunnel group name

Context **configure service vpls string sap string l2tpv3-session router group string**

Tree **group**

String Length 1 to 32

Introduced 16.0.R4

Platforms All

## router-instance *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Router name used to identify the router instance

Context **configure service vpls string sap string l2tpv3-session router router-instance string**

Tree **router-instance**

String Length 1 to 64

Introduced 16.0.R4

Platforms All

### **vc-id** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis VC ID for the L2TPv3 session

Context **configure service vpls string sap string l2tpv3-session vc-id number**

Tree [vc-id](#)

Range 1 to 4294967295

Introduced 16.0.R4

Platforms All

### **lag**

Synopsis Enter the **lag** context

Context **configure service vpls string sap string lag**

Tree [lag](#)

Introduced 16.0.R1

Platforms All

### **link-map-profile** *number*

Synopsis LAG link map profile for a SAP or network interface

Context **configure service vpls string sap string lag link-map-profile number**

Tree [link-map-profile](#)

Description This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.

If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.

Range 1 to 64

Introduced 16.0.R1

Platforms All

## per-link-hash

Synopsis	Enter the <b>per-link-hash</b> context
Context	<b>configure service vpls string sap string lag per-link-hash</b>
Tree	<a href="#">per-link-hash</a>
Introduced	16.0.R1
Platforms	All

## class number

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure service vpls string sap string lag per-link-hash class number</b>
Tree	<a href="#">class</a>
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

## weight number

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure service vpls string sap string lag per-link-hash weight number</b>
Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

## managed-vlan-list

Synopsis	Enter the <b>managed-vlan-list</b> context
Context	<b>configure service vpls string sap string managed-vlan-list</b>
Tree	<a href="#">managed-vlan-list</a>
Introduced	19.10.R1
Platforms	All

**range** [vlan-range] *string*

Synopsis	Add a list entry for <b>range</b>
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">managed-vlan-list</a> <a href="#">range</a> <i>string</i>
Tree	<a href="#">range</a>
Introduced	19.10.R1
Platforms	All

**[vlan-range]** *string*

Synopsis	Range of VLANs associated with the M-VPLS SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">managed-vlan-list</a> <a href="#">range</a> <i>string</i>
Tree	<a href="#">range</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**mc-ring**

Synopsis	Enable the <b>mc-ring</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mc-ring</a>
Tree	<a href="#">mc-ring</a>
Introduced	16.0.R1
Platforms	All

**ring-node** *string*

Synopsis	Name for the ring node associated with this SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mc-ring</a> <a href="#">ring-node</a> <i>string</i>
Tree	<a href="#">ring-node</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## mld-snooping

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string mld-snooping</a>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

## fast-leave *boolean*

Synopsis	Allow IGMP fast leave processing
Context	<b>configure</b> <a href="#">service vpls string sap string mld-snooping fast-leave boolean</a>
Tree	<a href="#">fast-leave</a>
Default	false
Introduced	16.0.R1
Platforms	All

## import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">service vpls string sap string mld-snooping import-policy reference</a>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Introduced	16.0.R1
Platforms	All

## maximum-number-groups *number*

Synopsis	Maximum groups allowed
Context	<b>configure</b> <a href="#">service vpls string sap string mld-snooping maximum-number-groups number</a>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All



**mrouter-port** *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service vpls string sap string mld-snooping mrouter-port</a> <i>boolean</i>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mvr**

Synopsis	Enter the <b>mvr</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string mld-snooping mvr</a>
Tree	<a href="#">mvr</a>
Introduced	16.0.R1
Platforms	All

**from-vpls** *reference*

Synopsis	MVR VPLS from which the multicast channels are taken
Context	<b>configure</b> <a href="#">service vpls string sap string mld-snooping mvr from-vpls</a> <i>reference</i>
Tree	<a href="#">from-vpls</a>
Reference	<b>configure</b> <a href="#">service vpls string</a>
Introduced	16.0.R1
Platforms	All

**to-sap** *string*

Synopsis	SAP to which the multicast channels are copied
Context	<b>configure</b> <a href="#">service vpls string sap string mld-snooping mvr to-sap</a> <i>string</i>
Tree	<a href="#">to-sap</a>
String Length	1 to 45
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">robust-count</a> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

**router-alert-check** *boolean*

Synopsis	Enable IP router alert check option
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

**send-queries** *boolean*

Synopsis	Generate IGMP general queries
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">send-queries</a> <i>boolean</i>
Tree	<a href="#">send-queries</a>
Default	false
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a>
Tree	<a href="#">static</a>
Introduced	16.0.R1
Platforms	All

**group** [[group-address](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">sap string</a> <a href="#">mld-snooping static group string</a>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

**[group-address]** *string*

Synopsis	Group address of multicast channel
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">sap string</a> <a href="#">mld-snooping static group string</a>
Tree	<a href="#">group</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">sap string</a> <a href="#">mld-snooping static group string</a> <a href="#">source string</a>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">sap string</a> <a href="#">mld-snooping static group string</a> <a href="#">source string</a>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	any source address (*,G)
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> <b>starg</b>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

**version** *keyword*

Synopsis	Version of MLD running on the SAP or SDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

**monitor-oper-group** *reference*

Synopsis	Monitor operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">monitor-oper-group</a> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

**mrp**

Synopsis	Enter the <b>mrp</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>mrp</b>
Tree	<a href="#">mrp</a>
Introduced	20.10.R1

Platforms All

### **join-time** *number*

Synopsis Interval between transmit opportunities  
 Context **configure** [service vpls string sap string mrp join-time number](#)  
 Tree [join-time](#)  
 Range 1 to 10  
 Default 2  
 Introduced 20.10.R1  
 Platforms All

### **leave-all-time** *number*

Synopsis Frequency that LeaveAll PDUs are generated  
 Context **configure** [service vpls string sap string mrp leave-all-time number](#)  
 Tree [leave-all-time](#)  
 Range 60 to 300  
 Default 100  
 Introduced 20.10.R1  
 Platforms All

### **leave-time** *number*

Synopsis Time in leave state before transitioning to MT state  
 Context **configure** [service vpls string sap string mrp leave-time number](#)  
 Tree [leave-time](#)  
 Range 30 to 60  
 Default 30  
 Introduced 20.10.R1  
 Platforms All

### **periodic-time** *number*

Synopsis Frequency of periodic events generation

Context	<b>configure service vpls string sap string mrp periodic-time number</b>
Tree	<a href="#">periodic-time</a>
Range	10 to 100
Default	10
Introduced	20.10.R1
Platforms	All

### **periodic-timer** *boolean*

Synopsis	Enable the periodic transmission timer
Context	<b>configure service vpls string sap string mrp periodic-timer boolean</b>
Tree	<a href="#">periodic-timer</a>
Default	false
Introduced	20.10.R1
Platforms	All

### **policy** *reference*

Synopsis	MMRP policy name
Context	<b>configure service vpls string sap string mrp policy reference</b>
Tree	<a href="#">policy</a>
Reference	<b>configure service mrp policy string</b>
Introduced	20.10.R1
Platforms	All

### **multi-service-site** *reference*

Synopsis	Multi service site name
Context	<b>configure service vpls string sap string multi-service-site reference</b>
Tree	<a href="#">multi-service-site</a>
Reference	<b>configure service customer string multi-service-site string</b>
Introduced	16.0.R1
Platforms	All

## **oper-group** *reference*

Synopsis	Operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">oper-group</a> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

## **pbb**

Synopsis	Enter the <b>pbb</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">pbb</a>
Tree	<a href="#">pbb</a>
Introduced	20.10.R1
Platforms	All

## **fault-propagation**

Synopsis	Enter the <b>fault-propagation</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">pbb</a> <a href="#">fault-propagation</a>
Tree	<a href="#">fault-propagation</a>
Introduced	20.10.R1
Platforms	All

## **backbone-mac-address** [[address](#)] *string*

Synopsis	Add a list entry for <b>backbone-mac-address</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">pbb</a> <a href="#">fault-propagation</a> <a href="#">backbone-mac-address</a> <i>string</i>
Tree	<a href="#">backbone-mac-address</a>
Introduced	20.10.R1
Platforms	All



**[address]** *string*

Synopsis	Backbone MAC address
Context	<b>configure</b> <a href="#">service vpls string sap string pbb fault-propagation backbone-mac-address string</a>
Tree	<a href="#">backbone-mac-address</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**backbone-mac-name** [[name](#)] *reference*

Synopsis	Add a list entry for <b>backbone-mac-name</b>
Context	<b>configure</b> <a href="#">service vpls string sap string pbb fault-propagation backbone-mac-name reference</a>
Tree	<a href="#">backbone-mac-name</a>
Introduced	20.10.R1
Platforms	All

**[name]** *reference*

Synopsis	Backbone MAC address name
Context	<b>configure</b> <a href="#">service vpls string sap string pbb fault-propagation backbone-mac-name reference</a>
Tree	<a href="#">backbone-mac-name</a>
Reference	<b>configure</b> <a href="#">service pbb mac string</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**pim-snooping**

Synopsis	Enter the <b>pim-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string pim-snooping</a>
Tree	<a href="#">pim-snooping</a>
Introduced	16.0.R1

Platforms All

### **maximum-number-groups** *number*

Synopsis Maximum groups for this interface

Context **configure** [service vpls](#) *string* [sap](#) *string* [pim-snooping](#) **maximum-number-groups** *number*

Tree [maximum-number-groups](#)

Range 1 to 16000

Introduced 16.0.R1

Platforms All

### **process-cpm-traffic-on-sap-down** *boolean*

Synopsis Process CPM traffic on SAP down event

Context **configure** [service vpls](#) *string* [sap](#) *string* **process-cpm-traffic-on-sap-down** *boolean*

Tree [process-cpm-traffic-on-sap-down](#)

Default false

Introduced 16.0.R1

Platforms All

### **radius-auth-policy** *reference*

Synopsis RADIUS authentication policy

Context **configure** [service vpls](#) *string* [sap](#) *string* **radius-auth-policy** *reference*

Tree [radius-auth-policy](#)

Reference **configure** [subscriber-mgmt](#) **radius-authentication-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy-ipv4** *reference*

Synopsis Subscriber host connectivity verification policy for IPv4

Context **configure** [service vpls](#) *string* [sap](#) *string* **shcv-policy-ipv4** *reference*

Tree [shcv-policy-ipv4](#)

Reference **configure** [subscriber-mgmt](#) **shcv-policy** *string*

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **spb**

Synopsis	Enable the <b>spb</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">spb</a>
Tree	<a href="#">spb</a>
Introduced	21.10.R1
Platforms	All

## **admin-state** *keyword*

Synopsis	Admin state
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">spb</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

## **level** [*id*] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">spb</a> <b>level</b> <i>number</i>
Tree	<a href="#">level</a>
Introduced	21.10.R1
Platforms	All

## **[id]** *number*

Synopsis	Level identifier
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">spb</a> <b>level</b> <i>number</i>
Tree	<a href="#">level</a>
Range	1

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Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Hello interval
Context	<b>configure</b> <a href="#">service vpls</a> <i>string sap string spb level number</i> <b>hello-interval</b> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	1 to 20000
Units	seconds
Default	9
Introduced	21.10.R1
Platforms	All

### **hello-multiplier** *number*

Synopsis	Hello multiplier
Context	<b>configure</b> <a href="#">service vpls</a> <i>string sap string spb level number</i> <b>hello-multiplier</b> <i>number</i>
Tree	<a href="#">hello-multiplier</a>
Range	2 to 100
Default	3
Introduced	21.10.R1
Platforms	All

### **metric** *number*

Synopsis	Metric
Context	<b>configure</b> <a href="#">service vpls</a> <i>string sap string spb level number</i> <b>metric</b> <i>number</i>
Tree	<a href="#">metric</a>
Range	0 to 16777215
Default	0
Introduced	21.10.R1
Platforms	All

**lsp-pacing-interval** *number*

Synopsis	Lsp pacing interval
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">spb</a> <a href="#">lsp-pacing-interval</a> <i>number</i>
Tree	<a href="#">lsp-pacing-interval</a>
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Retransmit interval
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">spb</a> <a href="#">retransmit-interval</a> <i>number</i>
Tree	<a href="#">retransmit-interval</a>
Range	1 to 65535
Units	seconds
Default	5
Introduced	21.10.R1
Platforms	All

**split-horizon-group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Split horizon group
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">split-horizon-group</a> <i>reference</i>
Tree	<a href="#">split-horizon-group</a>
Reference	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**static-host**

Synopsis	Enter the <b>static-host</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string static-host</a>
Tree	<a href="#">static-host</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4 [ip] string mac string**

Synopsis	Enter the <b>ipv4</b> list instance
Context	<b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ip] string**

Synopsis	IP address
Context	<b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string</a>
Tree	<a href="#">ipv4</a>
MD-CLI Default	0.0.0.0
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac string**

Synopsis	MAC address
Context	<b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string</a>
Tree	<a href="#">ipv4</a>
MD-CLI Default	00:00:00:00:00:00
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the static host

Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ancp-string** *string*

Synopsis ANCP string

Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) **ancp-string** *string*

Tree [ancp-string](#)

String Length 1 to 63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **app-profile**

Synopsis Enter the **app-profile** context

Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) **app-profile**

Tree [app-profile](#)

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** *reference*

Synopsis Application profile used by the static host

Context **configure** [service](#) [vpls](#) [string](#) [sap](#) [string](#) [static-host](#) [ipv4](#) [string](#) [mac](#) [string](#) **app-profile** *profile reference*

Tree	<a href="#">profile</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-profile string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id** *string*

Synopsis	Intermediate destination ID
Context	<b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string int-dest-id string</a>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv**

Synopsis	Enter the <b>shcv</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string shcv</a>
Tree	<a href="#">shcv</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile** *reference*

Synopsis	SLA profile name
Context	<b>configure</b> <a href="#">service vpls string sap string static-host ipv4 string mac string sla-profile reference</a>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sla-profile string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Sub-profile name
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Context	<b>configure service vpls string sap string static-host ipv4 string mac string sub-profile reference</b>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure subscriber-mgmt sub-profile string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis	Enter the <b>subscriber-id</b> context
Context	<b>configure service vpls string sap string static-host ipv4 string mac string subscriber-id</b>
Tree	<a href="#">subscriber-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string string

Synopsis	Subscriber identification
Context	<b>configure service vpls string sap string static-host ipv4 string mac string subscriber-id string string</b>
Tree	<a href="#">string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	<b>configure service vpls string sap string static-host ipv4 string mac string subscriber-id use-sap-id</b>
Tree	<a href="#">use-sap-id</a>
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**static-isid**

Synopsis	Enter the <b>static-isid</b> context
Context	<b>configure service vpls string sap string static-isid</b>
Tree	<b>static-isid</b>
Introduced	19.10.R1
Platforms	All

**range [range-id] number**

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure service vpls string sap string static-isid range number</b>
Tree	<b>range</b>
Introduced	19.10.R1
Platforms	All

**[range-id] number**

Synopsis	Range ID for static ISID
Context	<b>configure service vpls string sap string static-isid range number</b>
Tree	<b>range</b>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**end number**

Synopsis	Upper bound of the ISID range
Context	<b>configure service vpls string sap string static-isid range number end number</b>
Tree	<b>end</b>
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

**start number**

Synopsis	Lower bound of the ISID range
Context	<b>configure service vpls string sap string static-isid range number start number</b>
Tree	<b>start</b>
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

**stp**

Synopsis	Enter the <b>stp</b> context
Context	<b>configure service vpls string sap string stp</b>
Tree	<b>stp</b>
Introduced	16.0.R4
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of STP
Context	<b>configure service vpls string sap string stp admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R4
Platforms	All

**auto-edge boolean**

Synopsis	Enable automatic detection of edge port characteristics
Context	<b>configure service vpls string sap string stp auto-edge boolean</b>
Tree	<b>auto-edge</b>
Default	true
Introduced	16.0.R4
Platforms	All

**edge-port** *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	<b>configure</b> <a href="#">service vpls</a> <i>string sap string stp edge-port boolean</i>
Tree	<a href="#">edge-port</a>
Default	false
Introduced	16.0.R4
Platforms	All

**link-type** *keyword*

Synopsis	Configure STP link-type
Context	<b>configure</b> <a href="#">service vpls</a> <i>string sap string stp link-type keyword</i>
Tree	<a href="#">link-type</a>
Options	pt-pt, shared
Default	pt-pt
Introduced	16.0.R4
Platforms	All

**mst-instance** [[mst-inst-number](#)] *number*

Synopsis	Enter the <b>mst-instance</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string sap string stp mst-instance number</i>
Tree	<a href="#">mst-instance</a>
Introduced	19.10.R1
Platforms	All

**[mst-inst-number]** *number*

Synopsis	Multiple Spanning Tree Instance number
Context	<b>configure</b> <a href="#">service vpls</a> <i>string sap string stp mst-instance number</i>
Tree	<a href="#">mst-instance</a>
Range	1 to 4094
Notes	This element is part of a list key.
Introduced	19.10.R1

Platforms All

### **mst-path-cost** *number*

Synopsis MSTI path cost  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [stp](#) [mst-instance](#) *number* **mst-path-cost** *number*  
 Tree [mst-path-cost](#)  
 Range 1 to 200000000  
 Default 10  
 Introduced 19.10.R1  
 Platforms All

### **mst-port-priority** *number*

Synopsis MSTI port priority  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [stp](#) [mst-instance](#) *number* **mst-port-priority** *number*  
 Tree [mst-port-priority](#)  
 Range 0 | 16 | 32 | 48 | 64 | 80 | 96 | 112 | 128 | 144 | 160 | 176 | 192 | 208 | 224 | 240  
 Default 128  
 Introduced 19.10.R1  
 Platforms All

### **path-cost** *number*

Synopsis Configure path-cost  
 Context **configure** [service vpls](#) *string* [sap](#) *string* [stp](#) **path-cost** *number*  
 Tree [path-cost](#)  
 Range 1 to 200000000  
 Default 10  
 Introduced 16.0.R4  
 Platforms All

### **port-num** *number*

Synopsis Configure virtual port number

Context	<b>configure service vpls string sap string stp port-num number</b>
Tree	<b>port-num</b>
Range	1 to 2047
Introduced	16.0.R4
Platforms	All

### **priority number**

Synopsis	Configure STP priority
Context	<b>configure service vpls string sap string stp priority number</b>
Tree	<b>priority</b>
Range	0 to 255
Default	128
Introduced	16.0.R4
Platforms	All

### **root-guard boolean**

Synopsis	Enable/disable STP root-guard
Context	<b>configure service vpls string sap string stp root-guard boolean</b>
Tree	<b>root-guard</b>
Default	false
Introduced	16.0.R4
Platforms	All

### **sub-sla-mgmt**

Synopsis	Enter the <b>sub-sla-mgmt</b> context
Context	<b>configure service vpls string sap string sub-sla-mgmt</b>
Tree	<b>sub-sla-mgmt</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of SAP subscriber management
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**defaults**

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Default application profile name for this SAP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**int-dest-id**

Synopsis	Enter the <b>int-dest-id</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">int-dest-id</a>
Tree	<a href="#">int-dest-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	Use the configured string
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string sub-sla-mgmt defaults int-dest-id</a> <a href="#">string string</a>
Tree	<a href="#">string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**top-q-tag**

Synopsis	Use the top Q-tag of this SAP
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string sub-sla-mgmt defaults int-dest-id</a> <a href="#">top-q-tag</a>
Tree	<a href="#">top-q-tag</a>
Notes	The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	Default SLA profile for hosts on this SAP
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string sub-sla-mgmt defaults sla-profile</a> <a href="#">reference</a>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-profile** *reference*

Synopsis	Default subscriber profile for the SAP
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string sap</a> <a href="#">string sub-sla-mgmt defaults sub-profile</a> <a href="#">reference</a>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <a href="#">string</a>
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis Enter the **subscriber-id** context

Context **configure service vpls string sap string sub-sla-mgmt defaults subscriber-id**

Tree [subscriber-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-id

Synopsis Use auto-generated subscriber identification string

Context **configure service vpls string sap string sub-sla-mgmt defaults subscriber-id auto-id**

Tree [auto-id](#)

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-id

Synopsis Use SAP ID as default subscriber identification string

Context **configure service vpls string sap string sub-sla-mgmt defaults subscriber-id sap-id**

Tree [sap-id](#)

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string string

Synopsis Default subscriber identification string for the SAP

Context **configure service vpls string sap string sub-sla-mgmt defaults subscriber-id string string**

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac-da-hashing** *boolean*

Synopsis Use destination MAC address instead of subscriber ID to select egress LAG link  
 Context **configure** [service vpls string sap string sub-sla-mgmt mac-da-hashing boolean](#)  
 Tree [mac-da-hashing](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **single-sub-parameters**

Synopsis Enter the **single-sub-parameters** context  
 Context **configure** [service vpls string sap string sub-sla-mgmt single-sub-parameters](#)  
 Tree [single-sub-parameters](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **non-sub-traffic**

Synopsis Enable the **non-sub-traffic** context  
 Context **configure** [service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic](#)  
 Tree [non-sub-traffic](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** *reference*

Synopsis Application profile name for all non-subscriber traffic  
 Context **configure** [service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic app-profile reference](#)  
 Tree [app-profile](#)  
 Reference **configure** [application-assurance group number partition number policy app-profile string](#)

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile** *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	<b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sla-profile reference</a>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sla-profile string</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Subscriber profile all non-subscriber traffic
Context	<b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic sub-profile reference</a>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subscriber ID applied for all non-subscriber traffic
Context	<b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt single-sub-parameters non-sub-traffic subscriber-id string</a>
Tree	<a href="#">subscriber-id</a>
String Length	1 to 64

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **profiled-traffic-only** *boolean*

Synopsis	Include all traffic in subscriber profile
Context	<b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt single-sub-parameters profiled-traffic-only boolean</a>
Tree	<a href="#">profiled-traffic-only</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-ident-policy** *reference*

Synopsis	Subscriber identification policy used on this SAP
Context	<b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt sub-ident-policy reference</a>
Tree	<a href="#">sub-ident-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-limit** (*keyword | number*)

Synopsis	Maximum number of subscribers on this SAP
Context	<b>configure</b> <a href="#">service vpls string sap string sub-sla-mgmt subscriber-limit (keyword   number)</a>
Tree	<a href="#">subscriber-limit</a>
Range	1 to 131071
Options	no-limit
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## transit-policy

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure</b> <a href="#">service vpls string sap string transit-policy</a>
Tree	<a href="#">transit-policy</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	<b>configure</b> <a href="#">service vpls string sap string transit-policy ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number transit-ip-policy number</a>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure</b> <a href="#">service vpls string sap string transit-policy prefix reference</a>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number transit-prefix-policy number</a>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**segment-routing-v6** [[instance](#)] *number*

Synopsis	Enter the <b>segment-routing-v6</b> list instance
Context	<b>configure service vpls string</b> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[instance]** *number*

Synopsis	Segment routing v6 instance
Context	<b>configure service vpls string</b> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>
Range	1
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**locator** [[locator-name](#)] *reference*

Synopsis	Enter the <b>locator</b> list instance
Context	<b>configure service vpls string</b> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i>
Tree	<a href="#">locator</a>
Max. Instances	1
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[locator-name]** *reference*

Synopsis	SRv6 locator name
Context	<b>configure service vpls string</b> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">locator</a> <i>reference</i>
Tree	<a href="#">locator</a>

Reference	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <i>locator</i> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## function

Synopsis	Enter the <b>function</b> context
Context	<b>configure service vpls</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <i>locator</i> <i>reference</i> <a href="#">function</a>
Tree	<a href="#">function</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## end-dt2m

Synopsis	Enable the <b>end-dt2m</b> context
Context	<b>configure service vpls</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <i>locator</i> <i>reference</i> <a href="#">function</a> <a href="#">end-dt2m</a>
Tree	<a href="#">end-dt2m</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value *number*

Synopsis	SRv6 function value
Context	<b>configure service vpls</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <i>locator</i> <i>reference</i> <a href="#">function</a> <a href="#">end-dt2m</a> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.  When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**end-dt2u**

Synopsis	Enable the <b>end-dt2u</b> context
Context	<b>configure service vpls string segment-routing-v6 number locator reference function end-dt2u</b>
Tree	<b>end-dt2u</b>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure service vpls string segment-routing-v6 number locator reference function end-dt2u value number</b>
Tree	<b>value</b>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.  When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**micro-segment-locator [locator-name] reference**

Synopsis	Enter the <b>micro-segment-locator</b> list instance
Context	<b>configure service vpls string segment-routing-v6 number micro-segment-locator reference</b>
Tree	<b>micro-segment-locator</b>
Max. Instances	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[locator-name] reference**

Synopsis	Micro-segment SRv6 locator name
Context	<b>configure service vpls string segment-routing-v6 number micro-segment-locator reference</b>



Tree	<a href="#">micro-segment-locator</a>
Description	This command associates a pre-defined micro-segment SRv6 locator (defined in the <b>configure router segment-routing segment-routing-v6</b> context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.
Reference	<b>configure router</b> <i>string</i> <a href="#">segment-routing</a> <a href="#">segment-routing-v6</a> <a href="#">micro-segment-locator</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## function

Synopsis	Enter the <b>function</b> context
Context	<b>configure service vpls</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a>
Tree	<a href="#">function</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## udt2m

Synopsis	Enable the <b>udt2m</b> context
Context	<b>configure service vpls</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt2m</a>
Tree	<a href="#">udt2m</a>
Description	Commands in this context configure the SRv6 uDT2M behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value number

Synopsis	SRv6 function value
Context	<b>configure service vpls</b> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">micro-segment-locator</a> <i>reference</i> <a href="#">function</a> <a href="#">udt2m</a> <i>value</i> <i>number</i>

Tree	<a href="#">value</a>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## udt2u

Synopsis	Enable the <b>udt2u</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">segment-routing-v6 number</a> <a href="#">micro-segment-locator reference</a> <a href="#">function udt2u</a>
Tree	<a href="#">udt2u</a>
Description	Commands in this context configure the SRv6 uDT2U behavior and the function value that is associated to the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occurs in the VPLS service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value number

Synopsis	SRv6 function value
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">segment-routing-v6 number</a> <a href="#">micro-segment-locator reference</a> <a href="#">function udt2u value</a> <i>number</i>
Tree	<a href="#">value</a>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**service-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure</b> <i>service vpls string</i> <b>service-id</b> <i>number</i>
Tree	<b>service-id</b>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**service-mtu** *number*

Synopsis	MTU size
Context	<b>configure</b> <i>service vpls string</i> <b>service-mtu</b> <i>number</i>
Tree	<b>service-mtu</b>
Description	This command configures the Maximum Transmission Unit (MTU) value (payload) for the service. The system uses the value to validate the operational state of the SAP and SDP binding within the service. The value overrides the default MTU for the service type.

The service MTU and a SAP's service delineation encapsulation overhead (4 bytes for a dot1q tag) are used to derive the required MTU of the physical port or channel on which the SAP was created. If the required payload is larger than the port or channel MTU, the SAP is placed in an inoperative state. If the required MTU is equal to or less than the port or channel MTU, the SAP transitions to the operative state.

When binding an SDP to a service, the service MTU is compared to the path MTU associated with the SDP. The path MTU can be administratively defined in the context of the SDP. The default or administrative path MTU can be dynamically reduced due to the MTU capabilities discovered by the tunneling mechanism of the SDP or the egress interface MTU capabilities based on the next hop in the tunnel path. If the service MTU is larger than the path MTU, the SDP binding for the service is placed in an inoperative state. If the service MTU is equal to or less than the path MTU, the SDP binding is placed in an operational state.

If a service MTU, port or channel MTU, or path MTU is dynamically or administratively modified, all associated SAP and SDP binding operational states are automatically reevaluated.

Binding operational states are automatically reevaluated.

For I-VPLS and Epipes bound to a B-VPLS, the service MTU must be at least 18 bytes smaller than the B-VPLS service MTU to accommodate the PBB header.

Because this connects a Layer 2 to a Layer 3 service, adjust the service MTU under the Epipe service. The MTU that is advertised from the Epipe side is service MTU minus EtherHeaderSize.

In the **configure service epipe spoke-sdp** context, the **adv-service-mtu** command can be used to override the configured MTU value used in T-LDP signaling to the far-end of an Epipe spoke-sdp. The **adv-service-mtu** command is also used to validate the value signaled by the far-end PE.

Range	1 to 9782
Introduced	16.0.R1
Platforms	All

### **shcv-policy-ipv4** *reference*

Synopsis	Subscriber host connectivity verification policy for IPv4
Context	<b>configure service vpls string shcv-policy-ipv4 reference</b>
Tree	<a href="#">shcv-policy-ipv4</a>
Reference	<b>configure subscriber-mgmt shcv-policy string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **spb**

Synopsis	Enable the <b>spb</b> context
Context	<b>configure service vpls string spb</b>
Tree	<a href="#">spb</a>
Introduced	21.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of SPB
Context	<b>configure service vpls string spb admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1

Platforms All

### **fid** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis FID identifier

Context **configure** *service vpls string spb fid number*

Tree [fid](#)

Range 1 to 4095

Default 1

Introduced 21.10.R1

Platforms All

### **isis-instance** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis ISIS instance

Context **configure** *service vpls string spb isis-instance number*

Tree [isis-instance](#)

Range 1024 to 2047

Default 1024

Introduced 21.10.R1

Platforms All

### **level** [*id*] *number*

Synopsis Enter the **level** list instance

Context **configure** *service vpls string spb level number*

Tree [level](#)

Introduced 21.10.R1

Platforms All

**[id] number**

Synopsis	Level identifier
Context	<b>configure service vpls string spb level number</b>
Tree	<a href="#">level</a>
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

**bridge-priority number**

Synopsis	SPB Bridge priority
Context	<b>configure service vpls string spb level number bridge-priority number</b>
Tree	<a href="#">bridge-priority</a>
Range	0 to 15
Default	8
Introduced	21.10.R1
Platforms	All

**ect-high-path-fid [fid] number**

Synopsis	Add a list entry for <b>ect-high-path-fid</b>
Context	<b>configure service vpls string spb level number ect-high-path-fid number</b>
Tree	<a href="#">ect-high-path-fid</a>
Introduced	21.10.R1
Platforms	All

**[fid] number**

Synopsis	SPB control vpls FID
Context	<b>configure service vpls string spb level number ect-high-path-fid number</b>
Tree	<a href="#">ect-high-path-fid</a>
Range	1 to 4095
Notes	This element is part of a list key.

Introduced	21.10.R1
Platforms	All

## forwarding-tree

Synopsis	Enter the <b>forwarding-tree</b> context
Context	<b>configure</b> <a href="#">service vpls string spb level number forwarding-tree</a>
Tree	<a href="#">forwarding-tree</a>
Introduced	21.10.R1
Platforms	All

## topology *keyword*

Synopsis	Topology
Context	<b>configure</b> <a href="#">service vpls string spb level number forwarding-tree topology keyword</a>
Tree	<a href="#">topology</a>
Options	spf, st
Default	spf
Introduced	21.10.R1
Platforms	All

## lsp-lifetime *number*

Synopsis	Time LSP is considered valid by other routers
Context	<b>configure</b> <a href="#">service vpls string spb lsp-lifetime number</a>
Tree	<a href="#">lsp-lifetime</a>
Range	350 to 65535
Default	1200
Introduced	21.10.R1
Platforms	All

## lsp-refresh-interval

Synopsis	Enter the <b>lsp-refresh-interval</b> context
Context	<b>configure</b> <a href="#">service vpls string spb lsp-refresh-interval</a>

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Tree	<a href="#">lsp-refresh-interval</a>
Introduced	21.10.R1
Platforms	All

### **half-lifetime** *boolean*

Synopsis	Refresh LSP interval at half the LSP lifetime
Context	<b>configure</b> <a href="#">service vpls string spb lsp-refresh-interval half-lifetime boolean</a>
Tree	<a href="#">half-lifetime</a>
Default	true
Introduced	21.10.R1
Platforms	All

### **interval** *number*

Synopsis	Specify the interval at which LSPs are refreshed
Context	<b>configure</b> <a href="#">service vpls string spb lsp-refresh-interval interval number</a>
Tree	<a href="#">interval</a>
Range	150 to 65535
Default	600
Introduced	21.10.R1
Platforms	All

### **overload**

Synopsis	Enable the <b>overload</b> context
Context	<b>configure</b> <a href="#">service vpls string spb overload</a>
Tree	<a href="#">overload</a>
Introduced	21.10.R1
Platforms	All

### **timeout** *number*

Synopsis	Time the router operates in overloaded state
Context	<b>configure</b> <a href="#">service vpls string spb overload timeout number</a>



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Tree	<a href="#">timeout</a>
Range	0   60 to 1800
Units	seconds
Default	0
Introduced	21.10.R1
Platforms	All

### **overload-on-boot**

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure</b> <a href="#">service vpls string spb overload-on-boot</a>
Tree	<a href="#">overload-on-boot</a>
Introduced	21.10.R1
Platforms	All

### **timeout** *number*

Synopsis	Time the router operates in overloaded state
Context	<b>configure</b> <a href="#">service vpls string spb overload-on-boot timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	0   60 to 1800
Units	seconds
Default	0
Introduced	21.10.R1
Platforms	All

### **timers**

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <a href="#">service vpls string spb timers</a>
Tree	<a href="#">timers</a>
Introduced	21.10.R1
Platforms	All

## **lsp-wait**

Synopsis	Enable the <b>lsp-wait</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spb timers</a> <a href="#">lsp-wait</a>
Tree	<a href="#">lsp-wait</a>
Introduced	21.10.R1
Platforms	All

## **initial-wait number**

Synopsis	Initial wait
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spb timers</a> <a href="#">lsp-wait initial-wait number</a>
Tree	<a href="#">initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	10
Introduced	21.10.R1
Platforms	All

## **max-wait number**

Synopsis	Max wait time
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spb timers</a> <a href="#">lsp-wait max-wait number</a>
Tree	<a href="#">max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	5000
Introduced	21.10.R1
Platforms	All

## **second-wait number**

Synopsis	Second wait
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spb timers</a> <a href="#">lsp-wait second-wait number</a>
Tree	<a href="#">second-wait</a>
Range	10 to 100000

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Units	milliseconds
Default	1000
Introduced	21.10.R1
Platforms	All

### **spf-wait**

Synopsis	Enable the <b>spf-wait</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spb timers spf-wait</a>
Tree	<a href="#">spf-wait</a>
Introduced	21.10.R1
Platforms	All

### **initial-wait number**

Synopsis	Initial wait
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spb timers spf-wait initial-wait number</a>
Tree	<a href="#">initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	21.10.R1
Platforms	All

### **max-wait number**

Synopsis	Max wait time
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spb timers spf-wait max-wait number</a>
Tree	<a href="#">max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	21.10.R1
Platforms	All

**second-wait** *number*

Synopsis	Second wait
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spb timers</a> <a href="#">spf-wait</a> <a href="#">second-wait</a> <i>number</i>
Tree	<a href="#">second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	21.10.R1
Platforms	All

**spbm-control-vpls**

Synopsis	Enter the <b>spbm-control-vpls</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spbm-control-vpls</a>
Tree	<a href="#">spbm-control-vpls</a>
Introduced	21.10.R1
Platforms	All

**fid** *number*

Synopsis	SPB control vpls FID
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spbm-control-vpls</a> <a href="#">fid</a> <i>number</i>
Tree	<a href="#">fid</a>
Range	1 to 4095
Introduced	21.10.R1
Platforms	All

**service-name** *string*

Synopsis	SPB control vpls service
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spbm-control-vpls</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	21.10.R1

Platforms All

### **split-horizon-group** [[shg-name](#)] *string*

Synopsis Enter the **split-horizon-group** list instance  
Context **configure service vpls string split-horizon-group string**  
Tree [split-horizon-group](#)  
Introduced 16.0.R1  
Platforms All

### **[shg-name]** *string*

Synopsis SHG name to which the SDP belongs  
Context **configure service vpls string split-horizon-group string**  
Tree [split-horizon-group](#)  
String Length 1 to 32  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure service vpls string split-horizon-group string description string**  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **fdb**

Synopsis Enter the **fdb** context  
Context **configure service vpls string split-horizon-group string fdb**  
Tree [fdb](#)  
Introduced 16.0.R1

Platforms All

## saps

Synopsis Enter the **saps** context

Context **configure service vpls string split-horizon-group string fdb saps**

Tree [saps](#)

Introduced 16.0.R1

Platforms All

## auto-learn-mac-protect *boolean*

Synopsis Populate automatically MAC protect list with MAC addresses learned on SDP with split horizon group

Context **configure service vpls string split-horizon-group string fdb saps auto-learn-mac-protect *boolean***

Tree [auto-learn-mac-protect](#)

Default false

Introduced 16.0.R1

Platforms All

## auto-learn-mac-protect-exclude-list *reference*

Synopsis Referenced MAC protect exclusion list name

Context **configure service vpls string split-horizon-group string fdb saps auto-learn-mac-protect-exclude-list *reference***

Tree [auto-learn-mac-protect-exclude-list](#)

Description This command references the name of a MAC protect exclusion list.

Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.

An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.

Reference **configure service mac-list string**

Introduced 20.5.R1

Platforms All

**discard-unprotected-dest-mac** *boolean*

Synopsis	Discard packet with unprotected destination MAC address
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i> <a href="#">fdb saps</a> <a href="#">discard-unprotected-dest-mac</a> <i>boolean</i>
Tree	<a href="#">discard-unprotected-dest-mac</a>
Default	false
Introduced	16.0.R1
Platforms	All

**protected-src-mac-violation-action** *keyword*

Synopsis	Action to take whenever a relearn request for a protected MAC is received
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i> <a href="#">fdb saps</a> <a href="#">protected-src-mac-violation-action</a> <i>keyword</i>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	sap-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

**residential** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Define as a residential split horizon group
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i> <a href="#">residential</a> <i>boolean</i>
Tree	<a href="#">residential</a>
Default	false
Introduced	16.0.R1
Platforms	All

**spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>

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Tree	<a href="#">spoke-sdp</a>
Introduced	16.0.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP binding ID
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string</a>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**accounting-policy** *reference*

Synopsis	Policy to collect accounting statistics
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy number</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All



**app-profile** *reference*

Synopsis	ISA-AA application profile name for this SDP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Introduced	21.2.R1
Platforms	All

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	21.2.R1
Platforms	All

**encap** *keyword*

Synopsis	BFD encapsulation used on the SDP binding
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a> <a href="#">bfd-liveness</a> <a href="#">encap</a> <i>keyword</i>
Tree	<a href="#">encap</a>
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

**bfd-template** *reference*

Synopsis	BFD template associated with the SDP binding
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string bfd bfd-template reference</a>
Tree	<a href="#">bfd-template</a>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Reference	<b>configure</b> <a href="#">bfd bfd-template string</a>
Introduced	21.2.R1
Platforms	All

**failure-action** *keyword*

Synopsis	VCCV BFD action taken on the SDP binding
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string bfd failure-action keyword</a>
Tree	<a href="#">failure-action</a>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Options	none, down
Default	none
Introduced	21.2.R1
Platforms	All

**wait-for-up-timer** *number*

Synopsis	Time waited for BFD up status
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string bfd wait-for-up-timer number</a>
Tree	<a href="#">wait-for-up-timer</a>
Description	<p>This command configures the time interval that is used to wait for a BFD session to come up.</p> <p>This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.</p>

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Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

### **block-on-mesh-failure** *boolean*

Synopsis	Enable blocking after all SDPs are operationally down
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">block-on-mesh-failure</a> <i>boolean</i>
Tree	<a href="#">block-on-mesh-failure</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **bpdu-translation** *keyword*

Synopsis	BPDU format
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bpdu-translation</a> <i>keyword</i>
Tree	<a href="#">bpdu-translation</a>
Options	auto, pvst, stp, pvst-rw, auto-rw
Introduced	16.0.R1
Platforms	All

### **collect-stats** *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">collect-stats</a> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **control-word** *boolean*

Synopsis	Use the control word as preferred
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Context	<b>configure service vpls string spoke-sdp string control-word boolean</b>
Tree	<a href="#">control-word</a>
Default	false
Introduced	16.0.R1
Platforms	All

## cpu-protection

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure service vpls string spoke-sdp string cpu-protection</b>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis	Enable the <b>eth-cfm-monitoring</b> context
Context	<b>configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring</b>
Tree	<a href="#">eth-cfm-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	<b>configure service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring aggregate</b>
Tree	<a href="#">aggregate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
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Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string cpu-protection eth-cfm-monitoring car</a>
Tree	<a href="#">car</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string cpu-protection mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## policy-id *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string cpu-protection policy-id reference</a>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system security cpu-protection policy number</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## dhcp

Synopsis	Enter the <b>dhcp</b> context
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Context	<b>configure service vpls string spoke-sdp string dhcp</b>
Tree	<b>dhcp</b>
Introduced	16.0.R1
Platforms	All

### **description string**

Synopsis	Text description
Context	<b>configure service vpls string spoke-sdp string dhcp description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **snoop boolean**

Synopsis	Allow DHCP snooping of DHCP messages on the SAP or SDP
Context	<b>configure service vpls string spoke-sdp string dhcp snoop boolean</b>
Tree	<b>snoop</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure service vpls string spoke-sdp string egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	All

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vpls string spoke-sdp string egress filter</b>

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Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

### **ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ipv6 reference**

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter ipv6 reference</a>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mac reference**

Synopsis	MAC filter policy name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress filter mac reference</a>
Tree	<a href="#">mac</a>
Reference	<b>configure</b> <a href="#">filter mac-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mfib-allowed-mda-destinations**

Synopsis	Enter the <b>mfib-allowed-mda-destinations</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress mfib-allowed-mda-destinations</a>

Tree	<a href="#">mfib-allowed-mda-destinations</a>
Introduced	16.0.R4
Platforms	All

### **mda** [[mda-id](#)] *string*

Synopsis	Add a list entry for <b>mda</b>
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">egress mfib-allowed-mda-destinations mda string</a>
Tree	<a href="#">mda</a>
Introduced	16.0.R4
Platforms	All

### **[mda-id]** *string*

Synopsis	MFIB allowed MDA destination
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">egress mfib-allowed-mda-destinations mda string</a>
Tree	<a href="#">mda</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">egress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

### **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">egress qos network</a>
Tree	<a href="#">network</a>



Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Network policy ID  
 Context **configure** [service vpls string spoke-sdp string egress qos network policy-name reference](#)  
 Tree [policy-name](#)  
 Reference **configure** [qos network string](#)  
 Introduced 16.0.R1  
 Platforms All

### **port-redirect-group**

Synopsis Enter the **port-redirect-group** context  
 Context **configure** [service vpls string spoke-sdp string egress qos network port-redirect-group](#)  
 Tree [port-redirect-group](#)  
 Introduced 16.0.R1  
 Platforms All

### **group-name** *reference*

Synopsis Name of the egress port queue group  
 Context **configure** [service vpls string spoke-sdp string egress qos network port-redirect-group group-name reference](#)  
 Tree [group-name](#)  
 Reference **configure** [qos queue-group-templates egress queue-group string](#)  
 Introduced 16.0.R1  
 Platforms All

### **instance** *number*

Synopsis Queue-group instance ID  
 Context **configure** [service vpls string spoke-sdp string egress qos network port-redirect-group instance number](#)

Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **vc-label** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

### **endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a>
Tree	<a href="#">endpoint</a>
Introduced	16.0.R1
Platforms	All

### **name** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of service endpoint to which SDP bind is attached
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">endpoint</a> <a href="#">name</a> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">endpoint</a> <i>string</i>
Introduced	16.0.R1

Platforms All

### **precedence** (*number* | *keyword*)

Synopsis Precedence of this SDP bind when there are multiple SDP binds attached to one service endpoint

Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [endpoint](#) **precedence** (*number* | *keyword*)

Tree [precedence](#)

Range 1 to 4

Options primary

Default 4

Introduced 16.0.R1

Platforms All

### **entropy-label**

Synopsis Enable the use of entropy labels for spoke SDPs

Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* **entropy-label**

Tree [entropy-label](#)

Notes The following elements are part of a choice: **entropy-label** or **hash-label**.

Introduced 16.0.R1

Platforms All

### **eth-cfm**

Synopsis Enter the **eth-cfm** context

Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* **eth-cfm**

Tree [eth-cfm](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-imm-fc-stats**

Synopsis Enter the **collect-imm-fc-stats** context

Context **configure** [service](#) [vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm](#) **collect-imm-fc-stats**

Tree	<a href="#">collect-lmm-fc-stats</a>
Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc** keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc</a> <a href="#">keyword</a>
Tree	<a href="#">fc</a>
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc-in-profile** keyword

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a> <a href="#">fc-in-profile</a> <a href="#">keyword</a>
Tree	<a href="#">fc-in-profile</a>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p>

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>collect-lmm-stats</b> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	When configured to <b>true</b> , the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.  The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.  When configured to <b>false</b> , the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
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Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<a href="#">mep</a>
Reference	<b>configure eth-cfm domain string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name reference**

Synopsis	Maintenance Association (MA) name
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<a href="#">mep</a>
Reference	<b>configure eth-cfm domain string association string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id number**

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</b>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state keyword**

Synopsis	Administrative state of the MEP
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number admin-state keyword</b>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ais

Synopsis	Enable the <b>ais</b> context
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais</b>
Tree	<a href="#">ais</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## client-meg-level *number*

Synopsis	Client MEG level for AIS message generation
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais client-meg-level number</b>
Tree	<a href="#">client-meg-level</a>
Range	1 to 7
Max. Instances	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## interface-support *boolean*

Synopsis	Enable generation of AIS PDUs based on endpoint state
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ais interface-support boolean</b>
Tree	<a href="#">interface-support</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**interval number**

Synopsis	Transmission interval for AIS messages
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1   60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**low-priority-defect keyword**

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon
Default	all-def
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority number**

Synopsis	Priority of the AIS messages generated by the node
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
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Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification</i>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-alarm-time number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number alarm-notification fng-reset-time number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis	Generate CCM messages
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Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm boolean</b>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority number**

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</b>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size number**

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</b>
Tree	<a href="#">ccm-padding-size</a>
Description	<p>This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.</p> <p>This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b>) is less than 1 second.</p>
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cfm-vlan-tag string**

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
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Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number cfm-vlan-tag string</i>
Tree	<a href="#">cfm-vlan-tag</a>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the <b>vc-type vlan</b> or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## csf

Synopsis	Enable the <b>csf</b> context
Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</i>
Tree	<a href="#">csf</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## multiplier *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf multiplier decimal-number</i>
Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## description *string*

Synopsis	Text description
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Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **direction** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Direction the MEP faces
Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number direction keyword</i>
Tree	<a href="#">direction</a>
Options	down, up
Default	down
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure service vpls</b> <i>string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test</i>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
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Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test bit-error-threshold number</b>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### test-pattern

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern</b>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern crc-tlv boolean</b>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number eth-test test-pattern pattern keyword</b>
Tree	<a href="#">pattern</a>

Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### fault-propagation *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <a href="#">number</a> <b>fault-propagation</b> <i>keyword</i>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### grace

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <a href="#">number</a> <b>grace</b>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### eth-ed

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string eth-cfm mep</a> <a href="#">md-admin-name</a> <a href="#">reference ma-admin-name</a> <a href="#">reference mep-id</a> <a href="#">number</a> <a href="#">grace</a> <b>eth-ed</b>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-rx-defect-window** *number*

Synopsis Maximum received ETH-ED expected defect window duration

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-ed max-rx-defect-window](#) *number*

Tree [max-rx-defect-window](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis Transmission priority for ETH-ED PDUs

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-ed priority](#) *number*

Tree [priority](#)

Range 0 to 7

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed** *boolean*

Synopsis Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [eth-cfm mep](#) [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number* [grace eth-ed rx-eth-ed](#) *boolean*

Tree [rx-eth-ed](#)

Description This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed tx-eth-ed</a> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace</a>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace rx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect. When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
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Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-vsm-grace tx-eth-vsm-grace boolean</b>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **lbm-svc-act-responder** *boolean*

Synopsis	Process service activation streams in ETH-CFM LBM
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number lbm-svc-act-responder boolean</b>
Tree	<a href="#">lbm-svc-act-responder</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure service vpls string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number low-priority-defect keyword</b>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mac-address** *string*

Synopsis	MAC address of the MEP
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>mac-address</b> <i>string</i>
Tree	<b>mac-address</b>
Description	This command specifies the MAC address of the MEP.  When unconfigured, the MAC address of the port (if the MEP is on a SAP) or the MAC address of a bridge (if the MEP is on a spoke) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i>
Tree	<b>one-way-delay-threshold</b>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**primary-vlan** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	MEP provisioned using MA primary VLAN ID
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>primary-vlan</b> <i>boolean</i>
Tree	<b>primary-vlan</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mip primary-vlan** (*number* | *keyword*)

Synopsis	Enter the <b>mip</b> list instance
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mip</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**primary-vlan** (*number* | *keyword*)

Synopsis	VLAN ID to which the MIP is attached
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mip</b>
Description	This command provides an option for linking a MIP with a Primary VLAN number or none. When the <b>none</b> option is provided, the MIP does not include the primary vlan.
Range	1 to 4094
Options	none
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**cfm-vlan-tag** *string*

Synopsis	VLAN tags to apply to CFM PDUs for egress processing
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm mip primary-vlan</b> ( <i>number</i>   <i>keyword</i> ) <b>cfm-vlan-tag</b> <i>string</i>
Tree	<b>cfm-vlan-tag</b>
Description	This command allows the CFM function to include additional VLAN tags to the CFM packet that are carried to the egress and treated as service delimited. Typically, this function is used to influence the VLAN carried over a binding that uses the vc-type vlan or the binding forces the use of one or more VLAN tag that results in a mismatch between the service data arriving at the binding and the locally generated ETH-CFM PDUs arriving at the same egress. When this command is included under the MEP or MIP configuration, the tags used as part of the configuration typically match the SAP service delimited configuration.
String Length	1 to 9

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-address** *string*

Synopsis	MAC address of the MIP
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm mip primary-vlan (number   keyword)</a> <a href="#">mac-address string</a>
Tree	<a href="#">mac-address</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-ctag-levels** *number*

Synopsis	Squelch levels using additional VLAN C-Tag space
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm squelch-ingress-ctag-levels number</a>
Tree	<a href="#">squelch-ingress-ctag-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding plus an additional VLAN, up to a maximum tag length of two tags. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level to be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">eth-cfm squelch-ingress-levels number</a>
Tree	<a href="#">squelch-ingress-levels</a>

Description	This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.  The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vmep-filter** *boolean*

Synopsis	Suppress eth-cfm PDUs based on level lower than or equal to configured Virtual MEP
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm vmep-filter</a> <i>boolean</i>
Tree	<a href="#">vmep-filter</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **etree-leaf** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable etree leaf access-circuit status
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">etree-leaf</a> <i>boolean</i>
Tree	<a href="#">etree-leaf</a>
Default	false
Introduced	16.0.R1
Platforms	All

**etree-root-leaf-tag** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	E-tree root leaf tag status
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string etree-root-leaf-tag boolean</a>
Tree	<a href="#">etree-root-leaf-tag</a>
Default	false
Introduced	16.0.R1
Platforms	All

**fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string fdb</a>
Tree	<a href="#">fdb</a>
Introduced	16.0.R1
Platforms	All

**auto-learn-mac-protect** *boolean*

Synopsis	Populate automatically MAC protect list with source MAC addresses learned on SDP
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string auto-learn-mac-protect boolean</a>
Tree	<a href="#">auto-learn-mac-protect</a>
Default	false
Introduced	16.0.R1
Platforms	All

**auto-learn-mac-protect-exclude-list** *reference*

Synopsis	Referenced MAC protect exclusion list name
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string auto-learn-mac-protect-exclude-list reference</a>
Tree	<a href="#">auto-learn-mac-protect-exclude-list</a>
Description	This command references the name of a MAC protect exclusion list.

Dynamically-learned MAC Source Addresses (SA) are protected if they are learned on an object with ALMP configured and no exclusion list is associated with the object, or if the MAC SA does not match any entry in an associated exclusion list.

An exclusion list can be used in multiple objects of a service. If a list is empty, ALMP does not exclude any learned MAC SAs from protection on the object.

Reference	<b>configure service mac-list string</b>
Introduced	20.5.R1
Platforms	All

### **discard-unknown-source** *boolean*

Synopsis	Discard packets with unknown destination MAC addresses
Context	<b>configure service vpls string spoke-sdp string fdb discard-unknown-source boolean</b>
Tree	<a href="#">discard-unknown-source</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **limit-mac-move** *keyword*

Synopsis	MAC move
Context	<b>configure service vpls string spoke-sdp string fdb limit-mac-move keyword</b>
Tree	<a href="#">limit-mac-move</a>
Options	blockable, non-blockable
Default	blockable
Introduced	16.0.R1
Platforms	All

### **mac-learning**

Synopsis	Enter the <b>mac-learning</b> context
Context	<b>configure service vpls string spoke-sdp string fdb mac-learning</b>
Tree	<a href="#">mac-learning</a>
Introduced	16.0.R1
Platforms	All

**aging** *boolean*

Synopsis	Enable aging of MAC addresses
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string fdb mac-learning aging</a> <i>boolean</i>
Tree	<a href="#">aging</a>
Default	true
Introduced	16.0.R1
Platforms	All

**learning** *boolean*

Synopsis	Enable learning of new MAC addresses
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string fdb mac-learning learning</a> <i>boolean</i>
Tree	<a href="#">learning</a>
Default	true
Introduced	16.0.R1
Platforms	All

**mac-pinning** *boolean*

Synopsis	MAC address pinning in active status
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string fdb mac-pinning</a> <i>boolean</i>
Tree	<a href="#">mac-pinning</a>
Default	false
Introduced	16.0.R1
Platforms	All

**maximum-mac-addresses** *number*

Synopsis	Maximum number of MAC address entries in the FDB
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string fdb maximum-mac-addresses</a> <i>number</i>
Tree	<a href="#">maximum-mac-addresses</a>
Description	<p>This command specifies the maximum number of FDB entries for both learned and static MAC addresses for this spoke SDP.</p> <p>When the configured limit is reached, no new addresses are learned from the SAP or spoke SDP until at least one FDB entry is aged out or cleared.</p>



When the configured limit is reached and the **configure service spoke-sdp fdb discard-unknown-source** command is set to **true** for this spoke SDP, packets with unknown source MAC addresses are discarded. If **discard-unknown-source** is set to **false**, the packets are forwarded if their destination MAC addresses are known, or flooded if their destination MAC addresses are unknown.

However, if the **configure service vpls fdb discard-unknown** command is set to **true**, packets with unknown destination MAC addresses are discarded, even if the limit of FDB entries on the specific VPLS instance is not reached.

When unconfigured, the spoke SDP uses the global MAC learning limitations.

Range	1 to 511999
Introduced	16.0.R1
Platforms	All

### **protected-src-mac-violation-action** *keyword*

Synopsis	Action when a relearn request for a protected MAC is received on the SDP
Context	<b>configure service vpls string spoke-sdp string fdb protected-src-mac-violation-action keyword</b>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	sdp-bind-oper-down, alarm-only, discard
Introduced	16.0.R1
Platforms	All

### **force-vc-forwarding** *keyword*

Synopsis	VC forwarding action
Context	<b>configure service vpls string spoke-sdp string force-vc-forwarding keyword</b>
Tree	<a href="#">force-vc-forwarding</a>
Options	vlan, qinq-c-tag-c-tag, qinq-s-tag-c-tag
Introduced	16.0.R1
Platforms	All

### **hash-label**

Synopsis	Enable the <b>hash-label</b> context
Context	<b>configure service vpls string spoke-sdp string hash-label</b>
Tree	<a href="#">hash-label</a>

Description	Commands in this context configure the use of hash labels for egress datapaths. For information about hash-label handling, see the "Hash labels" section of the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i> .
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

## signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string hash-label</a> <a href="#">signal-capability</a>
Tree	<a href="#">signal-capability</a>
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.  The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.
Introduced	16.0.R1
Platforms	All

## i-vpls-mac-flush

Synopsis	Enter the <b>i-vpls-mac-flush</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string i-vpls-mac-flush</a>
Tree	<a href="#">i-vpls-mac-flush</a>
Introduced	16.0.R1
Platforms	All

## bgp-evpn

Synopsis	Enter the <b>bgp-evpn</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <a href="#">string spoke-sdp</a> <a href="#">string i-vpls-mac-flush</a> <a href="#">bgp-evpn</a>
Tree	<a href="#">bgp-evpn</a>
Introduced	16.0.R1
Platforms	All

**send-to-bvpls** *boolean*

Synopsis	Send B-VPLS EVPN flush
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">i-vpls-mac-flush</a> <a href="#">bgp-evpn</a> <a href="#">send-to-bvpls</a> <i>boolean</i>
Tree	<a href="#">send-to-bvpls</a>
Default	true
Introduced	16.0.R1
Platforms	All

**igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	All

**fast-leave** *boolean*

Synopsis	Allow IGMP fast leave processing
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">fast-leave</a> <i>boolean</i>
Tree	<a href="#">fast-leave</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**maximum-number-group-sources** *number*

Synopsis	Maximum group source combinations
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping maximum-number-group-sources number</a>
Tree	<a href="#">maximum-number-group-sources</a>
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

**maximum-number-groups** *number*

Synopsis	Maximum groups allowed
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping maximum-number-groups number</a>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

**maximum-number-sources** *number*

Synopsis	Maximum sources that are allowed per group
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping maximum-number-sources number</a>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

**mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string igmp-snooping mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1

Platforms All

## bandwidth

Synopsis Enter the **bandwidth** context

Context **configure service vpls string spoke-sdp string igmp-snooping mcac bandwidth**

Tree **bandwidth**

Introduced 16.0.R1

Platforms All

## mandatory (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure service vpls string spoke-sdp string igmp-snooping mcac bandwidth mandatory (*number* | *keyword*)**

Tree **mandatory**

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms All

## total (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure service vpls string spoke-sdp string igmp-snooping mcac bandwidth total (*number* | *keyword*)**

Tree **total**

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms All

**interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping mcac</a> <a href="#">interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping mcac</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac</a> <a href="#">policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**mrouter-port** *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">mrouter-port</a> <i>boolean</i>
Tree	<a href="#">mrouter-port</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">igmp-snooping</a> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10

Introduced 16.0.R1  
 Platforms All

### **robust-count** *number*

Synopsis Number of retries after expected message loss  
 Context **configure** [service vpls string spoke-sdp string igmp-snooping robust-count number](#)  
 Tree [robust-count](#)  
 Range 2 to 7  
 Default 2  
 Introduced 16.0.R1  
 Platforms All

### **router-alert-check** *boolean*

Synopsis Enable IP router alert check option  
 Context **configure** [service vpls string spoke-sdp string igmp-snooping router-alert-check boolean](#)  
 Tree [router-alert-check](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **send-queries** *boolean*

Synopsis Generate IGMP general queries  
 Context **configure** [service vpls string spoke-sdp string igmp-snooping send-queries boolean](#)  
 Tree [send-queries](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **static**

Synopsis Enter the **static** context  
 Context **configure** [service vpls string spoke-sdp string igmp-snooping static](#)



Tree	<a href="#">static</a>
Introduced	16.0.R1
Platforms	All

**group** [[group-address](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">igmp-snooping static group string</a>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

**[group-address]** *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">igmp-snooping static group string</a>
Tree	<a href="#">group</a>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service vpls string</a> <a href="#">spoke-sdp string</a> <a href="#">igmp-snooping static group string</a> <a href="#">source string</a>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
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Context	<b>configure service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>igmp-snooping static group</b> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### starg

Synopsis	any source address (*,G)
Context	<b>configure service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>igmp-snooping static group</b> <i>string</i> <b>starg</b>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

### version *keyword*

Synopsis	IGMP protocol version
Context	<b>configure service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>igmp-snooping version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

### ignore-standby-signaling *boolean*

Synopsis	Ignore standby-bit received from TLDP peers when performing internal tasks
Context	<b>configure service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ignore-standby-signaling</b> <i>boolean</i>
Tree	<a href="#">ignore-standby-signaling</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service vpls string spoke-sdp string ingress</b>
Tree	<b>ingress</b>
Introduced	16.0.R1
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vpls string spoke-sdp string ingress filter</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure service vpls string spoke-sdp string ingress filter ip reference</b>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	All

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure service vpls string spoke-sdp string ingress filter ipv6 reference</b>
Tree	<b>ipv6</b>
Reference	<b>configure filter ipv6-filter string</b>
Introduced	16.0.R1
Platforms	All

**mac reference**

Synopsis	MAC filter policy name
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string ingress filter mac reference</a>
Tree	<a href="#">mac</a>
Reference	<b>configure</b> <a href="#">filter mac-filter string</a>
Introduced	16.0.R1
Platforms	All

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string ingress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

**network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string ingress qos network</a>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	All

**fp-redirect-group**

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string ingress qos network fp-redirect-group</a>
Tree	<a href="#">fp-redirect-group</a>
Introduced	16.0.R1
Platforms	All

**group-name reference**

Synopsis	Name of the forwarding plane queue group template
----------	---

Context	<b>configure service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress qos network fp-redirect-group</b> <i>group-name</i> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **instance** *number*

Synopsis	Instance of FP ingress queue group for the SDP binding
Context	<b>configure service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress qos network fp-redirect-group</b> <i>instance</i> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Network policy ID
Context	<b>configure service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress qos network</b> <i>policy-name</i> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos network</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ingress MPLS VC label to send packets to the far end
Context	<b>configure service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress</b> <i>vc-label</i> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	1 to 1048575

Introduced 16.0.R1  
Platforms All

## **l2pt**

Synopsis Enter the **l2pt** context  
Context **configure service vpls string spoke-sdp string l2pt**  
Tree **l2pt**  
Introduced 16.0.R1  
Platforms All

## **termination**

Synopsis Enable the **termination** context  
Context **configure service vpls string spoke-sdp string l2pt termination**  
Tree **termination**  
Introduced 16.0.R1  
Platforms All

## **protocols**

Synopsis Enter the **protocols** context  
Context **configure service vpls string spoke-sdp string l2pt termination protocols**  
Tree **protocols**  
Introduced 16.0.R1  
Platforms All

## **cdp boolean**

Synopsis Enable Cisco discovery protocol  
Context **configure service vpls string spoke-sdp string l2pt termination protocols cdp boolean**  
Tree **cdp**  
Default false  
Introduced 16.0.R1  
Platforms All

**ntp boolean**

Synopsis	Enable dynamic trunking protocol
Context	<b>configure service vpls string spoke-sdp string l2pt termination protocols ntp boolean</b>
Tree	<a href="#">ntp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**pagp boolean**

Synopsis	Enable port aggregation protocol
Context	<b>configure service vpls string spoke-sdp string l2pt termination protocols pagp boolean</b>
Tree	<a href="#">pagp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**stp boolean**

Synopsis	Enable all spanning tree protocols
Context	<b>configure service vpls string spoke-sdp string l2pt termination protocols stp boolean</b>
Tree	<a href="#">stp</a>
Default	true
Introduced	16.0.R1
Platforms	All

**udld boolean**

Synopsis	Enable unidirectional link detection
Context	<b>configure service vpls string spoke-sdp string l2pt termination protocols udld boolean</b>
Tree	<a href="#">udld</a>
Default	false
Introduced	16.0.R1
Platforms	All

**vtp** *boolean*

Synopsis	Enable virtual trunk protocol
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">l2pt termination protocols</a> <b>vtp</b> <i>boolean</i>
Tree	<a href="#">vtp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mld-snooping**

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>mld-snooping</b>
Tree	<a href="#">mld-snooping</a>
Introduced	16.0.R1
Platforms	All

**fast-leave** *boolean*

Synopsis	Allow IGMP fast leave processing
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>fast-leave</b> <i>boolean</i>
Tree	<a href="#">fast-leave</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <b>policy-statement</b> <i>string</i>
Introduced	16.0.R1
Platforms	All



**maximum-number-groups** *number*

Synopsis	Maximum groups allowed
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

**mrouter-port** *boolean*

Synopsis	Operate port as a multicast router port
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">mrouter-port</a> <i>boolean</i>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>

Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">robust-count</a> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	All

### **router-alert-check** *boolean*

Synopsis	Enable IP router alert check option
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1

Platforms All

### **send-queries** *boolean*

Synopsis Generate IGMP general queries

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) [send-queries](#) *boolean*

Tree [send-queries](#)

Default false

Introduced 16.0.R1

Platforms All

### **static**

Synopsis Enter the **static** context

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) [static](#)

Tree [static](#)

Introduced 16.0.R1

Platforms All

### **group** [[group-address](#)] *string*

Synopsis Enter the **group** list instance

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) [static](#) [group](#) *string*

Tree [group](#)

Introduced 16.0.R1

Platforms All

### **[group-address]** *string*

Synopsis Group address of multicast channel

Context **configure** [service vpls](#) *string* [spoke-sdp](#) *string* [mld-snooping](#) [static](#) [group](#) *string*

Tree [group](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	any source address (*,G)
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <a href="#">static</a> <a href="#">group</a> <i>string</i> <b>starg</b>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

**version** *keyword*

Synopsis	Version of MLD running on the SAP or SDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">mld-snooping</a> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2

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Default	2
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group** *reference*

Synopsis	Operational group that affects state of the SDP bind
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string</a> <b>monitor-oper-group</b> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service oper-group string</a>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

### **mrp**

Synopsis	Enter the <b>mrp</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string</a> <b>mrp</b>
Tree	<a href="#">mrp</a>
Introduced	20.10.R1
Platforms	All

### **join-time** *number*

Synopsis	Maximum rate for attribute join messages sent on SDP
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string</a> <b>mrp</b> <b>join-time</b> <i>number</i>
Tree	<a href="#">join-time</a>
Range	1 to 10
Units	deciseconds
Default	2
Introduced	20.10.R1
Platforms	All

**leave-all-time** *number*

Synopsis	Frequency of LeaveAll PDUs by LeaveAll state machine
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>mrp</b> <b>leave-all-time</b> <i>number</i>
Tree	<a href="#">leave-all-time</a>
Range	60 to 300
Units	deciseconds
Default	100
Introduced	20.10.R1
Platforms	All

**leave-time** *number*

Synopsis	Time in LV state before transition to MT state
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>mrp</b> <b>leave-time</b> <i>number</i>
Tree	<a href="#">leave-time</a>
Range	30 to 60
Units	deciseconds
Default	30
Introduced	20.10.R1
Platforms	All

**periodic-time** *number*

Synopsis	Frequency of periodic events generated by state machine
Context	<b>configure</b> <b>service vpls</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>mrp</b> <b>periodic-time</b> <i>number</i>
Tree	<a href="#">periodic-time</a>
Range	10 to 100
Units	deciseconds
Default	10
Introduced	20.10.R1
Platforms	All

**periodic-timer** *boolean*

Synopsis	Enable the Periodic Transmission Timer
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Context	<b>configure service vpls string spoke-sdp string mrp periodic-timer boolean</b>
Tree	<a href="#">periodic-timer</a>
Default	false
Introduced	20.10.R1
Platforms	All

### **policy reference**

Synopsis	MRP policy to control Group B-MAC attributes
Context	<b>configure service vpls string spoke-sdp string mrp policy reference</b>
Tree	<a href="#">policy</a>
Reference	<b>configure service mrp policy string</b>
Introduced	20.10.R1
Platforms	All

### **oper-group reference**

Synopsis	Operational group identifier
Context	<b>configure service vpls string spoke-sdp string oper-group reference</b>
Tree	<a href="#">oper-group</a>
Reference	<b>configure service oper-group string</b>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	All

### **pbb**

Synopsis	Enter the <b>pbb</b> context
Context	<b>configure service vpls string spoke-sdp string pbb</b>
Tree	<a href="#">pbb</a>
Introduced	20.10.R1
Platforms	All

## fault-propagation

Synopsis	Enter the <b>fault-propagation</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pbb</a> <b>fault-propagation</b>
Tree	<a href="#">fault-propagation</a>
Introduced	20.10.R1
Platforms	All

## backbone-mac-address [[address](#)] *string*

Synopsis	Add a list entry for <b>backbone-mac-address</b>
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pbb</a> <b>fault-propagation backbone-mac-address string</b>
Tree	<a href="#">backbone-mac-address</a>
Introduced	20.10.R1
Platforms	All

## [\[address\]](#) *string*

Synopsis	Backbone MAC address
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pbb</a> <b>fault-propagation backbone-mac-address string</b>
Tree	<a href="#">backbone-mac-address</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

## backbone-mac-name [[name](#)] *reference*

Synopsis	Add a list entry for <b>backbone-mac-name</b>
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pbb</a> <b>fault-propagation backbone-mac-name reference</b>
Tree	<a href="#">backbone-mac-name</a>
Introduced	20.10.R1
Platforms	All



**[name] reference**

Synopsis	Backbone MAC address name
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pbb fault-propagation backbone-mac-name reference</a>
Tree	<a href="#">backbone-mac-name</a>
Reference	<b>configure</b> <a href="#">service pbb mac string</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	All

**pim-snooping**

Synopsis	Enter the <b>pim-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pim-snooping</a>
Tree	<a href="#">pim-snooping</a>
Introduced	16.0.R1
Platforms	All

**maximum-number-groups number**

Synopsis	Maximum groups for this interface
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pim-snooping maximum-number-groups number</a>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

**pw-status**

Synopsis	Enter the <b>pw-status</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pw-status</a>
Tree	<a href="#">pw-status</a>
Introduced	16.0.R1
Platforms	All

**signaling** *boolean*

Synopsis	Enable the use of pseudowire status signaling
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string pw-status signaling boolean</a>
Tree	<a href="#">signaling</a>
Default	true
Introduced	16.0.R1
Platforms	All

**spb**

Synopsis	Enable the <b>spb</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string spb</a>
Tree	<a href="#">spb</a>
Introduced	21.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Admin state
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string spb admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

**level** [*id*] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string spb level number</a>
Tree	<a href="#">level</a>
Introduced	21.10.R1
Platforms	All

**[id] number**

Synopsis	Level identifier
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	All

**hello-interval number**

Synopsis	Hello interval
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb level</a> <i>number</i> <a href="#">hello-interval</a> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	1 to 20000
Units	seconds
Default	9
Introduced	21.10.R1
Platforms	All

**hello-multiplier number**

Synopsis	Hello multiplier
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb level</a> <i>number</i> <a href="#">hello-multiplier</a> <i>number</i>
Tree	<a href="#">hello-multiplier</a>
Range	2 to 100
Default	3
Introduced	21.10.R1
Platforms	All

**metric number**

Synopsis	Metric
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb level</a> <i>number</i> <a href="#">metric</a> <i>number</i>

Tree	<a href="#">metric</a>
Range	0 to 16777215
Default	0
Introduced	21.10.R1
Platforms	All

### **lsp-pacing-interval** *number*

Synopsis	Lsp pacing interval
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb</a> <a href="#">lsp-pacing-interval</a> <i>number</i>
Tree	<a href="#">lsp-pacing-interval</a>
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	All

### **retransmit-interval** *number*

Synopsis	Retransmit interval
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">spb</a> <a href="#">retransmit-interval</a> <i>number</i>
Tree	<a href="#">retransmit-interval</a>
Range	1 to 65535
Units	seconds
Default	5
Introduced	21.10.R1
Platforms	All

### **split-horizon-group** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the split horizon group where the spoke SDP bind belongs to
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">split-horizon-group</a> <i>reference</i>

Tree	<a href="#">split-horizon-group</a>
Reference	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">split-horizon-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## **static-isid**

Synopsis	Enter the <b>static-isid</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">static-isid</a>
Tree	<a href="#">static-isid</a>
Introduced	19.10.R1
Platforms	All

## **range** [[range-id](#)] *number*

Synopsis	Enter the <b>range</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">static-isid</a> <a href="#">range</a> <i>number</i>
Tree	<a href="#">range</a>
Introduced	19.10.R1
Platforms	All

## **[range-id]** *number*

Synopsis	Range ID for static ISID
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">static-isid</a> <a href="#">range</a> <i>number</i>
Tree	<a href="#">range</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

## **end** *number*

Synopsis	Upper bound of the ISID range
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">static-isid</a> <a href="#">range</a> <i>number</i> <a href="#">end</a> <i>number</i>

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Tree	<a href="#">end</a>
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

### **start number**

Synopsis	Lower bound of the ISID range
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string static-isid range number start number</a>
Tree	<a href="#">start</a>
Range	1 to 16777215
Introduced	19.10.R1
Platforms	All

### **stp**

Synopsis	Enter the <b>stp</b> context
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string stp</a>
Tree	<a href="#">stp</a>
Introduced	16.0.R4
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of STP
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string stp admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R4
Platforms	All

### **auto-edge boolean**

Synopsis	Enable automatic detection of edge port characteristics
Context	<b>configure</b> <a href="#">service vpls string spoke-sdp string stp auto-edge boolean</a>

Tree	<a href="#">auto-edge</a>
Default	true
Introduced	16.0.R4
Platforms	All

### **edge-port** *boolean*

Synopsis	Designate SAP or SDP as an edge port
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp edge-port</a> <i>boolean</i>
Tree	<a href="#">edge-port</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **link-type** *keyword*

Synopsis	Configure STP link-type
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp link-type</a> <i>keyword</i>
Tree	<a href="#">link-type</a>
Options	pt-pt, shared
Default	pt-pt
Introduced	16.0.R4
Platforms	All

### **path-cost** *number*

Synopsis	Configure path-cost
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp path-cost</a> <i>number</i>
Tree	<a href="#">path-cost</a>
Range	1 to 200000000
Default	10
Introduced	16.0.R4
Platforms	All

**port-num** *number*

Synopsis	Virtual port number
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp</a> <a href="#">port-num</a> <i>number</i>
Tree	<a href="#">port-num</a>
Range	1 to 2047
Introduced	16.0.R4
Platforms	All

**priority** *number*

Synopsis	Configure STP priority
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	128
Introduced	16.0.R4
Platforms	All

**root-guard** *boolean*

Synopsis	Enable/disable STP root-guard
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">stp</a> <a href="#">root-guard</a> <i>boolean</i>
Tree	<a href="#">root-guard</a>
Default	false
Introduced	16.0.R4
Platforms	All

**transit-policy**

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a>
Tree	<a href="#">transit-policy</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vc-type keyword

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding; VPLS not supported
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vc-type</a> <i>keyword</i>
Tree	<a href="#">vc-type</a>
Options	ether, vlan
Default	ether
Introduced	16.0.R1
Platforms	All

## vlan-vc-tag number

Synopsis	SDP bind VC tag
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">vlan-vc-tag</a> <i>number</i>
Tree	<a href="#">vlan-vc-tag</a>
Range	0 to 4094
Introduced	16.0.R1

Platforms All

## stp

Synopsis Enter the **stp** context  
Context **configure service vpls string stp**  
Tree **stp**  
Introduced 16.0.R4  
Platforms All

## admin-state *keyword*

Synopsis Administrative state of STP  
Context **configure service vpls string stp admin-state keyword**  
Tree **admin-state**  
Options enable, disable  
Default disable  
Introduced 16.0.R4  
Platforms All

## forward-delay *number*

Synopsis Configure forward-delay  
Context **configure service vpls string stp forward-delay number**  
Tree **forward-delay**  
Range 4 to 30  
Default 15  
Introduced 16.0.R4  
Platforms All

## hello-time *number*

Synopsis Configure hello-time  
Context **configure service vpls string stp hello-time number**  
Tree **hello-time**

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Range	1 to 10
Default	2
Introduced	16.0.R4
Platforms	All

### **hold-count** *number*

Synopsis	Configure BPDU transmit hold count
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>stp</b> <b>hold-count</b> <i>number</i>
Tree	<a href="#">hold-count</a>
Range	1 to 20
Default	6
Introduced	16.0.R4
Platforms	All

### **maximum-age** *number*

Synopsis	Configure maximum STP information age
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>stp</b> <b>maximum-age</b> <i>number</i>
Tree	<a href="#">maximum-age</a>
Range	6 to 40
Default	20
Introduced	16.0.R4
Platforms	All

### **mode** *keyword*

Synopsis	Configure protocol version
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>stp</b> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	rstp, comp-dot1w, dot1w, mstp, pmstp
Default	rstp
Introduced	16.0.R4
Platforms	All

**mst-instance** [*mst-inst-number*] *number*

Synopsis	Enter the <b>mst-instance</b> list instance
Context	<b>configure</b> <i>service vpls string stp mst-instance number</i>
Tree	<i>mst-instance</i>
Introduced	19.10.R1
Platforms	All

**[mst-inst-number]** *number*

Synopsis	Multiple Spanning Tree Instance number
Context	<b>configure</b> <i>service vpls string stp mst-instance number</i>
Tree	<i>mst-instance</i>
Range	1 to 4094
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**mst-priority** *number*

Synopsis	Priority of multiple spanning tree instance
Context	<b>configure</b> <i>service vpls string stp mst-instance number mst-priority number</i>
Tree	<i>mst-priority</i>
Range	0   4096   8192   12288   16384   20480   24576   28672   32768   36864   40960   45056   49152   53248   57344   61440
Default	32768
Introduced	19.10.R1
Platforms	All

**vlan-range** [*range*] *string*

Synopsis	Add a list entry for <b>vlan-range</b>
Context	<b>configure</b> <i>service vpls string stp mst-instance number vlan-range string</i>
Tree	<i>vlan-range</i>
Introduced	19.10.R1

Platforms All

### **[range]** *string*

Synopsis Range of VLANs associated with the M-VPLS SAP  
 Context **configure service vpls string stp mst-instance number vlan-range string**  
 Tree [vlan-range](#)  
 Notes This element is part of a list key.  
 Introduced 19.10.R1  
 Platforms All

### **mst-maximum-hops** *number*

Synopsis Maximum number of hops in an MSTP region  
 Context **configure service vpls string stp mst-maximum-hops number**  
 Tree [mst-maximum-hops](#)  
 Range 1 to 40  
 Default 20  
 Introduced 19.10.R1  
 Platforms All

### **mst-name** *string*

Synopsis MST region name  
 Context **configure service vpls string stp mst-name string**  
 Tree [mst-name](#)  
 String Length 1 to 32  
 Introduced 19.10.R1  
 Platforms All

### **mst-revision** *number*

Synopsis MST configuration revision  
 Context **configure service vpls string stp mst-revision number**  
 Tree [mst-revision](#)

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Range	0 to 65535
Introduced	19.10.R1
Platforms	All

### **priority** *number*

Synopsis	STP bridge priority
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>stp</b> <i>priority number</i>
Tree	<a href="#">priority</a>
Range	0 to 65535
Default	32768
Introduced	16.0.R4
Platforms	All

### **temp-flooding** *number*

Synopsis	Temporary flooding
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>temp-flooding</b> <i>number</i>
Tree	<a href="#">temp-flooding</a>
Range	3 to 600
Units	seconds
Introduced	16.0.R1
Platforms	All

### **tunnel-elmi** *boolean*

Synopsis	Allow E-LMI tunneling
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <b>tunnel-elmi</b> <i>boolean</i>
Tree	<a href="#">tunnel-elmi</a>
Description	<p>When configured to <b>true</b>, the router allows E-LMI packets in a VPLS service to be tunneled. The following must also be the case for this command to function:</p> <ul style="list-style-type: none"><li>• the <b>configure port ethernet elmi mode uni-n</b> command is not configured</li><li>• the E-LMI packets map to that VPLS service</li></ul> <p>When configured to <b>false</b>, tunneling of the E-LMI packets for a VPLS service is disabled.</p>
Default	false

Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vpn-id** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VPN identifier for the service
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vpn-id number</i>
Tree	<a href="#">vpn-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

### **vxlan**

Synopsis	Enter the <b>vxlan</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan</i>
Tree	<a href="#">vxlan</a>
Introduced	16.0.R1
Platforms	All

### **instance** [[vxlan-instance](#)] *number*

Synopsis	Enter the <b>instance</b> list instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i>
Tree	<a href="#">instance</a>
Introduced	16.0.R1
Platforms	All

### **[vxlan-instance]** *number*

Synopsis	VXLAN instance
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i>

Tree	<a href="#">instance</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## assisted-replication

Synopsis	Enter the <b>assisted-replication</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i> <a href="#">assisted-replication</a>
Tree	<a href="#">assisted-replication</a>
Introduced	16.0.R1
Platforms	All

## leaf

Synopsis	Enable the <b>leaf</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i> <a href="#">assisted-replication</a> <a href="#">leaf</a>
Tree	<a href="#">leaf</a>
Notes	The following elements are part of a choice: <b>leaf</b> or <b>replicator</b> .
Introduced	16.0.R1
Platforms	All

## acttime *number*

Synopsis	Time for the leaf to wait before sending traffic to a new replicator
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i> <a href="#">assisted-replication</a> <a href="#">leaf</a> <a href="#">acttime</a> <i>number</i>
Tree	<a href="#">acttime</a>
Range	1 to 255
Units	seconds
Introduced	16.0.R1
Platforms	All



**replicator**

Synopsis	AR role as replicator
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i> <a href="#">assisted-replication replicator</a>
Tree	<a href="#">replicator</a>
Notes	The following elements are part of a choice: <b>leaf</b> or <b>replicator</b> .
Introduced	16.0.R1
Platforms	All

**egress-vtep** [[ip-address](#)] (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>egress-vtep</b>
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i> <a href="#">egress-vtep</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">egress-vtep</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[ip-address]** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	VTEP IP address used when originating VXLAN packets
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i> <a href="#">egress-vtep</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">egress-vtep</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fdb**

Synopsis	Enter the <b>fdb</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number</i> <a href="#">fdb</a>
Tree	<a href="#">fdb</a>
Introduced	16.0.R1
Platforms	All

### **discard-unknown-source** *boolean*

Synopsis	Discard frames with unknown source
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">vxlan</a> <i>instance</i> <i>number</i> <a href="#">fdb</a> <a href="#">discard-unknown-source</a> <i>boolean</i>
Tree	<a href="#">discard-unknown-source</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mac-learning**

Synopsis	Enter the <b>mac-learning</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">vxlan</a> <i>instance</i> <i>number</i> <a href="#">fdb</a> <a href="#">mac-learning</a>
Tree	<a href="#">mac-learning</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **aging** *boolean*

Synopsis	Enable/disable aging of MAC addresses
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">vxlan</a> <i>instance</i> <i>number</i> <a href="#">fdb</a> <a href="#">mac-learning</a> <a href="#">aging</a> <i>boolean</i>
Tree	<a href="#">aging</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **learning** *boolean*

Synopsis	Enable learning of new MAC addresses
Context	<b>configure</b> <a href="#">service vpls</a> <i>string</i> <a href="#">vxlan</a> <i>instance</i> <i>number</i> <a href="#">fdb</a> <a href="#">mac-learning</a> <a href="#">learning</a> <i>boolean</i>
Tree	<a href="#">learning</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**maximum-mac-addresses** *number*

Synopsis	Maximum number of MAC entries in the FDB from this vxlan instance
Context	<b>configure</b> <a href="#">service vpls string vxlan instance number fdb maximum-mac-addresses number</a>
Tree	<a href="#">maximum-mac-addresses</a>
Range	1 to 511999
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**protected-src-mac-violation-action** *keyword*

Synopsis	Action for a relearn request for a protected MAC
Context	<b>configure</b> <a href="#">service vpls string vxlan instance number fdb protected-src-mac-violation-action keyword</a>
Tree	<a href="#">protected-src-mac-violation-action</a>
Options	discard
Introduced	16.0.R1
Platforms	All

**igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">service vpls string vxlan instance number igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R5
Platforms	All

**mrouter-port** *boolean*

Synopsis	Enable VXLAN binds as multicast router ports
Context	<b>configure</b> <a href="#">service vpls string vxlan instance number igmp-snooping mrouter-port boolean</a>
Tree	<a href="#">mrouter-port</a>
Default	false
Introduced	16.0.R5
Platforms	All

## mld-snooping

Synopsis	Enter the <b>mld-snooping</b> context
Context	<b>configure service vpls string vxlan instance number mld-snooping</b>
Tree	<b>mld-snooping</b>
Introduced	16.0.R5
Platforms	All

## mrouter-port *boolean*

Synopsis	Enable VXLAN binds as multicast router ports
Context	<b>configure service vpls string vxlan instance number mld-snooping mrouter-port boolean</b>
Tree	<b>mrouter-port</b>
Default	false
Introduced	16.0.R5
Platforms	All

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure service vpls string vxlan instance number network</b>
Tree	<b>network</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service vpls string vxlan instance number network ingress</b>
Tree	<b>ingress</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vpls string vxlan instance number network ingress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service vpls string vxlan instance number network ingress qos network</a>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**fp-redirect-group**

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure</b> <a href="#">service vpls string vxlan instance number network ingress qos network fp-redirect-group</a>
Tree	<a href="#">fp-redirect-group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**group-name** *reference*

Synopsis	Name of the forwarding plane queue group template
Context	<b>configure</b> <a href="#">service vpls string vxlan instance number network ingress qos network fp-redirect-group group-name reference</a>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos queue-group-templates ingress queue-group string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**instance number**

Synopsis	Instance of the forwarding-plane ingress Queue Group for this SDP binding
Context	<b>configure service vpls string vxlan instance number network ingress qos network fp-redirect-group instance number</b>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policy-name reference**

Synopsis	Ingress network policy name applied to this SDP binding
Context	<b>configure service vpls string vxlan instance number network ingress qos network policy-name reference</b>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos network string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**rx-discard-on-ndf keyword**

Synopsis	Received multicast traffic type discarded on NDF
Context	<b>configure service vpls string vxlan instance number rx-discard-on-ndf keyword</b>
Tree	<a href="#">rx-discard-on-ndf</a>
Options	bm, bum, none
Default	bm
Introduced	16.0.R4
Platforms	All

**source-vtep-security boolean**

Synopsis	Enable/disable source vtep security
Context	<b>configure service vpls string vxlan instance number source-vtep-security boolean</b>
Tree	<a href="#">source-vtep-security</a>
Default	false

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **vni number**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VNI of the VXLAN
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan instance number vni number</i>
Tree	<a href="#">vni</a>
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **source-vtep** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Vxlan source virtual tunnel endpoint information
Context	<b>configure</b> <a href="#">service vpls</a> <i>string vxlan source-vtep (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">source-vtep</a>
Introduced	16.0.R1
Platforms	All

### **wlan-gw**

Synopsis	Enter the <b>wlan-gw</b> context
Context	<b>configure</b> <a href="#">service vpls</a> <i>string wlan-gw</i>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of WLAN-GW
Context	<b>configure service vpls string wlan-gw admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure service vpls string wlan-gw description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wlan-gw-group** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	WLAN-GW endpoint within the VPLS service
Context	<b>configure service vpls string wlan-gw wlan-gw-group reference</b>
Tree	<a href="#">wlan-gw-group</a>
Description	<p>This command specifies a WLAN-GW group to be used as an endpoint within the VPLS. This feature is used in conjunction with the <b>configure service vprn subscriber-interface group-interface wlan-gw vlan-range dynamic-service</b> command for a VPRN service and the <b>configure service ies subscriber-interface group-interface wlan-gw vlan-range dynamic-service</b> command for an IES service.</p> <p>See "Dynamic VPLS service" in the <i>7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide</i> for more information about the dynamic VPLS service feature.</p>
Reference	<b>configure isa wlan-gw-group number</b>
Introduced	23.3.R1



Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vprn** [*service-name*] *string*

Synopsis Enter the **vprn** list instance  
Context **configure service vprn string**  
Tree **vprn**  
Introduced 16.0.R1  
Platforms All

### **[service-name]** *string*

Synopsis Administrative service name  
Context **configure service vprn string**  
Tree **vprn**  
String Length 1 to 64  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **aa-interface** [*interface-name*] *string*

Synopsis Enter the **aa-interface** list instance  
Context **configure service vprn string aa-interface string**  
Tree **aa-interface**  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[interface-name]** *string*

Synopsis Interface name  
Context **configure service vprn string aa-interface string**  
Tree **aa-interface**  
String Length 1 to 32  
Notes This element is part of a list key.

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>ip-mtu</b> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service vprn string aa-interface string ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## primary

Synopsis	Enable the <b>primary</b> context
Context	<b>configure service vprn string aa-interface string ipv4 primary</b>
Tree	<a href="#">primary</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	<b>configure service vprn string aa-interface string ipv4 primary address string</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix-length *number*

Synopsis	IPv4 address prefix length
Context	<b>configure service vprn string aa-interface string ipv4 primary prefix-length number</b>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sap** [*sap-id*] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
Max. Instances	1
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>sap</b> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>sap</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <b>sap</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160

Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## egress

Synopsis Enter the **egress** context  
Context **configure service vprn string aa-interface string sap string egress**  
Tree **egress**  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis Enter the **filter** context  
Context **configure service vprn string aa-interface string sap string egress filter**  
Tree **filter**  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis IPv4 filter policy name  
Context **configure service vprn string aa-interface string sap string egress filter ip reference**  
Tree **ip**  
Reference **configure filter ip-filter string**  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis Enter the **qos** context  
Context **configure service vprn string aa-interface string sap string egress qos**  
Tree **qos**  
Introduced 21.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">service vprn string aa-interface string sap string egress qos sap-egress</a>
Tree	<a href="#">sap-egress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy-name reference**

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure</b> <a href="#">service vprn string aa-interface string sap string egress qos sap-egress policy-name reference</a>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-egress string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**virtual-port**

Synopsis	Enter the <b>virtual-port</b> context
Context	<b>configure</b> <a href="#">service vprn string aa-interface string sap string egress virtual-port</a>
Tree	<a href="#">virtual-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vport-name reference**

Synopsis	Virtual port assigned to the SAP
Context	<b>configure</b> <a href="#">service vprn string aa-interface string sap string egress virtual-port vport-name reference</a>
Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port string ethernet access egress virtual-port string</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## fwd-wholesale

Synopsis	Enter the <b>fwd-wholesale</b> context
Context	<b>configure service vprn</b> <i>string aa-interface string sap string fwd-wholesale</i>
Tree	<a href="#">fwd-wholesale</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pppoe-service *reference*

Synopsis	PPPoE service name
Context	<b>configure service vprn</b> <i>string aa-interface string sap string fwd-wholesale pppoe-service reference</i>
Tree	<a href="#">pppoe-service</a>
Reference	<b>configure service epipe</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service vprn</b> <i>string aa-interface string sap string ingress</i>
Tree	<a href="#">ingress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service vprn</b> <i>string aa-interface string sap string ingress qos</i>
Tree	<a href="#">qos</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap-ingress

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">sap-ingress</a>
Tree	<a href="#">sap-ingress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policy-name *reference*

Synopsis	Policy ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">sap-ingress</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lag

Synopsis	Enter the <b>lag</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aa-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag</a>
Tree	<a href="#">lag</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## aaa

Synopsis	Enter the <b>aaa</b> context
Context	<b>configure service vprn string aaa</b>
Tree	<a href="#">aaa</a>
Introduced	16.0.R4
Platforms	All

## remote-servers

Synopsis	Enter the <b>remote-servers</b> context
Context	<b>configure service vprn string aaa remote-servers</b>
Tree	<a href="#">remote-servers</a>
Introduced	16.0.R4
Platforms	All

## radius

Synopsis	Enable the <b>radius</b> context
Context	<b>configure service vprn string aaa remote-servers radius</b>
Tree	<a href="#">radius</a>
Introduced	16.0.R4
Platforms	All

## access-algorithm *keyword*

Synopsis	Algorithm used to access the set of RADIUS servers
Context	<b>configure service vprn string aaa remote-servers radius access-algorithm keyword</b>
Tree	<a href="#">access-algorithm</a>
Options	direct, round-robin
Default	direct
Introduced	16.0.R4
Platforms	All

**accounting** *boolean*

Synopsis	Enable RADIUS command accounting
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius accounting</a> <i>boolean</i>
Tree	<a href="#">accounting</a>
Default	false
Introduced	16.0.R4
Platforms	All

**accounting-port** *number*

Synopsis	Port number on RADIUS server for accounting requests
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius accounting-port</a> <i>number</i>
Tree	<a href="#">accounting-port</a>
Range	1 to 65535
Default	1813
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the authentication server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**authorization** *boolean*

Synopsis	Enable RADIUS authorization
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius authorization</a> <i>boolean</i>
Tree	<a href="#">authorization</a>
Default	false
Introduced	16.0.R4

Platforms All

### **interactive-authentication** *boolean*

Synopsis Enable RADIUS interactive authentication

Context **configure service vprn** *string* **aaa remote-servers radius interactive-authentication** *boolean*

Tree [interactive-authentication](#)

Default false

Introduced 16.0.R4

Platforms All

### **port** *number*

Synopsis UDP port number on which to contact RADIUS server

Context **configure service vprn** *string* **aaa remote-servers radius port** *number*

Tree [port](#)

Range 1 to 65535

Default 1812

Introduced 16.0.R4

Platforms All

### **server** [[index](#)] *number*

Synopsis Enter the **server** list instance

Context **configure service vprn** *string* **aaa remote-servers radius server** *number*

Tree [server](#)

Max. Instances 5

Introduced 16.0.R4

Platforms All

### [[index](#)] *number*

Synopsis RADIUS server ID

Context **configure service vprn** *string* **aaa remote-servers radius server** *number*

Tree	<a href="#">server</a>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius server number</a> <b>address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **authenticator** *keyword*

Synopsis	Authenticator hash algorithm for the RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius server number</a> <b>authenticator</b> <i>keyword</i>
Tree	<a href="#">authenticator</a>
Description	This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.
Options	md5, sm3
Default	md5
Introduced	22.10.R1
Platforms	All

### **secret** *string*

Synopsis	Secret key to access the RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius server number</a> <b>secret</b> <i>string</i>
Tree	<a href="#">secret</a>
String Length	1 to 115

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Introduced	16.0.R4
Platforms	All

### **tls-client-profile** *reference*

Synopsis	TLS client profile for the RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius server</a> <i>number</i> <a href="#">tls-client-profile reference</a>
Tree	<a href="#">tls-client-profile</a>
Description	This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS.
Reference	<b>configure</b> <a href="#">system security tls client-tls-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

### **server-retry** *number*

Synopsis	Number of attempts to retry contacting RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius server-retry</a> <i>number</i>
Tree	<a href="#">server-retry</a>
Range	1 to 10
Default	3
Introduced	16.0.R4
Platforms	All

### **server-timeout** *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers radius server-timeout</a> <i>number</i>
Tree	<a href="#">server-timeout</a>
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R4
Platforms	All

**use-default-template** *boolean*

Synopsis	Apply the RADIUS default user template to RADIUS user
Context	<b>configure service vprn</b> <i>string</i> <b>aaa remote-servers radius use-default-template</b> <i>boolean</i>
Tree	<a href="#">use-default-template</a>
Default	false
Introduced	16.0.R4
Platforms	All

**tacplus**

Synopsis	Enable the <b>tacplus</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>aaa remote-servers tacplus</b>
Tree	<a href="#">tacplus</a>
Introduced	16.0.R4
Platforms	All

**accounting**

Synopsis	Enable the <b>accounting</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>aaa remote-servers tacplus accounting</b>
Tree	<a href="#">accounting</a>
Introduced	16.0.R4
Platforms	All

**record-type** *keyword*

Synopsis	Type of accounting record packet sent to TACACS+ server
Context	<b>configure service vprn</b> <i>string</i> <b>aaa remote-servers tacplus accounting record-type</b> <i>keyword</i>
Tree	<a href="#">record-type</a>
Options	start-stop, stop-only
Default	stop-only
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the TACACS+ protocol
Context	<b>configure service vprn string aaa remote-servers tacplus admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

### **authorization**

Synopsis	Enable the <b>authorization</b> context
Context	<b>configure service vprn string aaa remote-servers tacplus authorization</b>
Tree	<a href="#">authorization</a>
Introduced	16.0.R4
Platforms	All

### **request-format**

Synopsis	Enter the <b>request-format</b> context
Context	<b>configure service vprn string aaa remote-servers tacplus authorization request-format</b>
Tree	<a href="#">request-format</a>
Description	Commands in this context configure access operations that are sent to the TACACS+ server during authorization.
Introduced	21.10.R3
Platforms	All

### **access-operation-cmd** *keyword*

Synopsis	Access operations sent in authorization requests
Context	<b>configure service vprn string aaa remote-servers tacplus authorization request-format access-operation-cmd keyword</b>
Tree	<a href="#">access-operation-cmd</a>
Description	This command sends an operation argument in authorization requests.

In model-driven interfaces, this command configures the system to send the operation in the `cmd` argument, and the path in the `cmd-args` argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces.

Options	delete
Max. Instances	1
Introduced	21.10.R3
Platforms	All

### **use-priv-lvl** *boolean*

Synopsis	Allow privilege level mapping
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers tacplus authorization use-priv-lvl</a> <i>boolean</i>
Tree	<a href="#">use-priv-lvl</a>
Description	<p>When configured to <b>true</b>, this command automatically performs a single authorization request to the TACACS+ server for <code>cmd*</code> (all commands) immediately after login, and then uses the local profile associated (via the <b>priv-lvl-map</b>) with the <code>priv-lvl</code> returned by the TACACS+ server for all subsequent authorization (except <b>enable-admin</b>). After the initial authorization for <code>cmd*</code>, no further authorization requests are sent to the TACACS+ server (except <b>enable-admin</b>).</p> <p>When configured to <b>false</b>, each command is sent to the TACACS+ server for authorization (this is true regardless of whether the <b>tacplus use-default-template</b> setting is enabled).</p>
Default	false
Introduced	16.0.R4
Platforms	All

### **interactive-authentication** *boolean*

Synopsis	Allows TACACS+ interactive authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers tacplus interactive-authentication</a> <i>boolean</i>
Tree	<a href="#">interactive-authentication</a>
Default	false
Introduced	16.0.R4
Platforms	All



## priv-lvl-map

Synopsis	Enter the <b>priv-lvl-map</b> context
Context	<b>configure service vprn string aaa remote-servers tacplus priv-lvl-map</b>
Tree	<a href="#">priv-lvl-map</a>
Introduced	16.0.R4
Platforms	All

## priv-lvl [[level](#)] *number*

Synopsis	Enter the <b>priv-lvl</b> list instance
Context	<b>configure service vprn string aaa remote-servers tacplus priv-lvl-map priv-lvl number</b>
Tree	<a href="#">priv-lvl</a>
Introduced	16.0.R4
Platforms	All

## [\[level\]](#) *number*

Synopsis	Privilege level for the mapping
Context	<b>configure service vprn string aaa remote-servers tacplus priv-lvl-map priv-lvl number</b>
Tree	<a href="#">priv-lvl</a>
Range	0 to 15
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

## user-profile-name *reference*

Synopsis	User profile for the mapping
Context	<b>configure service vprn string aaa remote-servers tacplus priv-lvl-map priv-lvl number user-profile-name reference</b>
Tree	<a href="#">user-profile-name</a>
Reference	<b>configure system security aaa local-profiles profile string</b>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**server** [[index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure service vprn string aaa remote-servers tacplus server number</b>
Tree	<a href="#">server</a>
Max. Instances	5
Introduced	16.0.R4
Platforms	All

**[index]** *number*

Synopsis	TACACS+ server ID
Context	<b>configure service vprn string aaa remote-servers tacplus server number</b>
Tree	<a href="#">server</a>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the TACACS+ server
Context	<b>configure service vprn string aaa remote-servers tacplus server number address (ipv4-address-no-zone   ipv6-address-no-zone)</b>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**port** *number*

Synopsis	TCP port ID on which to contact TACACS+ server
Context	<b>configure service vprn string aaa remote-servers tacplus server number port number</b>
Tree	<a href="#">port</a>

Range	0   1 to 65535
Default	49
Introduced	16.0.R4
Platforms	All

**secret** *string*

Synopsis	Secret key to access the TACACS+ server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers tacplus server</a> <i>number</i> <b>secret</b> <i>string</i>
Tree	<a href="#">secret</a>
String Length	1 to 199
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**server-timeout** *number*

Synopsis	Time to wait for a response from the TACACS+ server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers tacplus server-timeout</a> <i>number</i>
Tree	<a href="#">server-timeout</a>
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R4
Platforms	All

**use-default-template** *boolean*

Synopsis	Apply TACACS+ default user-template to TACACS+ user
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aaa remote-servers tacplus use-default-template</a> <i>boolean</i>
Tree	<a href="#">use-default-template</a>
Default	true
Introduced	16.0.R4
Platforms	All

**aarp-interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>aarp-interface</b> list instance
Context	<b>configure service vprn</b> <i>string aarp-interface string</i>
Tree	<a href="#">aarp-interface</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[interface-name]** *string*

Synopsis	Interface name
Context	<b>configure service vprn</b> <i>string aarp-interface string</i>
Tree	<a href="#">aarp-interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure service vprn</b> <i>string aarp-interface string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure service vprn</b> <i>string aarp-interface string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*

Synopsis IP MTU applied to outgoing packets

Context **configure** *service vprn string aarp-interface string ip-mtu number*

Tree [ip-mtu](#)

Description This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.

Range 512 to 9786

Units bytes

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance

Context **configure** *service vprn string aarp-interface string spoke-sdp string*

Tree [spoke-sdp](#)

Max. Instances 1

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[sdp-bind-id]** *string*

Synopsis SDP binding ID

Context **configure** *service vprn string aarp-interface string spoke-sdp string*

Tree [spoke-sdp](#)

String Length 3 to 16

Notes This element is part of a list key.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aarp

Synopsis	Enable the <b>aarp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp</a>
Tree	<a href="#">aarp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## id reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AARP instance ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp id reference</a>
Tree	<a href="#">id</a>
Reference	<b>configure</b> <a href="#">application-assurance aarp</a> <i>number</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## type keyword

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Role of the spoke SDP referenced by the AARP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">aarp type keyword</a>
Tree	<a href="#">type</a>
Options	subscriber-side-shunt, network-side-shunt
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of this service SDP binding
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>egress</b>
Tree	<a href="#">egress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <b>filter</b>
Tree	<a href="#">filter</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis	IP filter identifier
Context	<b>configure service vprn</b> <i>string aarp-interface string spoke-sdp string egress filter ip reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vc-label number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Static MPLS VC label to send packets to far-end device
Context	<b>configure service vprn</b> <i>string aarp-interface string spoke-sdp string egress vc-label number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service vprn</b> <i>string aarp-interface string spoke-sdp string ingress</i>
Tree	<a href="#">ingress</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vprn</b> <i>string aarp-interface string spoke-sdp string ingress filter</i>
Tree	<a href="#">filter</a>



Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip** *reference*

Synopsis	IP filter ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress filter ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VC ingress value that indicates a specific connection
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">aarp-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	1 to 1048575
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the service
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## aggregates

Synopsis	Enter the <b>aggregates</b> context
Context	<b>configure service vprn string aggregates</b>
Tree	<a href="#">aggregates</a>
Introduced	16.0.R1
Platforms	All

## aggregate [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>aggregate</b> list instance
Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">aggregate</a>
Introduced	16.0.R1
Platforms	All

## [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Destination IP address prefix of the aggregate route
Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">aggregate</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## aggregator

Synopsis	Enter the <b>aggregator</b> context
Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>aggregator</b>
Tree	<a href="#">aggregator</a>
Introduced	16.0.R1
Platforms	All

**address string**

Synopsis	Aggregator IP address
Context	<b>configure service vprn string aggregates aggregate (ipv4-prefix   ipv6-prefix) aggregator address string</b>
Tree	<b>address</b>
Introduced	16.0.R1
Platforms	All

**as-number number**

Synopsis	Aggregator AS number
Context	<b>configure service vprn string aggregates aggregate (ipv4-prefix   ipv6-prefix) aggregator as-number number</b>
Tree	<b>as-number</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**as-set boolean**

Synopsis	Use AS_SET path segment type for the aggregate route
Context	<b>configure service vprn string aggregates aggregate (ipv4-prefix   ipv6-prefix) as-set boolean</b>
Tree	<b>as-set</b>
Description	<p>When configured to <b>true</b>, the AS_PATH attribute of the aggregate contains an AS_SET containing all AS numbers from the contributing routes. This can increase the amount of churn due to best-path changes.</p> <p>When configured to <b>false</b>, the AS_PATH attribute contains no AS_SET and will be originated by the ESR.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**blackhole**

Synopsis	Enable the <b>blackhole</b> context
Context	<b>configure service vprn string aggregates aggregate (ipv4-prefix   ipv6-prefix) blackhole</b>

Tree	<a href="#">blackhole</a>
Notes	The following elements are part of a choice: <b>blackhole</b> or <b>indirect</b> .
Introduced	16.0.R1
Platforms	All

### **generate-icmp** *boolean*

Synopsis	Send ICMP unreachable messages for aggregate routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">blackhole</a> <a href="#">generate-icmp</a> <i>boolean</i>
Tree	<a href="#">generate-icmp</a>
Description	When configured to <b>true</b> , ICMP unreachable messages are sent when packets match an aggregate route in the FIB with a black-hole next-hop. When configured to <b>false</b> , ICMP unreachable messages are not generated.
Default	false
Introduced	16.0.R2
Platforms	All

### **community** *string*

Synopsis	Community name that is added to the aggregate route
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">aggregates</a> <a href="#">aggregate</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">community</a> <i>string</i>
Tree	<a href="#">community</a>
Description	This command associates a BGP community with the aggregate route. The community name can be matched in route policies and is automatically added to BGP routes exported from the aggregate route.
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
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Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **discard-component-communities** *boolean*

Synopsis	Advertise aggregate with aggregate route community set
Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>discard-component-communities boolean</b>
Tree	<a href="#">discard-component-communities</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **indirect** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Address of the indirect next hop
Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>indirect</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">indirect</a>
Description	This command programs aggregate routes into the forwarding table with an indirect next hop. If a packet matches the aggregate route but not a contributing route, it is forwarded toward the indirect next hop rather than being discarded.
Notes	The following elements are part of a choice: <b>blackhole</b> or <b>indirect</b> .
Introduced	16.0.R1
Platforms	All

### **local-preference** *number*

Synopsis	Local preference used when aggregate route is exported
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Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>local-preference number</b>
Tree	<b>local-preference</b>
Description	This command configures the local preference value to use when the aggregate route is exported rather than using any of the local preference values assigned for any of the contributing routes.
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Policy name for the aggregated route
Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>policy reference</b>
Tree	<b>policy</b>
Description	<p>This command associates an aggregate route with a policy reference. The aggregated route is activated only when there is at least one eligible active route in the sub-trees below it that is accepted by the policy evaluation. There is no evaluation into any sub-tree that starts with another active aggregate route. Eligible routes exclude host routes and LDP shortcut routes.</p> <p>If an aggregate route has no policy, or the reference is to an empty policy, this configuration is treated as equivalent to a policy with one rule that accepts all routes.</p>
Reference	<b>configure policy-options policy-statement string</b>
Introduced	20.10.R1
Platforms	All

### **summary-only boolean**

Synopsis	Advertise the aggregate route only
Context	<b>configure service vprn string aggregates aggregate</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>summary-only boolean</b>
Tree	<b>summary-only</b>
Description	<p>When configured to <b>true</b>, the router suppresses the advertisement of more specific component routes for the aggregate.</p> <p>When configured to <b>false</b>, the router advertises both the aggregate route and its contributing routes.</p>
Default	false

Introduced	16.0.R1
Platforms	All

### **tunnel-group** *number*

Synopsis	Tunnel group from which to associate the MC IPsec state
Context	<b>configure</b> <b>service vpn</b> <i>string</i> <b>aggregates aggregate</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>tunnel-group</b> <i>number</i>
Tree	<b>tunnel-group</b>
Description	This command adds the MC-IPsec state of the specific tunnel-group to the aggregate route.
Range	1 to 64
Introduced	20.7.R1
Platforms	All

### **allow-export-bgp-vpn** *boolean*

Synopsis	Include BGP-VPN routes for export
Context	<b>configure</b> <b>service vpn</b> <i>string</i> <b>allow-export-bgp-vpn</b> <i>boolean</i>
Tree	<b>allow-export-bgp-vpn</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **autonomous-system** *number*

Synopsis	AS number advertised to peers for this router
Context	<b>configure</b> <b>service vpn</b> <i>string</i> <b>autonomous-system</b> <i>number</i>
Tree	<b>autonomous-system</b>
Description	This command configures the autonomous system (AS) number for the router. This value must be set before BGP can be activated.  If the AS number is changed on a router with an active BGP instance, the new AS number is not used until the BGP instance is restarted.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## bgp

Synopsis	Enable the <b>bgp</b> context
Context	<b>configure service vprn string bgp</b>
Tree	<a href="#">bgp</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the BGP instance
Context	<b>configure service vprn string bgp admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## advertise-inactive *boolean*

Synopsis	Advertise inactive BGP routes to peers
Context	<b>configure service vprn string bgp advertise-inactive boolean</b>
Tree	<a href="#">advertise-inactive</a>
Description	When configured to <b>true</b> , this command allows any inactive BGP route to be advertised, even though it is not the used route.  When configured to <b>false</b> , the advertisement of inactive BGP routes to other BGP peers is disabled.
Default	false
Introduced	16.0.R1
Platforms	All

## advertise-ipv6-next-hops

Synopsis	Enter the <b>advertise-ipv6-next-hops</b> context
Context	<b>configure service vprn string bgp advertise-ipv6-next-hops</b>
Tree	<a href="#">advertise-ipv6-next-hops</a>



Introduced	19.5.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Enable IPv4 routes to be advertised
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp advertise-ipv6-next-hops ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.5.R1
Platforms	All

### **aggregator-id-zero** *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to 0
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp aggregator-id-zero</a> <i>boolean</i>
Tree	<a href="#">aggregator-id-zero</a>
Description	When configured to <b>true</b> , the router ID in the BGP AGGREGATOR path attribute is set to 0 when BGP aggregates routes. This prevents different routers within an AS from creating aggregate routes for the same prefix with different path attributes.  When configured to <b>false</b> , the AS number and router ID are added to the AGGREGATOR path attribute.
Default	false
Introduced	16.0.R1
Platforms	All

### **asn-4-byte** *boolean*

Synopsis	Advertise support for 4-byte ASNs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp asn-4-byte</a> <i>boolean</i>
Tree	<a href="#">asn-4-byte</a>
Default	true
Introduced	16.0.R1
Platforms	All

**attribute-set**

Synopsis	Enter the <b>attribute-set</b> context
Context	<b>configure service vprn string bgp attribute-set</b>
Tree	<b>attribute-set</b>
Description	<p>Commands in this context configure the handling of attribute set (ATTR_SET) attributes in BGP routes received from PE-CE peers of the VPRN.</p> <p>ATTR_SET is an optional transitive BGP path attribute standardized by RFC 6368 that is added to BGP L3 VPN routes to provide logical separation between the BGP domain of a customer and the BGP domain of a service provider.</p>
Introduced	23.10.R1
Platforms	All

**remove boolean**

Synopsis	Remove ATTR_SET in received BGP routes from PE-CE peers
Context	<b>configure service vprn string bgp attribute-set remove boolean</b>
Tree	<b>remove</b>
Description	<p>When configured to <b>true</b>, BGP ignores and silently discards ATTR_SETs in BGP routes received from PE-CE peers of the VPRN. The discarded ATTR_SETs do not affect BGP best path selection in the VPRN, and they do not appear in the VPN-IP routes that result from the VRF export of the BGP routes. Nokia recommends configuring this command to <b>true</b> in most deployments.</p> <p>When configured to <b>false</b>, BGP ignores ATTR_SETs in BGP routes received from PE-CE peers of the VPRN, but does not discard them. This allows the ATTR_SETs to propagate between CE devices connected to the VPRN and to other PE devices when the BGP routes are exported as VPN-IP routes.</p> <p><b>Note:</b> If the configuration of this command is changed, ROUTE_REFRESH messages are sent to all PE-CE peers of the VPRN.</p>
Default	false
Introduced	23.10.R1
Platforms	All

**authentication-key string**

Synopsis	BGP authentication key for all peers
Context	<b>configure service vprn string bgp authentication-key string</b>
Tree	<b>authentication-key</b>

Description	This command configures the authentication key used to protect all sessions. The stored format of the authentication key is based on the <b>configure system security hash-control management-interface md-cli hash-algorithm</b> setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

### authentication-keychain *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure service vprn string bgp authentication-keychain reference</b>
Tree	<a href="#">authentication-keychain</a>
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	<b>configure system security keychains keychain string</b>
Introduced	16.0.R3
Platforms	All

### backup-path

Synopsis	Enter the <b>backup-path</b> context
Context	<b>configure service vprn string bgp backup-path</b>
Tree	<a href="#">backup-path</a>
Description	<p>Commands in this context enable the use of a backup path for specified BGP-learned prefixes belonging to the base router. Multiple paths must be received for a prefix in order to take advantage of this feature. When a prefix has a backup path and its primary paths fail, the affected traffic is rapidly diverted to the backup path without waiting for control plane re-convergence to occur. When many prefixes share the same primary paths and in some cases, the same backup path, the time to divert failover traffic to the backup path is independent of the number of prefixes.</p> <p>By default, IPv4 and IPv6 prefixes do not have a backup path installed in the IOM.</p>
Introduced	16.0.R1
Platforms	All

### ipv4 *boolean*

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	<b>configure service vprn string bgp backup-path ipv4 boolean</b>

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Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp backup-path ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp backup-path label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Enable support for labeled unicast IPv6 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp backup-path label-ipv6</a> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	22.2.R1
Platforms	All

### **best-path-selection**

Synopsis	Enter the <b>best-path-selection</b> context
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Context	<b>configure service vprn string bgp best-path-selection</b>
Tree	<a href="#">best-path-selection</a>
Introduced	16.0.R1
Platforms	All

### **always-compare-med**

Synopsis	Enter the <b>always-compare-med</b> context
Context	<b>configure service vprn string bgp best-path-selection always-compare-med</b>
Tree	<a href="#">always-compare-med</a>
Description	Commands in this context determine how the BGP decision process is affected by the MED path attribute.
Introduced	16.0.R1
Platforms	All

### **med-value** *keyword*

Synopsis	Action for a missing MED attribute
Context	<b>configure service vprn string bgp best-path-selection always-compare-med med-value keyword</b>
Tree	<a href="#">med-value</a>
Options	off, missing-med-zero, missing-med-infinity, on
Default	off
Introduced	16.0.R1
Platforms	All

### **strict-as** *boolean*

Synopsis	Compare MED only for routes from same neighbor AS
Context	<b>configure service vprn string bgp best-path-selection always-compare-med strict-as boolean</b>
Tree	<a href="#">strict-as</a>
Description	<p>When configured to <b>true</b>, the route selection process can compare the MED path attribute between routes only if they come from the same neighbor AS.</p> <p>When configured to <b>false</b>, the route selection process can compare the MED path attribute between routes even if they come from different neighbor ASs.</p>

Default	true
Introduced	16.0.R1
Platforms	All

### **as-path-ignore**

Synopsis	Enter the <b>as-path-ignore</b> context
Context	<b>configure service vprn string bgp best-path-selection as-path-ignore</b>
Tree	<a href="#">as-path-ignore</a>
Description	Commands in this context determine whether the AS path length is considered in the selection process for routes of the specified address families.
Introduced	16.0.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Ignore AS path length for unlabeled unicast IPv4 routes
Context	<b>configure service vprn string bgp best-path-selection as-path-ignore ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6 boolean**

Synopsis	Ignore AS path length for unlabeled unicast IPv6 routes
Context	<b>configure service vprn string bgp best-path-selection as-path-ignore ipv6 boolean</b>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4 boolean**

Synopsis	Ignore AS path length for labeled-unicast IPv4 routes
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Context	<b>configure service vprn</b> <i>string</i> <b>bgp best-path-selection as-path-ignore label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv6** *boolean*

Synopsis	Ignore AS path length for labeled unicast IPv6 routes
Context	<b>configure service vprn</b> <i>string</i> <b>bgp best-path-selection as-path-ignore label-ipv6</b> <i>boolean</i>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	22.2.R1
Platforms	All

### **compare-origin-validation-state** *boolean*

Synopsis	Allow comparison of origin validation states
Context	<b>configure service vprn</b> <i>string</i> <b>bgp best-path-selection compare-origin-validation-state</b> <i>boolean</i>
Tree	<a href="#">compare-origin-validation-state</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **d-path-length-ignore** *boolean*

Synopsis	Enable D-PATH length ignore
Context	<b>configure service vprn</b> <i>string</i> <b>bgp best-path-selection d-path-length-ignore</b> <i>boolean</i>
Tree	<a href="#">d-path-length-ignore</a>
Description	<p>When configured to <b>true</b>, this command, enables the router to ignore the D-PATH domain segment length during best-path selection.</p> <p>At the base router level (or VPRN BGP level for PE-CE routers), this command allows BGP to ignore the D-PATH domain segment length for best-path selection purposes. BGP ignores the D-PATH length when comparing two VPN routes or two IFL routes within the same RD. However, these VPN/IFL routes are processed in the main-BGP instance.</p>

At the VPRN router level, this command allows the VPRN RTM to ignore the D-PATH domain segment length for best-path selection purposes (for routes in VPRN). The user can control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.

Best-path selection for EVPN-IFF routes against other owners (for example, EVPN-IFL or IPVPN) still relies on RTM preference. When EVPN-IFF RTM preference matches the RTM preference of another BGP owner, the existing RTM selection applies and D-PATH is not considered, irrespective of the **d-path-length-ignore** configuration.

When configured to **false**, this command disables the ability to ignore the D-PATH domain segment length.

Default	false
Introduced	21.10.R1
Platforms	All

### **deterministic-med** *boolean*

Synopsis	Group paths based on AS before MED attribute comparison
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp best-path-selection deterministic-med</a> <i>boolean</i>
Tree	<a href="#">deterministic-med</a>
Description	When configured to <b>true</b> , BGP groups paths from the same AS that are equal up to the MED attribute comparison and then compares the best path from each group to select the overall best path. This process ensures that the best-path selection process is deterministic in all cases.  When configured to <b>false</b> , paths are not grouped and the overall best-path selection can depend on the order of route arrival.
Default	false
Introduced	16.0.R1
Platforms	All

### **ebgp-ibgp-equal**

Synopsis	Enter the <b>ebgp-ibgp-equal</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp best-path-selection ebgp-ibgp-equal</a>
Tree	<a href="#">ebgp-ibgp-equal</a>
Description	Commands in this context allow BGP to ignore the difference between EBGp and IBGP routes in selecting the best path and eligible multipaths (if multipath and ECMP are enabled) for the specified address families. The result is a form of EIBGP load-balancing in a multipath scenario. This behavior can be applied selectively to certain address families.



By default, the BGP decision process prefers an EBGP learned route over an IBGP learned route.

Introduced 16.0.R1  
 Platforms All

### **ipv4 boolean**

Synopsis Consider EBGP and IBGP IPv4 routes equal  
 Context **configure service vprn string bgp best-path-selection ebgp-ibgp-equal ipv4 boolean**  
 Tree [ipv4](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ipv6 boolean**

Synopsis Consider EBGP and IBGP IPv6 routes equal  
 Context **configure service vprn string bgp best-path-selection ebgp-ibgp-equal ipv6 boolean**  
 Tree [ipv6](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **label-ipv4 boolean**

Synopsis Consider EBGP and IBGP label-IPv4 routes equal  
 Context **configure service vprn string bgp best-path-selection ebgp-ibgp-equal label-ipv4 boolean**  
 Tree [label-ipv4](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **label-ipv6 boolean**

Synopsis Consider EBGP and IBGP label-IPv6 routes equal

Context	<b>configure service vprn string bgp best-path-selection ebgp-ibgp-equal label-ipv6 boolean</b>
Tree	<a href="#">label-ipv6</a>
Default	false
Introduced	22.2.R1
Platforms	All

### **ignore-nh-metric boolean**

Synopsis	Ignore next-hop distance in best path selection
Context	<b>configure service vprn string bgp best-path-selection ignore-nh-metric boolean</b>
Tree	<a href="#">ignore-nh-metric</a>
Description	<p>When configured to <b>true</b>, BGP ignores the resolved distance to the BGP next hop in its route selection process.</p> <p>When configured to <b>false</b>, BGP factors the distance to the next hop into its decision process when it compares two BGP routes with the same NLRI learned from base router BGP peers (in the <b>router</b> context) or IP prefix learned from VPRN BGP peers (in the <b>vprn</b> context).</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **ignore-router-id**

Synopsis	Enable the <b>ignore-router-id</b> context
Context	<b>configure service vprn string bgp best-path-selection ignore-router-id</b>
Tree	<a href="#">ignore-router-id</a>
Description	<p>Commands in this context determine whether the BGP selection process ignores the BGP identifier (router ID) comparison of two EBGP paths from different EBGP peers when determining the best path for the specified address families.</p> <p>By default, BGP selects the path with the lower router ID when it compares two paths from EBGP peers.</p>
Introduced	16.0.R1
Platforms	All

**origin-invalid-unusable** *boolean*

Synopsis	Ignore routes with invalid origin validation state
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp best-path-selection origin-invalid-unusable</a> <i>boolean</i>
Tree	<a href="#">origin-invalid-unusable</a>
Default	false
Introduced	19.7.R1
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , BFD is enabled on all BGP sessions, subject to the association of those BGP sessions with IP interfaces that have BFD configurations. When configured to <b>false</b> , BFD is not enabled globally for all BGP sessions.
Default	false
Introduced	16.0.R1
Platforms	All

**bfd-strict-mode**

Synopsis	Enter the <b>bfd-strict-mode</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp bfd-strict-mode</a>
Tree	<a href="#">bfd-strict-mode</a>
Introduced	23.7.R1
Platforms	All

**advertise**

Synopsis	Enable the <b>advertise</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp bfd-strict-mode advertise</a>
Tree	<a href="#">advertise</a>
Description	Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:

- The inherited or configured value for the **bfd-liveness** command that applies to the peer is **true**.
- The interface associated with the peer has a valid BFD configuration.

When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.

When unconfigured, BGP does not advertise the Strict-BFD capability to peers.

Introduced	23.7.R1
Platforms	All

### **holdtime** *number*

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>bfd-strict-mode</b> <b>advertise</b> <b>holdtime</b> <i>number</i>
Tree	<b>holdtime</b>
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds
Default	30
Introduced	23.7.R1
Platforms	All

### **next-hop-reachability** *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>bfd-strict-mode</b> <b>next-hop-reachability</b> <i>boolean</i>
Tree	<b>next-hop-reachability</b>
Description	When configured to <b>true</b> , the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met: <ul style="list-style-type: none"> <li>• The BFD session to the peer is in a down state.</li> <li>• There is a valid interface BFD configuration that applies to the peer.</li> <li>• There is a valid BFD liveness configuration that applies to the peer.</li> </ul>

The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.

Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.

The behavior of the router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent.

Configuring this command to **true** only affects routes belonging to the following address families:

- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Default	false
Introduced	23.7.R1
Platforms	All

### **client-reflect** *boolean*

Synopsis	Allow client reflection of routes by route reflector
Context	<b>configure</b> <i>service vpn</i> <i>string</i> <b>bgp</b> <b>client-reflect</b> <i>boolean</i>
Tree	<b>client-reflect</b>
Description	When configured to <b>true</b> , routes received from neighbors considered to be RR clients are reflected to other peers as expected.  When configured to <b>false</b> , routes received from neighbors considered to be RR clients are not reflected to other clients.
Default	true
Introduced	16.0.R1

Platforms All

## cluster

Synopsis Enter the **cluster** context  
 Context **configure service vprn string bgp cluster**  
 Tree **cluster**  
 Introduced 16.0.R1  
 Platforms All

## cluster-id *string*

Synopsis Route reflector cluster ID  
 Context **configure service vprn string bgp cluster cluster-id string**  
 Tree **cluster-id**  
 Description The command specifies the cluster ID to associate with the routing instance, effectively making all IBGP peers of the routing instance RR clients.  
 Introduced 16.0.R1  
 Platforms All

## connect-retry *number*

Synopsis BGP connect retry timer value  
 Context **configure service vprn string bgp connect-retry number**  
 Tree **connect-retry**  
 Description This command configures the BGP connect retry timer. When the timer expires, BGP tries to reconnect to the configured peer.  
 Range 1 to 65535  
 Default 120  
 Introduced 16.0.R1  
 Platforms All

## convergence

Synopsis Enter the **convergence** context  
 Context **configure service vprn string bgp convergence**

Tree	<a href="#">convergence</a>
Introduced	19.7.R1
Platforms	All

### **family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	19.7.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Address family for which convergence selection applies
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	All

### **max-wait-to-advertise** *number*

Synopsis	Maximum wait time before advertising routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence family</a> <i>keyword</i> <a href="#">max-wait-to-advertise</a> <i>number</i>
Tree	<a href="#">max-wait-to-advertise</a>
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

**min-wait-to-advertise** *number*

Synopsis	Minimum wait time before advertising routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp convergence min-wait-to-advertise</a> <i>number</i>
Tree	<a href="#">min-wait-to-advertise</a>
Range	0 to 3600
Default	0
Introduced	19.7.R1
Platforms	All

**damp-peer-oscillations**

Synopsis	Enable the <b>damp-peer-oscillations</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp damp-peer-oscillations</a>
Tree	<a href="#">damp-peer-oscillations</a>
Description	<p>Commands in this context support the DampPeerOscillations FSM behavior described in section 8.1 of RFC 4271, <i>A Border Gateway Protocol 4 (BGP-4)</i>.</p> <p>When unconfigured, the router does not perform peer oscillation damping and immediately transitions out of the idle state after every reset.</p>
Introduced	16.0.R1
Platforms	All

**error-interval** *number*

Synopsis	Time after a reset that the session must be error-free
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp damp-peer-oscillations error-interval</a> <i>number</i>
Tree	<a href="#">error-interval</a>
Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All



## idle-hold-time

Synopsis	Enter the <b>idle-hold-time</b> context
Context	<b>configure service vprn string bgp damp-peer-oscillations idle-hold-time</b>
Tree	<a href="#">idle-hold-time</a>
Description	<p>Commands in this context configure how long a BGP peer session remains in the idle state after some type of error causes the session to reset.</p> <p>In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur in a short time period after each session reset cause longer and longer hold times in the idle state.</p>
Introduced	16.0.R1
Platforms	All

## initial-wait *number*

Synopsis	Time session remains in idle state after stabilization
Context	<b>configure service vprn string bgp damp-peer-oscillations idle-hold-time initial-wait number</b>
Tree	<a href="#">initial-wait</a>
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

## max-wait *number*

Synopsis	Maximum session idle time after repeated instability
Context	<b>configure service vprn string bgp damp-peer-oscillations idle-hold-time max-wait number</b>
Tree	<a href="#">max-wait</a>
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

**second-wait** *number*

Synopsis	Time that doubles after each session failure
Context	<b>configure</b> <a href="#">service vprn string bgp damp-peer-oscillations idle-hold-time second-wait number</a>
Tree	<a href="#">second-wait</a>
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

**damping** *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	<b>configure</b> <a href="#">service vprn string bgp damping boolean</a>
Tree	<a href="#">damping</a>
Description	<p>When configured to <b>true</b>, this command enables route damping to reduce the number of update messages sent between BGP peers and reduce the load on peers without affecting the route convergence time for stable routes.</p> <p>Route damping is controlled by profiles set in route policies. If no profile is specified in the route policy, the default damping profile is used with the following parameters:</p> <ul style="list-style-type: none"> <li>• Half-life: 15 minutes</li> <li>• Max-suppress: 60 minutes</li> <li>• Suppress-threshold: 3000</li> <li>• Reuse-threshold: 750</li> </ul> <p>When configured to <b>false</b>, BGP route damping for learned routes is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**default-label-preference**

Synopsis	Enter the <b>default-label-preference</b> context
Context	<b>configure</b> <a href="#">service vprn string bgp default-label-preference</a>
Tree	<a href="#">default-label-preference</a>

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Introduced	19.5.R1
Platforms	All

### **ebgp number**

Synopsis	Default preference for EBGP
Context	<b>configure service vprn string bgp default-label-preference ebgp number</b>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

### **ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure service vprn string bgp default-label-preference ibgp number</b>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

### **default-preference**

Synopsis	Enter the <b>default-preference</b> context
Context	<b>configure service vprn string bgp default-preference</b>
Tree	<a href="#">default-preference</a>
Introduced	19.5.R1
Platforms	All

### **ebgp number**

Synopsis	Default preference for EBGP
Context	<b>configure service vprn string bgp default-preference ebgp number</b>

Tree	<a href="#">ebgp</a>
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

### **ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp default-preference ibgp number</a>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Default	0
Introduced	19.5.R1
Platforms	All

### **description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **domain-id string**

Synopsis	Domain ID of received BGP route before readvertisement
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp domain-id string</a>
Tree	<a href="#">domain-id</a>
Description	This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i> . Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example,

EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced	21.10.R1
Platforms	All

### **dynamic-neighbor-limit** *number*

Synopsis	Max dynamic BGP sessions to accept from remote peers
Context	<b>configure service vprn string bgp dynamic-neighbor-limit number</b>
Tree	<a href="#">dynamic-neighbor-limit</a>
Description	This command configures the maximum number of dynamic BGP sessions to accept from remote peers associated with the entire BGP instance. If accepting a new dynamic session causes the instance limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

### **ebgp-default-reject-policy**

Synopsis	Enter the <b>ebgp-default-reject-policy</b> context
Context	<b>configure service vprn string bgp ebgp-default-reject-policy</b>
Tree	<a href="#">ebgp-default-reject-policy</a>
Introduced	19.5.R1
Platforms	All

**export** *boolean*

Synopsis	Enable default reject export policy for external peers
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp ebgp-default-reject-policy</a> <a href="#">export</a> <i>boolean</i>
Tree	<a href="#">export</a>
Default	true
Introduced	19.5.R1
Platforms	All

**import** *boolean*

Synopsis	Enable default reject import policy for external peers
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp ebgp-default-reject-policy</a> <a href="#">import</a> <i>boolean</i>
Tree	<a href="#">import</a>
Default	true
Introduced	19.5.R1
Platforms	All

**eibgp-loadbalance** *boolean*

Synopsis	Use ECMP over BGP VPN and BGP routes
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp eibgp-loadbalance</a> <i>boolean</i>
Tree	<a href="#">eibgp-loadbalance</a>
Default	false
Introduced	16.0.R1
Platforms	All

**enforce-first-as** *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp enforce-first-as</a> <i>boolean</i>
Tree	<a href="#">enforce-first-as</a>
Description	When configured to <b>true</b> for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the <b>update-fault-tolerance</b> command in the <b>error-handling</b> context is set to <b>false</b> ) or the session is left up but the route is treated as withdrawn (if <b>update-fault-tolerance</b> is set to <b>true</b> ).

This command does not flap an established session because it applies only to routes received after the command is issued.

When configured to **false**, received routes are not checked for compliance with the rule.

Default	false
Introduced	16.0.R1
Platforms	All

## error-handling

Synopsis	Enter the <b>error-handling</b> context
Context	<b>configure service vprn string bgp error-handling</b>
Tree	<a href="#">error-handling</a>
Introduced	16.0.R1
Platforms	All

## update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	<b>configure service vprn string bgp error-handling update-fault-tolerance boolean</b>
Tree	<a href="#">update-fault-tolerance</a>
Description	When configured to <b>true</b> , non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.  When configured to <b>false</b> , most errors trigger a session reset.
Default	false
Introduced	16.0.R1
Platforms	All

## export

Synopsis	Enable the <b>export</b> context
Context	<b>configure service vprn string bgp export</b>
Tree	<a href="#">export</a>
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	Export policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp export policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**extended-nh-encoding**

Synopsis	Enter the <b>extended-nh-encoding</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp extended-nh-encoding</a>
Tree	<a href="#">extended-nh-encoding</a>
Introduced	19.5.R1
Platforms	All

**ipv4** *boolean*

Synopsis	Enable/disable family type ipv4.
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp extended-nh-encoding</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.5.R1
Platforms	All

**family**

Synopsis	Enter the <b>family</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp family</a>
Tree	<a href="#">family</a>



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Description	Commands in this context specify the BGP address families supported by the base router BGP sessions.
Introduced	16.0.R1
Platforms	All

### **flow-ipv4** *boolean*

Synopsis	Advertise support for the flowspec-IPv4 address family
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp family flow-ipv4</a> <i>boolean</i>
Tree	<a href="#">flow-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **flow-ipv6** *boolean*

Synopsis	Advertise support for the flowspec-IPv6 address family
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp family flow-ipv6</a> <i>boolean</i>
Tree	<a href="#">flow-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp family ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
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Context	<b>configure service vprn</b> <i>string</i> <b>bgp family ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Advertise support for the label-IPv4 address family
Context	<b>configure service vprn</b> <i>string</i> <b>bgp family label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv4** *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	<b>configure service vprn</b> <i>string</i> <b>bgp family mcast-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv6** *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	<b>configure service vprn</b> <i>string</i> <b>bgp family mcast-ipv6</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**fast-external-failover** *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp fast-external-failover</a> <i>boolean</i>
Tree	<a href="#">fast-external-failover</a>
Description	When configured to <b>true</b> , the router drops an external BGP session to a single-hop neighbor immediately when the local interface goes down. When configured to <b>false</b> , the BGP session remains up until the hold time expires.
Default	true
Introduced	16.0.R1
Platforms	All

**flowspec**

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp flowspec</a>
Tree	<a href="#">flowspec</a>
Introduced	16.0.R1
Platforms	All

**validate-dest-prefix** *boolean*

Synopsis	Validate destination prefix in FlowSpec-IPv4/IPv6 route
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp flowspec validate-dest-prefix</a> <i>boolean</i>
Tree	<a href="#">validate-dest-prefix</a>
Description	When configured to <b>true</b> , this command enables validation of received IPv4 and IPv6 FlowSpec routes that contain a destination-prefix subcomponent. A FlowSpec route with a destination-prefix subcomponent is considered invalid if both of the following are true: <ul style="list-style-type: none"> <li>• it was originated outside the local AS of the receiving BGP router</li> <li>• the neighbor AS of the FlowSpec route does not match the neighbor AS of the best match BGP (unicast) route for the destination prefix or the neighbor AS of any longer match BGP (unicast) route for the destination prefix</li> </ul> An invalid route is retained in the BGP but it is not used for filtering traffic or propagated to other BGP routers. When configured to <b>false</b> , destination-prefix validation is disabled.
Default	false
Introduced	16.0.R1

Platforms All

### **validate-redirect-ip** *boolean*

Synopsis Validate the redirect-to-IPv4 action in FlowSpec route

Context **configure** [service vprn](#) *string* [bgp flowspec](#) **validate-redirect-ip** *boolean*

Tree [validate-redirect-ip](#)

Description When configured to **true**, this command enables procedures to validate the redirect-to-IPv4 action attached to FlowSpec-IPv4 routes that are received by the BGP instance.

A FlowSpec-IPv4 route is considered invalid and is not installed as a filter rule if the FlowSpec-IPv4 route is deemed to have originated from a different AS than the IP route that resolves the redirection IPv4 address. The originating AS of a FlowSpec route is determined from its AS path.

When configured to **false**, the validation check is disabled.

Default false

Introduced 16.0.R1

Platforms All

### **graceful-restart**

Synopsis Enable the **graceful-restart** context

Context **configure** [service vprn](#) *string* [bgp](#) **graceful-restart**

Tree [graceful-restart](#)

Introduced 16.0.R1

Platforms All

### **gr-notification** *boolean*

Synopsis Perform Graceful Restart procedures

Context **configure** [service vprn](#) *string* [bgp graceful-restart](#) **gr-notification** *boolean*

Tree [gr-notification](#)

Description When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.

When configured to **false**, NOTIFICATION messages are not supported.

Default false

Introduced	16.0.R1
Platforms	All

## long-lived

Synopsis	Enable the <b>long-lived</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart long-lived</a>
Tree	<a href="#">long-lived</a>
Introduced	16.0.R1
Platforms	All

## advertise-stale-to-all-neighbors *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart long-lived advertise-stale-to-all-neighbors</a> <i>boolean</i>
Tree	<a href="#">advertise-stale-to-all-neighbors</a>
Default	false
Introduced	16.0.R1
Platforms	All

## advertised-stale-time *number*

Synopsis	LLGR stale routes time
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart long-lived advertised-stale-time</a> <i>number</i>
Tree	<a href="#">advertised-stale-time</a>
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

## family [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart long-lived family</a> <i>keyword</i>

Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

**[family-type]** *keyword*

Synopsis	Address family type for LLGR
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertised-stale-time** *number*

Synopsis	LLGR stale routes time for family override
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i> <a href="#">advertised-stale-time</a> <i>number</i>
Tree	<a href="#">advertised-stale-time</a>
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

**helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i> <a href="#">helper-override-stale-time</a> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

**forwarding-bits-set** *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <b>forwarding-bits-set</b> <i>keyword</i>
Tree	<a href="#">forwarding-bits-set</a>
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fw
Default	none
Introduced	16.0.R1
Platforms	All

**helper-override-restart-time** *number*

Synopsis	Locally-configured override for restart time
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <b>helper-override-restart-time</b> <i>number</i>
Tree	<a href="#">helper-override-restart-time</a>
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

**helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <b>helper-override-stale-time</b> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>

Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

### **without-no-export** *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart long-lived without-no-export</a> <i>boolean</i>
Tree	<a href="#">without-no-export</a>
Description	When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.  When configured to <b>false</b> , LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.
Default	false
Introduced	16.0.R1
Platforms	All

### **restart-time** *number*

Synopsis	Restart time advertised by GR capability
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart restart-time</a> <i>number</i>
Tree	<a href="#">restart-time</a>
Range	0 to 4095
Default	120
Introduced	16.0.R1
Platforms	All



**stale-routes-time** *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp graceful-restart</a> <b>stale-routes-time</b> <i>number</i>
Tree	<a href="#">stale-routes-time</a>
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

**group** [[group-name](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

**[group-name]** *string*

Synopsis	BGP peer group name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i>
Tree	<a href="#">group</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the BGP group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

### **advertise-inactive** *boolean*

Synopsis Advertise an inactive BGP route to peers

Context **configure** *service vprn string bgp group string advertise-inactive boolean*

Tree [advertise-inactive](#)

Description When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.

- If the active route for the IP prefix is a BGP route, that route is advertised.
- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 16.0.R1

Platforms All

### **advertise-ipv6-next-hops**

Synopsis Enable the **advertise-ipv6-next-hops** context

Context **configure** *service vprn string bgp group string advertise-ipv6-next-hops*

Tree [advertise-ipv6-next-hops](#)

Introduced 19.5.R1

Platforms All

### **ipv4** *boolean*

Synopsis Enable IPv4 routes to be advertised

Context **configure** *service vprn string bgp group string advertise-ipv6-next-hops ipv4 boolean*

Tree [ipv4](#)

Default false

Introduced	19.5.R1
Platforms	All

### **aggregator-id-zero** *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>aggregator-id-zero</b> <i>boolean</i>
Tree	<a href="#">aggregator-id-zero</a>
Introduced	16.0.R1
Platforms	All

### **as-override** *boolean*

Synopsis	Replace the peer's ASN with the local ASN in AS Path
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>as-override</b> <i>boolean</i>
Tree	<a href="#">as-override</a>
Description	<p>When configured to <b>true</b>, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p> <p>When configured to <b>false</b>, no AS override is performed.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **asn-4-byte** *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>asn-4-byte</b> <i>boolean</i>
Tree	<a href="#">asn-4-byte</a>
Description	<p>When this command inherits a value of <b>true</b>, the use of 4-byte ASNs is supported.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When configured to <b>false</b>, this command disables the use of 4-byte ASNs.</p>
Introduced	16.0.R1
Platforms	All

**authentication-key string**

Synopsis	BGP authentication key for peers in the group
Context	<b>configure service vpn string bgp group string authentication-key string</b>
Tree	<a href="#">authentication-key</a>
Description	This command configures the authentication key that must be configured on both peers. The stored format of the authentication key is based on the <b>configure system security hash-control management-interface md-cli hash-algorithm</b> setting.
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

**authentication-keychain reference**

Synopsis	TCP authentication keychain for the session
Context	<b>configure service vpn string bgp group string authentication-keychain reference</b>
Tree	<a href="#">authentication-keychain</a>
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	<b>configure system security keychains keychain string</b>
Introduced	16.0.R3
Platforms	All

**bfd-liveness boolean**

Synopsis	Enable BFD
Context	<b>configure service vpn string bgp group string bfd-liveness boolean</b>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BFD is removed from the associated protocol adjacency.</p>
Introduced	16.0.R1
Platforms	All

**bfd-strict-mode**

Synopsis	Enter the <b>bfd-strict-mode</b> context
Context	<b>configure service vprn string bgp group string bfd-strict-mode</b>
Tree	<a href="#">bfd-strict-mode</a>
Introduced	23.7.R1
Platforms	All

**advertise**

Synopsis	Enable the <b>advertise</b> context
Context	<b>configure service vprn string bgp group string bfd-strict-mode advertise</b>
Tree	<a href="#">advertise</a>
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none"> <li>• The inherited or configured value for the <b>bfd-liveness</b> command that applies to the peer is <b>true</b>.</li> <li>• The interface associated with the peer has a valid BFD configuration.</li> </ul> <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router transitions the session state to established after the BFD session with the peer enters the up state.</p> <p>When unconfigured, BGP does not advertise the Strict-BFD capability to peers.</p>
Introduced	23.7.R1
Platforms	All

**holdtime *number***

Synopsis	Maximum time BGP waits for the BFD session to come up
Context	<b>configure service vprn string bgp group string bfd-strict-mode advertise holdtime <i>number</i></b>
Tree	<a href="#">holdtime</a>
Description	This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.
Range	1 to 65535
Units	seconds

Default	30
Introduced	23.7.R1
Platforms	All

### **next-hop-reachability** *boolean*

Synopsis	Consider next hop unreachable if BFD session is down
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>group</b> <i>string</i> <b>bfd-strict-mode</b> <b>next-hop-reachability</b> <i>boolean</i>
Tree	<b>next-hop-reachability</b>
Description	<p>When configured to <b>true</b>, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:</p> <ul style="list-style-type: none"> <li>• The BFD session to the peer is in a down state.</li> <li>• There is a valid interface BFD configuration that applies to the peer.</li> <li>• There is a valid BFD liveness configuration that applies to the peer.</li> </ul> <p>The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.</p> <p>Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer.</p> <p>The behavior of the router when this command is <b>true</b> does not depend on whether Strict-BFD is used, as both features are independent.</p> <p>Configuring this command to <b>true</b> only affects routes belonging to the following address families:</p> <ul style="list-style-type: none"> <li>• IPv4</li> <li>• IPv6</li> <li>• IPv4 VPN</li> <li>• IPv6 VPN</li> <li>• labeled unicast IPv4</li> <li>• labeled unicast IPv6</li> <li>• EVPN</li> <li>• IPv4 multicast</li> <li>• IPv6 multicast</li> <li>• IPv4 VPN multicast</li> <li>• IPv6 VPN multicast</li> </ul> <p>When configured to <b>false</b>, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.</p>

Introduced 23.7.R1  
 Platforms All

### **capability-negotiation** *boolean*

Synopsis Enable capability negotiation  
 Context **configure** *service vprn string bgp group string capability-negotiation boolean*  
 Tree [capability-negotiation](#)  
 Description When configured to **true**, this command enables the exchange of capabilities.  
 When configured to **false** and the peering is flapped, new capabilities are not negotiated and strictly IPv4 exchanges are supported with the peer.  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **client-reflect** *boolean*

Synopsis Allow cluster RR to advertise routes to its clients  
 Context **configure** *service vprn string bgp group string client-reflect boolean*  
 Tree [client-reflect](#)  
 Description When unconfigured, this command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **true**.  
 When the command inherits a value of **true**, client reflection of routes is enabled.  
 When configured to **false**, this command disables client reflection of routes.  
 Introduced 16.0.R1  
 Platforms All

### **cluster**

Synopsis Enter the **cluster** context  
 Context **configure** *service vprn string bgp group string cluster*  
 Tree [cluster](#)  
 Introduced 16.0.R1  
 Platforms All

**cluster-id** *string*

Synopsis	Route reflector cluster ID
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">cluster cluster-id string</a>
Tree	<a href="#">cluster-id</a>
Introduced	16.0.R1
Platforms	All

**connect-retry** *number*

Synopsis	BGP connect retry timer value
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">connect-retry number</a>
Tree	<a href="#">connect-retry</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**damp-peer-oscillations**

Synopsis	Enable the <b>damp-peer-oscillations</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">damp-peer-oscillations</a>
Tree	<a href="#">damp-peer-oscillations</a>
Description	<p>Commands in this context specify how long a BGP peer session remains in the idle state after an error causes the session to reset. In the idle state, BGP does not initiate or respond to attempts to establish a new session. Repeated errors that occur a short time after each session reset cause longer and longer hold times in the idle state.</p> <p>When unconfigured, command settings are inherited from the global-level configuration.</p>
Introduced	16.0.R1
Platforms	All

**error-interval** *number*

Synopsis	Time after a reset that the session must be error-free
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">damp-peer-oscillations error-interval number</a>
Tree	<a href="#">error-interval</a>



Description	This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.
Range	0 to 2048
Default	30
Introduced	16.0.R1
Platforms	All

### **idle-hold-time**

Synopsis	Enter the <b>idle-hold-time</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">damp-peer-oscillations</a> <a href="#">idle-hold-time</a>
Tree	<a href="#">idle-hold-time</a>
Introduced	16.0.R1
Platforms	All

### **initial-wait number**

Synopsis	Time session remains in idle state after stabilization
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">damp-peer-oscillations</a> <a href="#">idle-hold-time</a> <a href="#">initial-wait number</a>
Tree	<a href="#">initial-wait</a>
Range	0 to 2048
Default	0
Introduced	16.0.R1
Platforms	All

### **max-wait number**

Synopsis	Maximum session idle time after repeated instability
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">damp-peer-oscillations</a> <a href="#">idle-hold-time</a> <a href="#">max-wait number</a>
Tree	<a href="#">max-wait</a>
Range	1 to 2048
Default	60
Introduced	16.0.R1

Platforms All

### **second-wait** *number*

Synopsis Time that doubles after each repeated session failure

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [damp-peer-oscillations](#) [idle-hold-time](#) [second-wait](#) *number*

Tree [second-wait](#)

Description This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.

Range 1 to 2048

Default 5

Introduced 16.0.R1

Platforms All

### **damping** *boolean*

Synopsis Use BGP route damping to reduce route flap

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [damping](#) *boolean*

Tree [damping](#)

Introduced 16.0.R1

Platforms All

### **default-label-preference**

Synopsis Enter the **default-label-preference** context

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [default-label-preference](#)

Tree [default-label-preference](#)

Introduced 19.5.R1

Platforms All

### **ebgp** *number*

Synopsis Default preference for EBGp

Context **configure** [service vprn](#) *string* [bgp group](#) *string* [default-label-preference](#) [ebgp](#) *number*

Tree [ebgp](#)

Range	0 to 255
Introduced	19.5.R1
Platforms	All

**ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">default-label-preference</a> <a href="#">ibgp number</a>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**default-preference**

Synopsis	Enter the <b>default-preference</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">default-preference</a>
Tree	<a href="#">default-preference</a>
Introduced	19.5.R1
Platforms	All

**ebgp number**

Synopsis	Default preference for EBGP
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">default-preference</a> <a href="#">ebgp number</a>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">default-preference</a> <a href="#">ibgp number</a>
Tree	<a href="#">ibgp</a>

Range	0 to 255
Introduced	19.5.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **dynamic-neighbor**

Synopsis	Enter the <b>dynamic-neighbor</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">dynamic-neighbor</a>
Tree	<a href="#">dynamic-neighbor</a>
Description	Commands in this context configure dynamic BGP sessions for a peer group.
Introduced	16.0.R1
Platforms	All

### **interface** [[interface-name](#)] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">dynamic-neighbor interface reference</a>
Tree	<a href="#">interface</a>
Description	Commands in this context configure an unnumbered VPRN access IP interface for dynamic neighbors.

If this interface connects to a network with other BGP routers, sessions with the other routers can be set up automatically without explicitly configuring them as BGP neighbors. The interface must be IPv6 enabled, but because the interface is considered unnumbered, it does not require an IPv4 address or a global-unicast IPv6 address. The sessions are set up using IPv6 link-local addresses.

The BGP unnumbered feature supports all address families that allow IPv6 link-local BGP next-hop addresses. This includes IPv4 with the use of RFC 8950 extensions.

When an interface is added to the list of dynamic-neighbor interfaces, an outgoing connection attempt is initiated toward any directly connected router on the interface that announces itself using an ICMPv6 router advertisement message. The session attempt is unsuccessful if the peer type is not EBGP, the reported AS number of the peer does not match one of the allowed values, or the maximum session limit of the interface would be exceeded.

Introduced 22.10.R1  
 Platforms All

### **[interface-name]** *reference*

Synopsis Name of the dynamic neighbor interface  
 Context **configure** [service vprn string](#) [bgp group string](#) [dynamic-neighbor interface reference](#)  
 Tree [interface](#)  
 Reference **configure** [service vprn string](#) [interface string](#)  
 Notes This element is part of a list key.  
 Introduced 22.10.R1  
 Platforms All

### **allowed-peer-as** *string*

Synopsis Allowed peer AS value or range of acceptable values  
 Context **configure** [service vprn string](#) [bgp group string](#) [dynamic-neighbor interface reference](#) [allowed-peer-as string](#)  
 Tree [allowed-peer-as](#)  
 Description This command specifies a singular allowed peer AS value or a range of acceptable values in the format *n1..n2*.  
 All values greater than or equal to *n1* and less than or equal to *n2* are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].  
 Max. Instances 32  
 Notes This element is ordered by the user.  
 Introduced 22.10.R1  
 Platforms All

**max-sessions** *number*

Synopsis	Maximum number of dynamic sessions allowed
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor interface</a> <i>reference</i> <a href="#">max-sessions</a> <i>number</i>
Tree	<a href="#">max-sessions</a>
Description	This command specifies the maximum number of dynamic sessions that are allowed to be set up on the interface as a result of accepting sessions from link-local addresses or initiating sessions by receiving IPv6 router advertisements.
Range	1 to 255
Default	1
Introduced	22.10.R1
Platforms	All

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">match</a>
Tree	<a href="#">match</a>
Introduced	19.5.R1
Platforms	All

**prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">match</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Introduced	19.5.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Dynamic peer prefix for the group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor</a> <a href="#">match</a> <a href="#">prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>

Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **allowed-peer-as** *string*

Synopsis	Allowed peer AS value or range of acceptable values
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">dynamic-neighbor match prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>allowed-peer-as</b> <i>string</i>
Tree	<a href="#">allowed-peer-as</a>
Description	This command specifies a singular allowed peer AS value or a range of acceptable values in the format <i>n1..n2</i> .  All values greater than or equal to <i>n1</i> and less than or equal to <i>n2</i> are acceptable. For example, if the acceptable peer AS numbers are 65001 to 65005 (range) and 62100 (singular value), configure this command to use a value of [65001..65005 62100].
Max. Instances	32
Notes	This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

### **dynamic-neighbor-limit** *number*

Synopsis	Maximum dynamic BGP sessions to accept from remote peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>dynamic-neighbor-limit</b> <i>number</i>
Tree	<a href="#">dynamic-neighbor-limit</a>
Description	This command configures the maximum number of dynamic BGP sessions that are accepted from remote peers associated with a specific peer group. If accepting a new dynamic session causes the group limit to be exceeded, the new session attempt is rejected and a Notification message is sent back to the remote peer.  When unconfigured, the setting is inherited from the BGP global-level configuration.
Range	1 to 8192
Introduced	16.0.R1
Platforms	All

## **ebgp-default-reject-policy**

Synopsis	Enable the <b>ebgp-default-reject-policy</b> context
Context	<b>configure</b> <a href="#">service vprn string bgp group string ebgp-default-reject-policy</a>
Tree	<a href="#">ebgp-default-reject-policy</a>
Introduced	19.5.R1
Platforms	All

## **export** *boolean*

Synopsis	Enable default reject export policy for external peers
Context	<b>configure</b> <a href="#">service vprn string bgp group string ebgp-default-reject-policy export boolean</a>
Tree	<a href="#">export</a>
Default	true
Introduced	19.5.R1
Platforms	All

## **import** *boolean*

Synopsis	Enable default reject import policy for external peers
Context	<b>configure</b> <a href="#">service vprn string bgp group string ebgp-default-reject-policy import boolean</a>
Tree	<a href="#">import</a>
Default	true
Introduced	19.5.R1
Platforms	All

## **enforce-first-as** *boolean*

Synopsis	Enforce the configured peer AS value in received routes
Context	<b>configure</b> <a href="#">service vprn string bgp group string enforce-first-as boolean</a>
Tree	<a href="#">enforce-first-as</a>
Introduced	16.0.R1
Platforms	All



## error-handling

Synopsis	Enter the <b>error-handling</b> context
Context	<b>configure service vprn string bgp group string error-handling</b>
Tree	<a href="#">error-handling</a>
Introduced	16.0.R1
Platforms	All

## update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	<b>configure service vprn string bgp group string error-handling update-fault-tolerance boolean</b>
Tree	<a href="#">update-fault-tolerance</a>
Description	<p>When configured to <b>true</b>, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, all errors trigger a session reset.</p>
Introduced	16.0.R1
Platforms	All

## evpn-link-bandwidth

Synopsis	Enter the <b>evpn-link-bandwidth</b> context
Context	<b>configure service vprn string bgp group string evpn-link-bandwidth</b>
Tree	<a href="#">evpn-link-bandwidth</a>
Introduced	22.7.R1
Platforms	All

## add-to-received-bgp *number*

Synopsis	Weight added to received PE-CE BGP routes
Context	<b>configure service vprn string bgp group string evpn-link-bandwidth add-to-received-bgp number</b>
Tree	<a href="#">add-to-received-bgp</a>

Description	This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.  For the load-balancing between EVPN-IFL and BGP PE-CE routes the <b>configure service vprn bgp eibgp-loadbalance</b> command must already be configured in the system.
Range	1 to 128
Introduced	22.7.R1
Platforms	All

## export

Synopsis	Enable the <b>export</b> context
Context	<b>configure service vprn string bgp group string export</b>
Tree	<a href="#">export</a>
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Export policy name
Context	<b>configure service vprn string bgp group string export policy (<i>policy-expr-string</i>   <i>string</i>)</b>
Tree	<a href="#">policy</a>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## extended-nh-encoding

Synopsis	Enable the <b>extended-nh-encoding</b> context
Context	<b>configure service vprn string bgp group string extended-nh-encoding</b>
Tree	<a href="#">extended-nh-encoding</a>

Introduced 19.5.R1  
Platforms All

### **ipv4** *boolean*

Synopsis Enable/disable family type ipv4.  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [extended-nh-encoding](#) [ipv4](#) *boolean*  
Tree [ipv4](#)  
Default false  
Introduced 19.5.R1  
Platforms All

### **family**

Synopsis Enable the **family** context  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family](#)  
Tree [family](#)  
Introduced 16.0.R1  
Platforms All

### **flow-ipv4** *boolean*

Synopsis Advertise support for the flowspec-IPv4 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family](#) [flow-ipv4](#) *boolean*  
Tree [flow-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **flow-ipv6** *boolean*

Synopsis Advertise support for the flowspec-IPv6 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family](#) [flow-ipv6](#) *boolean*  
Tree [flow-ipv6](#)  
Default false

Introduced 16.0.R1  
Platforms All

### **ipv4** *boolean*

Synopsis Add support for the IPv4 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family ipv4](#) *boolean*  
Tree [ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ipv6** *boolean*

Synopsis Advertise MP-BGP support for the IPv6 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family ipv6](#) *boolean*  
Tree [ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **label-ipv4** *boolean*

Synopsis Advertise support for the label-IPv4 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family label-ipv4](#) *boolean*  
Tree [label-ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **mcast-ipv4** *boolean*

Synopsis Advertise support for the MCAST-IPv4 address family  
Context **configure** [service vprn](#) *string* [bgp group](#) *string* [family mcast-ipv4](#) *boolean*  
Tree [mcast-ipv4](#)

Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv6** *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">family mcast-ipv6</a> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **fast-external-failover** *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">fast-external-failover</a> <i>boolean</i>
Tree	<a href="#">fast-external-failover</a>
Description	<p>When this command inherits a value of <b>true</b>, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When configured to <b>false</b>, the BGP session remains up until the hold time expires.</p>
Introduced	16.0.R1
Platforms	All

### **graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

**gr-notification** *boolean*

Synopsis	Perform graceful restart procedures after NOTIFICATION
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">gr-notification</a> <i>boolean</i>
Tree	<a href="#">gr-notification</a>
Description	When configured to <b>true</b> , the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.  When configured to <b>false</b> , NOTIFICATION messages are not supported.
Default	false
Introduced	16.0.R1
Platforms	All

**long-lived**

Synopsis	Enable the <b>long-lived</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a>
Tree	<a href="#">long-lived</a>
Introduced	16.0.R1
Platforms	All

**advertise-stale-to-all-neighbors** *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">advertise-stale-to-all-neighbors</a> <i>boolean</i>
Tree	<a href="#">advertise-stale-to-all-neighbors</a>
Default	false
Introduced	16.0.R1
Platforms	All

**advertised-stale-time** *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">advertised-stale-time</a> <i>number</i>

Tree	<a href="#">advertised-stale-time</a>
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

### **family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Address family type for LLGR
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertised-stale-time** *number*

Synopsis	LLGR stale routes time for family override
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i> <a href="#">advertised-stale-time</a> <i>number</i>
Tree	<a href="#">advertised-stale-time</a>
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400

Introduced	16.0.R1
Platforms	All

### **helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i> <a href="#">helper-override-stale-time</a> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

### **forwarding-bits-set** *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">forwarding-bits-set</a> <i>keyword</i>
Tree	<a href="#">forwarding-bits-set</a>
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fw
Default	none
Introduced	16.0.R1
Platforms	All



**helper-override-restart-time** *number*

Synopsis	Locally-configured override for restart time
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart long-lived</a> <a href="#">helper-override-restart-time number</a>
Tree	<a href="#">helper-override-restart-time</a>
Description	This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

**helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart long-lived</a> <a href="#">helper-override-stale-time number</a>
Tree	<a href="#">helper-override-stale-time</a>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.
Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

**without-no-export** *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart long-lived</a> <a href="#">without-no-export boolean</a>
Tree	<a href="#">without-no-export</a>
Description	When configured to <b>true</b> , LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.

When configured to **false**, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO\_EXPORT standard community is automatically added to the routes.

Default	false
Introduced	16.0.R1
Platforms	All

### **restart-time** *number*

Synopsis	Restart time advertised by GR capability
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart restart-time number</a>
Tree	<a href="#">restart-time</a>
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

### **stale-routes-time** *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">graceful-restart stale-routes-time number</a>
Tree	<a href="#">stale-routes-time</a>
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">hold-time</a>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	All

**minimum-hold-time** *number*

Synopsis	Minimum hold time between successive messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>hold-time</b> <b>minimum-hold-time</b> <i>number</i>
Tree	<b>minimum-hold-time</b>
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected. When unconfigured, the command value is inherited from the BGP global-level setting.
Range	0   3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Maximum time BGP waits between successive messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>hold-time</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Description	This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection. Although the implementation allows setting the keepalive timer at the BGP group level times separately, the configured keepalive timer is overridden by this value under the following circumstances. <ul style="list-style-type: none"> <li>• If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li> <li>• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> When unconfigured, the command setting is inherited from the BGP global-level configuration.
Range	0   3 to 65535
Introduced	16.0.R1
Platforms	All

**import**

Synopsis	Enable the <b>import</b> context
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Context	<b>configure service vprn string bgp group string import</b>
Tree	<b>import</b>
Introduced	16.0.R1
Platforms	All

### **policy** (*policy-expr-string | string*)

Synopsis	Route policy name
Context	<b>configure service vprn string bgp group string import policy</b> ( <i>policy-expr-string   string</i> )
Tree	<b>policy</b>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **initial-send-delay-zero** *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	<b>configure service vprn string bgp group string initial-send-delay-zero</b> <i>boolean</i>
Tree	<b>initial-send-delay-zero</b>
Description	<p>When configured to <b>true</b>, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	16.0.R1
Platforms	All

### **keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	<b>configure service vprn string bgp group string keepalive</b> <i>number</i>

Tree	<a href="#">keepalive</a>
Description	<p>This command configures the BGP keepalive timer value. A keepalive message is sent every time this timer expires.</p> <p>This value is generally one-third of the hold time interval configured in the <b>hold-time seconds</b> context. Although the implementation allows this keepalive value and the hold time interval to be independently set, under the following circumstances, the configured keepalive value is overridden by the hold time interval value:</p> <ul style="list-style-type: none"> <li>• If the specified keepalive value is greater than the configured hold time, the specified keepalive value is ignored and the timer value is set to one third of the current hold time value.</li> <li>• If the specified hold time interval is less than the configured keepalive value, the keepalive value is reset to one third of the specified hold time interval.</li> <li>• If the hold time interval is set to zero, the configured keepalive value is ignored. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> <p>When unconfigured, the command inherits the BGP global-level setting.</p>
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

### label-preference *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">label-preference</a> <i>number</i>
Tree	<a href="#">label-preference</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### link-bandwidth

Synopsis	Enter the <b>link-bandwidth</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a>
Tree	<a href="#">link-bandwidth</a>
Description	<p>Commands in this context specify the handling of the Link Bandwidth Extended Community attached to specific BGP routes.</p> <p>When all used multipaths of an IP prefix correspond to BGP routes with a Link Bandwidth EC, the datapath is programmed to use weighted ECMP across the BGP next hops in proportion to the bandwidth values.</p>

Introduced	16.0.R3
Platforms	All

### **accept-from-ebgp**

Synopsis	Enter the <b>accept-from-ebgp</b> context
Context	<b>configure service vprn string bgp group string link-bandwidth accept-from-ebgp</b>
Tree	<a href="#">accept-from-ebgp</a>
Introduced	16.0.R4
Platforms	All

### **ipv4 boolean**

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure service vprn string bgp group string link-bandwidth accept-from-ebgp ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **ipv6 boolean**

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure service vprn string bgp group string link-bandwidth accept-from-ebgp ipv6 boolean</b>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv4 boolean**

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure service vprn string bgp group string link-bandwidth accept-from-ebgp label-ipv4 boolean</b>

Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **add-to-received-ebgp**

Synopsis	Enter the <b>add-to-received-ebgp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a>
Tree	<a href="#">add-to-received-ebgp</a>
Introduced	16.0.R3
Platforms	All

### **ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">add-to-received-ebgp</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R3
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
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Context	<b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>link-bandwidth add-to-received-ebgp label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R3
Platforms	All

### aggregate-used-paths

Synopsis	Enter the <b>aggregate-used-paths</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>link-bandwidth aggregate-used-paths</b>
Tree	<a href="#">aggregate-used-paths</a>
Introduced	16.0.R4
Platforms	All

### ipv4 *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>link-bandwidth aggregate-used-paths ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### ipv6 *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>link-bandwidth aggregate-used-paths ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All



**label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth aggregate-used-paths</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**send-to-ebgp**

Synopsis	Enter the <b>send-to-ebgp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a>
Tree	<a href="#">send-to-ebgp</a>
Introduced	16.0.R4
Platforms	All

**ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">link-bandwidth</a> <a href="#">send-to-ebgp</a> <a href="#">label-ipv4</a> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**local-address** (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

Synopsis	Local IP address used when communicating with BGP peers
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">local-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   interface-name</i> )
Tree	<a href="#">local-address</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**local-as**

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">local-as</a>
Tree	<a href="#">local-as</a>
Introduced	16.0.R1
Platforms	All

**as-number** *number*

Synopsis	Local (or virtual) BGP AS number
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">local-as</a> <a href="#">as-number</a> <i>number</i>
Tree	<a href="#">as-number</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**prepend-global-as** *boolean*

Synopsis	Prepend global ASN when advertising routes to BGP peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">local-as</a> <a href="#">prepend-global-as</a> <i>boolean</i>
Tree	<a href="#">prepend-global-as</a>
Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to <b>false</b> , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

**private** *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">local-as</a> <a href="#">private</a> <i>boolean</i>
Tree	<a href="#">private</a>
Description	When configured to <b>true</b> , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

**local-preference** *number*

Synopsis	Default local preference if not in incoming routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">local-preference</a> <i>number</i>
Tree	<a href="#">local-preference</a>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

**loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">loop-detect</a> <i>keyword</i>
Tree	<a href="#">loop-detect</a>
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

**loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">loop-detect-threshold</a> <i>number</i>
Tree	<a href="#">loop-detect-threshold</a>
Range	0 to 15
Introduced	16.0.R6
Platforms	All

**med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">med-out</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">med-out</a>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

**min-route-advertisement** *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">min-route-advertisement</a> <i>number</i>
Tree	<a href="#">min-route-advertisement</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

## monitor

Synopsis	Enable the <b>monitor</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <b>monitor</b>
Tree	<a href="#">monitor</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <b>monitor</b> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <b>monitor</b> <a href="#">all-stations</a> <i>boolean</i>
Tree	<a href="#">all-stations</a>
Description	<p>When configured to <b>true</b>, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to <b>false</b>, the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## route-monitoring

Synopsis	Enter the <b>route-monitoring</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <b>monitor</b> <a href="#">route-monitoring</a>

Tree	<a href="#">route-monitoring</a>
Introduced	16.0.R1
Platforms	All

### **post-policy** *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">monitor</a> <a href="#">route-monitoring</a> <a href="#">post-policy</a> <i>boolean</i>
Tree	<a href="#">post-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **pre-policy** *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">monitor</a> <a href="#">route-monitoring</a> <a href="#">pre-policy</a> <i>boolean</i>
Tree	<a href="#">pre-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **station** [[station-name](#)] *reference*

Synopsis	Add a list entry for <b>station</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">group</a> <i>string</i> <a href="#">monitor</a> <a href="#">station</a> <i>reference</i>
Tree	<a href="#">station</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[station-name] reference**

Synopsis	BMP monitoring station
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Reference	<b>configure</b> <a href="#">bmp station</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**multihop number**

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">multihop</a> <i>number</i>
Tree	<a href="#">multihop</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**multipath-eligible boolean**

Synopsis	Allow routes from group peers in multipath eligibility
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">multipath-eligible</a> <i>boolean</i>
Tree	<a href="#">multipath-eligible</a>
Default	false
Introduced	19.5.R1
Platforms	All

**next-hop-self boolean**

Synopsis	Advertise routes with local address as next-hop address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">next-hop-self</a> <i>boolean</i>
Tree	<a href="#">next-hop-self</a>
Default	false
Introduced	16.0.R1

Platforms All

## origin-validation

Synopsis Enter the **origin-validation** context

Context **configure service vprn string bgp group string origin-validation**

Tree [origin-validation](#)

Introduced 19.7.R1

Platforms All

## ipv4 boolean

Synopsis Enable support for unlabeled unicast IPv4 routes

Context **configure service vprn string bgp group string origin-validation ipv4 boolean**

Tree [ipv4](#)

Default false

Introduced 19.7.R1

Platforms All

## ipv6 boolean

Synopsis Enable support for unlabeled unicast IPv6 routes

Context **configure service vprn string bgp group string origin-validation ipv6 boolean**

Tree [ipv6](#)

Default false

Introduced 19.7.R1

Platforms All

## label-ipv4 boolean

Synopsis Enable support for labeled-unicast IPv4 routes

Context **configure service vprn string bgp group string origin-validation label-ipv4 boolean**

Tree [label-ipv4](#)

Default false

Introduced 19.7.R1



Platforms All

### **passive** *boolean*

Synopsis Enable passive mode for BGP communication

Context **configure** *service vprn string bgp group string passive boolean*

Tree [passive](#)

Default false

Introduced 16.0.R1

Platforms All

### **path-mtu-discovery** *boolean*

Synopsis Enable Path MTU Discovery

Context **configure** *service vprn string bgp group string path-mtu-discovery boolean*

Tree [path-mtu-discovery](#)

Description When configured to **true**, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.

When set to **true**, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.

When configured to **false** and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced 16.0.R1

Platforms All

### **peer-as** *number*

Synopsis Peer AS number

Context **configure** *service vprn string bgp group string peer-as number*

Tree [peer-as](#)

Range 1 to 4294967295

Introduced	16.0.R1
Platforms	All

### **peer-ip-tracking** *boolean*

Synopsis	Enable BGP peer tracking
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>peer-ip-tracking</b> <i>boolean</i>
Tree	<a href="#">peer-ip-tracking</a>
Description	<p>When configured to <b>true</b>, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Route preference for routes learned from all peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>preference</b> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **prefix-limit** [[family](#)] *keyword*

Synopsis	Enter the <b>prefix-limit</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>prefix-limit</b> <i>keyword</i>
Tree	<a href="#">prefix-limit</a>
Description	Commands in this context limit the number of BGP routes per address family received from a BGP peer and define the actions when crossing the configured maximum.
Introduced	16.0.R1

Platforms All

### **[family]** *keyword*

Synopsis Address family to which the limit applies

Context **configure** *service vprn string bgp group string prefix-limit keyword*

Tree [prefix-limit](#)

Options ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **hold-excess** *number*

Synopsis Percentage of maximum routes to install in route table

Context **configure** *service vprn string bgp group string prefix-limit keyword hold-excess number*

Tree [hold-excess](#)

Description This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the **post-import** command is configured to **true**, only routes not rejected by import policies count toward the limit.

A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.

This command is mutually exclusive with the **idle-timeout** and **log-only** commands.

Range 1 to 100

Introduced 23.7.R1

Platforms All

### **idle-timeout** *number*

Synopsis Time BGP peering remains idle before reconnecting

Context **configure** *service vprn string bgp group string prefix-limit keyword idle-timeout number*

Tree [idle-timeout](#)

Description This command configures the time in minutes before a BGP peer is automatically re-established after reaching the prefix limit.

When unconfigured, the BGP peer stays down until the operator performs a reset. This command and **log-only** cannot be configured simultaneously.

Range	1 to 1024
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">prefix-limit</a> <i>keyword</i> <a href="#">log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Description	<p>When configured to <b>true</b>, the router disables the BGP session from being taken down upon reaching the prefix limit. Instead, only a warning message is sent when the limit is reached. A warning message is also sent when the configured threshold percentage of the limit is reached.</p> <p>This command and <b>idle-timeout</b> cannot be configured simultaneously.</p> <p>When configured to <b>false</b>, the router generates a log event and takes the BGP session down upon reaching the prefix limit.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **maximum** *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">prefix-limit</a> <i>keyword</i> <a href="#">maximum</a> <i>number</i>
Tree	<a href="#">maximum</a>
Description	<p>This command configures the maximum number of BGP routes of the specified address family that can be received from a peer before administrative action is taken.</p> <p>When <b>log-only</b> is unconfigured, the BGP session is taken down whenever the limit of any family is exceeded even if the limits of the other family has not been exceeded.</p>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

**post-import** *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">prefix-limit</a> <i>keyword</i> <a href="#">post-import</a> <i>boolean</i>
Tree	<a href="#">post-import</a>
Description	When configured to <b>true</b> , the system limits the number of routes that are accepted by import policies. Routes rejected by import policies are not counted against the configured limit.  When configured to <b>false</b> , the system limits the number of routes to all routes received from the peer.
Default	false
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Percentage threshold that triggers a warning message
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">prefix-limit</a> <i>keyword</i> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

**remove-private**

Synopsis	Enable the <b>remove-private</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">remove-private</a>
Tree	<a href="#">remove-private</a>
Introduced	16.0.R1
Platforms	All

**limited** *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">remove-private</a> <a href="#">limited</a> <i>boolean</i>
Tree	<a href="#">limited</a>

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Default	false
Introduced	16.0.R1
Platforms	All

### **replace** *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">remove-private</a> <b>replace</b> <i>boolean</i>
Tree	<a href="#">replace</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **skip-peer-as** *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">remove-private</a> <b>skip-peer-as</b> <i>boolean</i>
Tree	<a href="#">skip-peer-as</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **send-communities**

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>send-communities</b>
Tree	<a href="#">send-communities</a>
Introduced	16.0.R1
Platforms	All

### **extended** *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-communities</a> <b>extended</b> <i>boolean</i>
Tree	<a href="#">extended</a>

Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to <b>false</b>, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

### **large** *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-communities large</a> <i>boolean</i>
Tree	<a href="#">large</a>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to <b>false</b>, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

### **standard** *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-communities standard</a> <i>boolean</i>
Tree	<a href="#">standard</a>
Description	<p>When unconfigured, this command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to <b>false</b>, all standard communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

## send-default

Synopsis	Enable the <b>send-default</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-default</a>
Tree	<a href="#">send-default</a>
Introduced	19.7.R1
Platforms	All

## export-policy *reference*

Synopsis	Export policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-default</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	19.7.R1
Platforms	All

## ipv4 *boolean*

Synopsis	Generate and advertise an IPv4 default route (0/0)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-default</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.7.R1
Platforms	All

## ipv6 *boolean*

Synopsis	Generate and advertise an IPv6 default route (::/0)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <a href="#">send-default</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.7.R1
Platforms	All



**split-horizon** *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>split-horizon</b> <i>boolean</i>
Tree	<b>split-horizon</b>
Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

**static-group** *boolean*

Synopsis	Use group for static peers
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>static-group</b> <i>boolean</i>
Tree	<b>static-group</b>
Default	true
Introduced	16.0.R1
Platforms	All

**tcp-mss** (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i> <b>tcp-mss</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>tcp-mss</b>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p>

TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.

Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

### **third-party-nexthop** *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>third-party-nexthop</b> <i>boolean</i>
Tree	<a href="#">third-party-nexthop</a>
Description	<p>When configured to <b>true</b>, this command enables the router to send third-party next hop to EBGP peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGP peer and advertised to another EBGP peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When unconfigured, the command inherits the value of the global-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Introduced	16.0.R1
Platforms	All

### **ttl-security** *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp group</a> <i>string</i> <b>ttl-security</b> <i>number</i>
Tree	<a href="#">ttl-security</a>
Description	This command configures the minimum TTL value that BGP accepts from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	BGP peer type
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp group string</a> <a href="#">type keyword</a>
Tree	<a href="#">type</a>
Options	no-type, internal, external
Default	no-type
Introduced	16.0.R1
Platforms	All

**hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp hold-time</a>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	All

**minimum-hold-time** *number*

Synopsis	Minimum hold time between successive messages
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp hold-time minimum-hold-time number</a>
Tree	<a href="#">minimum-hold-time</a>
Description	This command specifies the minimum hold time that is accepted for the session. If a peer proposes a hold time lower than this value, the session attempt is rejected.
Range	0   3 to 65535
Default	0
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Maximum time BGP waits between successive messages
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp hold-time seconds number</a>
Tree	<a href="#">seconds</a>

Description	<p>This command configures the maximum time BGP waits between successive messages (either keepalive or update) from its peer before closing the connection.</p> <p>Although the implementation allows setting the keepalive timer at the BGP global level times separately, the configured keepalive timer is overridden by this value under the following circumstances.</p> <ul style="list-style-type: none"> <li>• If the specified hold time is less than the configured keepalive time, the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li> <li>• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. The connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul>
Range	0   3 to 65535
Default	90
Introduced	16.0.R1
Platforms	All

### **ibgp-multipath** *boolean*

Synopsis	Enable IBGP multipath load balancing
Context	<b>configure</b> <a href="#">service vprn string bgp ibgp-multipath boolean</a>
Tree	<a href="#">ibgp-multipath</a>
Description	<p>When configured to <b>true</b>, this command enables IBGP multipath load balancing when adding BGP routes to the route table if the route resolving the BGP next hop offers multiple next hops.</p> <p>When configured to <b>false</b>, this command disables IBGP multipath load balancing.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **import**

Synopsis	Enable the <b>import</b> context
Context	<b>configure</b> <a href="#">service vprn string bgp import</a>
Tree	<a href="#">import</a>
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	Import policy name
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>import</b> <b>policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**initial-send-delay-zero** *boolean*

Synopsis	Send BGP updates as soon as session comes up
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>initial-send-delay-zero</b> <i>boolean</i>
Tree	<b>initial-send-delay-zero</b>
Default	false
Introduced	16.0.R1
Platforms	All

**keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>keepalive</b> <i>number</i>
Tree	<b>keepalive</b>
Range	0 to 21845
Default	30
Introduced	16.0.R1
Platforms	All

**label-preference** *number*

Synopsis	Route preference for routes from labeled-unicast peers
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Context	<b>configure service vprn string bgp label-preference number</b>
Tree	<a href="#">label-preference</a>
Range	1 to 255
Default	170
Introduced	16.0.R1
Platforms	All

## local-as

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure service vprn string bgp local-as</b>
Tree	<a href="#">local-as</a>
Introduced	16.0.R1
Platforms	All

## as-number *number*

Synopsis	Local (or virtual) BGP AS number
Context	<b>configure service vprn string bgp local-as as-number number</b>
Tree	<a href="#">as-number</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

## prepend-global-as *boolean*

Synopsis	Prepend global AS when advertising routes to BGP peer
Context	<b>configure service vprn string bgp local-as prepend-global-as boolean</b>
Tree	<a href="#">prepend-global-as</a>
Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to <b>false</b> , the global ASN is hidden in paths announced to the EBGp peer.
Default	true
Introduced	16.0.R1

Platforms All

### **private** *boolean*

Synopsis Hide the local ASN in sent paths learned from peering

Context **configure service vprn** *string* **bgp local-as private** *boolean*

Tree [private](#)

Description When configured to **true**, the local ASN is hidden in paths learned from the peering.  
When configured to **false**, the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.

Default false

Introduced 16.0.R1

Platforms All

### **local-preference** *number*

Synopsis Default local preference if not in incoming routes

Context **configure service vprn** *string* **bgp local-preference** *number*

Tree [local-preference](#)

Max. Range 0 to 4294967295

Default 100

Introduced 16.0.R1

Platforms All

### **loop-detect** *keyword*

Synopsis Strategy for loop detection in the AS path

Context **configure service vprn** *string* **bgp loop-detect** *keyword*

Tree [loop-detect](#)

Options drop-peer, ignore-loop, off, discard-route

Default ignore-loop

Introduced 16.0.R1

Platforms All

### **loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	<b>configure service vprn string bgp loop-detect-threshold number</b>
Tree	<a href="#">loop-detect-threshold</a>
Range	0 to 15
Default	0
Introduced	16.0.R6
Platforms	All

### **med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure service vprn string bgp med-out (number   keyword)</b>
Tree	<a href="#">med-out</a>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

### **min-route-advertisement** *number*

Synopsis	Minimum time before a prefix can be advertised to peer
Context	<b>configure service vprn string bgp min-route-advertisement number</b>
Tree	<a href="#">min-route-advertisement</a>
Range	1 to 255
Default	30
Introduced	16.0.R1
Platforms	All

### **monitor**

Synopsis	Enable the <b>monitor</b> context
Context	<b>configure service vprn string bgp monitor</b>
Tree	<a href="#">monitor</a>
Introduced	16.0.R1



Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of BMP monitoring

Context **configure service vprn string bgp monitor admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms All

### **all-stations** *boolean*

Synopsis Send BMP messages to all configured stations

Context **configure service vprn string bgp monitor all-stations boolean**

Tree [all-stations](#)

Description When configured to **true**, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.

When configured to **false**, the command is not used to indicate the stations which can receive BMP messages. The **station** command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.

Default false

Introduced 16.0.R1

Platforms All

### **route-monitoring**

Synopsis Enter the **route-monitoring** context

Context **configure service vprn string bgp monitor route-monitoring**

Tree [route-monitoring](#)

Introduced 16.0.R1

Platforms All

**post-policy *boolean***

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor route-monitoring post-policy</a> <i>boolean</i>
Tree	<a href="#">post-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

**pre-policy *boolean***

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor route-monitoring pre-policy</a> <i>boolean</i>
Tree	<a href="#">pre-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

**station [[station-name](#)] *reference***

Synopsis	Add a list entry for <b>station</b>
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[[station-name](#)] *reference***

Synopsis	BMP monitoring station
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp monitor station</a> <i>reference</i>
Tree	<a href="#">station</a>
Reference	<b>configure</b> <a href="#">bmp station</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **multihop** *number*

Synopsis TTL in IP packet headers for EBGP peers multi-hops away

Context **configure service vprn string bgp multihop number**

Tree [multihop](#)

Description This command configures the Time to Live (TTL) value entered in the IP header of packets sent to an EBGP peer multiple hops away. This command applies only to EBGP.

Range 1 to 255

Introduced 16.0.R1

Platforms All

### **multipath**

Synopsis Enter the **multipath** context

Context **configure service vprn string bgp multipath**

Tree [multipath](#)

Introduced 16.0.R1

Platforms All

### **ebgp** *number*

Synopsis Maximum multipaths per prefix for EBGP learned routes

Context **configure service vprn string bgp multipath ebgp number**

Tree [ebgp](#)

Range 1 to 64

Introduced 16.0.R1

Platforms All

### **family** [*family-type*] *keyword*

Synopsis Enter the **family** list instance

Context **configure service vprn string bgp multipath family keyword**

Tree [family](#)

Description	<p>Commands in this context set ECMP multipath parameters that apply only to the specified label unicast address family.</p> <p>When multipath is enabled, traffic to the destination is load-shared across a set of paths (BGP routes) that the BGP decision process considers equal to the best path. The distribution of traffic over the multiple paths may or may not be equal. The distribution is based on weights derived from the Link Bandwidth Extended Community.</p> <p>For more information about the criteria a non-best route must meet to qualify as a multipath, see “BGP route installation in the route table” in the <i>7450 ESS 7750 SR 7950 XRS VSR Unicast Routing Protocols User Guide</i>.</p>
Introduced	19.5.R1
Platforms	All

### **[family-type]** *keyword*

Synopsis	Address family type for the multipath selection
Context	<b>configure</b> <i>service vprn string bgp multipath family keyword</i>
Tree	<i>family</i>
Options	ipv4, ipv6, label-ipv4, label-ipv6
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **ebgp** *number*

Synopsis	Maximum multipaths when best path is EBGp learned route
Context	<b>configure</b> <i>service vprn string bgp multipath family keyword ebgp number</i>
Tree	<i>ebgp</i>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an EBGp learned route. The limit configured using this command overrides the limit configured in the <b>max-paths</b> command. If the best path is an EBGp learned route, and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

### **ibgp** *number*

Synopsis	Maximum multipaths when best path is IBGP learned route
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Context	<b>configure service vprn string bgp multipath family keyword ibgp number</b>
Tree	<a href="#">ibgp</a>
Description	This command configures the maximum number of multipaths per prefix or NLRI when the best path is an IBGP learned route. The limit configured using this command overrides the limit configured in the <b>max-paths</b> command. If the best path is an IBGP learned route and this command is set to 1, multipaths are disabled.
Range	1 to 64
Introduced	19.5.R1
Platforms	All

### **max-paths number**

Synopsis	Maximum number of multipaths per prefix or NLRI
Context	<b>configure service vprn string bgp multipath family keyword max-paths number</b>
Tree	<a href="#">max-paths</a>
Description	This command configures the maximum number of multipaths per prefix or NLRI for the IP family option specified using the <b>family</b> command. Consider the following when configuring this command: <ul style="list-style-type: none"> <li>• If the best path is an EBGP-learned route and the <b>ebgp</b> command is configured, the limit configured in the <b>ebgp</b> command overrides the limit configured in this command.</li> <li>• If the best path is an IBGP-learned route and the <b>ibgp</b> command is configured, the limit configured in the <b>ibgp</b> command overrides the limit configured in this command.</li> <li>• If the best path is an EBGP-learned route and the <b>ebgp</b> command is not configured, and this command is configured to 1, multipaths are disabled.</li> <li>• If the best path is an IBGP-learned route and the <b>ibgp</b> command is not configured, and this command is configured to 1, multipaths are disabled.</li> </ul>
Range	1 to 64
Introduced	19.5.R1
Platforms	All

### **restrict keyword**

Synopsis	AS path restriction for the non-best path
Context	<b>configure service vprn string bgp multipath family keyword restrict keyword</b>
Tree	<a href="#">restrict</a>
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length

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Introduced	19.5.R1
Platforms	All

### **unequal-cost** *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multipath family</a> <i>keyword</i> <b>unequal-cost</b> <i>boolean</i>
Tree	<a href="#">unequal-cost</a>
Description	When configured to <b>true</b> , BGP ignores differences in the next-hop cost when determining eligible multipaths.
Default	false
Introduced	19.5.R1
Platforms	All

### **ibgp** *number*

Synopsis	Maximum multipaths per prefix for IBGP learned routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multipath</a> <b>ibgp</b> <i>number</i>
Tree	<a href="#">ibgp</a>
Range	1 to 64
Introduced	16.0.R1
Platforms	All

### **max-paths** *number*

Synopsis	Maximum multipaths per prefix
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multipath</a> <b>max-paths</b> <i>number</i>
Tree	<a href="#">max-paths</a>
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

**restrict** *keyword*

Synopsis	AS path restriction for the non-best path
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multipath restrict</a> <i>keyword</i>
Tree	<a href="#">restrict</a>
Options	same-as-path-length, same-neighbor-as, exact-as-path
Default	same-as-path-length
Introduced	16.0.R1
Platforms	All

**unequal-cost** *boolean*

Synopsis	Ignore differences in the next-hop cost for multipath
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp multipath unequal-cost</a> <i>boolean</i>
Tree	<a href="#">unequal-cost</a>
Default	false
Introduced	19.5.R1
Platforms	All

**neighbor** [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	IP address of the BGP peer router
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the BGP neighbor

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **advertise-inactive** *boolean*

Synopsis Advertise an inactive BGP route to peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **advertise-inactive** *boolean*

Tree [advertise-inactive](#)

Description When configured to **true**, this command allows an inactive BGP route to be advertised, even though it is not the most preferred route. The effect of the command on advertised unlabeled, labeled, and multicast IPv4 and IPv6 routes depends on several factors.

- If the active route for the IP prefix is a BGP route, that route is advertised.
- If the active route is a non-BGP route and there are valid inactive BGP routes to the same destination, the best valid inactive route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.
- If the active route is a non-BGP route and there are no valid BGP routes to the same destination, no route is advertised unless the active non-BGP route is matched and accepted by an export policy applied to the session.

When unconfigured, the command inherits the value of the global-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, the advertisement of inactive BGP routes to other BGP peers is disabled.

Introduced 16.0.R1

Platforms All



## advertise-ipv6-next-hops

Synopsis	Enable the <b>advertise-ipv6-next-hops</b> context
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops</b>
Tree	<a href="#">advertise-ipv6-next-hops</a>
Introduced	19.5.R1
Platforms	All

## ipv4 *boolean*

Synopsis	Enable IPv4 routes to be advertised
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>advertise-ipv6-next-hops ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.5.R1
Platforms	All

## aggregator-id-zero *boolean*

Synopsis	Set router ID in the BGP AGGREGATOR attribute to zero
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>aggregator-id-zero boolean</b>
Tree	<a href="#">aggregator-id-zero</a>
Introduced	16.0.R1
Platforms	All

## as-override *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>as-override boolean</b>
Tree	<a href="#">as-override</a>
Description	<p>When configured to <b>true</b>, the advertising router's local AS replaces all occurrences of the peer AS in the AS_PATH attribute.</p> <p>This command should be used with caution, as it breaks BGP's loop detection mechanism.</p>

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). This command cannot be explicitly configured to **false**.

When the command inherits a value of **false**, no AS override is performed.

Introduced	16.0.R1
Platforms	All

### **asn-4-byte** *boolean*

Synopsis	Advertise the use of 4-byte ASNs
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">asn-4-byte</a> <i>boolean</i>
Tree	<a href="#">asn-4-byte</a>
Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	BGP authentication key
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 370
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command associates the keychain to be used to authenticate the BGP session. The keychain allows the rollover of authentication keys during the lifetime of a session.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, BFD is enabled on a given protocol interface where the state of the protocol interface is tied to the state of the BFD session between the local node and the remote node.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BFD is removed from the associated protocol adjacency.</p>
Introduced	16.0.R1
Platforms	All

**bfd-strict-mode**

Synopsis	Enter the <b>bfd-strict-mode</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">bfd-strict-mode</a>
Tree	<a href="#">bfd-strict-mode</a>
Introduced	23.7.R1
Platforms	All

**advertise**

Synopsis	Enable the <b>advertise</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">bfd-strict-mode</a> <a href="#">advertise</a>
Tree	<a href="#">advertise</a>
Description	<p>Commands in this context configure BGP to advertise the Strict-BFD capability to peers that are within scope of this command and meet the following requirements:</p> <ul style="list-style-type: none"> <li>• The inherited or configured value for the <b>bfd-liveness</b> command that applies to the peer is <b>true</b>.</li> <li>• The interface associated with the peer has a valid BFD configuration.</li> </ul> <p>When the preceding conditions are satisfied and two peers attempting to form a session both advertise the Strict-BFD capability, the BGP finite state machine in each router</p>

transitions the session state to established after the BFD session with the peer enters the up state.

When unconfigured, BGP does not advertise the Strict-BFD capability to peers.

Introduced 23.7.R1

Platforms All

### **holdtime** *number*

Synopsis Maximum time BGP waits for the BFD session to come up

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **bfd-strict-mode advertise holdtime number**

Tree **holdtime**

Description This command configures the maximum time BGP waits for the BFD session to come up, provided that the Strict-BFD procedures apply to a session, and the negotiated BGP hold time is zero (no keepalives). If the negotiated BGP hold time is greater than zero, the advertised hold time is not considered.

Range 1 to 65535

Units seconds

Default 30

Introduced 23.7.R1

Platforms All

### **next-hop-reachability** *boolean*

Synopsis Consider next hop unreachable if BFD session is down

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **bfd-strict-mode next-hop-reachability boolean**

Tree **next-hop-reachability**

Description When configured to **true**, the router considers next-hop self routes belonging to specific address families received from a peer within scope of this command as having an unresolved next hop, provided that the following requirements are met:

- The BFD session to the peer is in a down state.
- There is a valid interface BFD configuration that applies to the peer.
- There is a valid BFD liveness configuration that applies to the peer.

The unresolved state is maintained until the BFD session state changes to up or administratively down, even if there is a resolving route or tunnel that matches the BGP next-hop address.

Routes received from one peer with a BGP next-hop address equal to the address of another peer are not affected by the BFD session to the other peer. The behavior of the

router when this command is **true** does not depend on whether Strict-BFD is used, as both features are independent.

Configuring this command to **true** only affects routes belonging to the following address families:

- IPv4
- IPv6
- IPv4 VPN
- IPv6 VPN
- labeled unicast IPv4
- labeled unicast IPv6
- EVPN
- IPv4 multicast
- IPv6 multicast
- IPv4 VPN multicast
- IPv6 VPN multicast

When configured to **false**, the router does not consider next-hop self routes belonging to the preceding address families as having an unresolved next hop if the BFD session goes down.

Introduced 23.7.R1

Platforms All

### **capability-negotiation** *boolean*

Synopsis Enable capability negotiation

Context **configure** **service vpn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **capability-negotiation** *boolean*

Tree [capability-negotiation](#)

Introduced 16.0.R1

Platforms All

### **client-reflect** *boolean*

Synopsis Allow cluster RR to advertise routes to its clients

Context **configure** **service vpn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **client-reflect** *boolean*

Tree [client-reflect](#)

Introduced 16.0.R1

Platforms All

## cluster

Synopsis Enter the **cluster** context

Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) cluster**

Tree [cluster](#)

Introduced 16.0.R1

Platforms All

## cluster-id *string*

Synopsis Route reflector cluster ID

Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) cluster cluster-id string**

Tree [cluster-id](#)

Introduced 16.0.R1

Platforms All

## connect-retry *number*

Synopsis BGP connect retry timer value

Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) connect-retry number**

Tree [connect-retry](#)

Range 1 to 65535

Introduced 16.0.R1

Platforms All

## damp-peer-oscillations

Synopsis Enable the **damp-peer-oscillations** context

Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) damp-peer-oscillations**

Tree [damp-peer-oscillations](#)

Introduced 16.0.R1

Platforms All

### **error-interval** *number*

Synopsis Time after a reset that the session must be error-free

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations error-interval** *number*

Tree [error-interval](#)

Description This command sets the interval of time after a reset, during which the session must be error-free in order to reset the penalty counter and return the idle hold time to the initial wait time.

Range 0 to 2048

Default 30

Introduced 16.0.R1

Platforms All

### **idle-hold-time**

Synopsis Enter the **idle-hold-time** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations idle-hold-time**

Tree [idle-hold-time](#)

Introduced 16.0.R1

Platforms All

### **initial-wait** *number*

Synopsis Time session remains in idle state after stabilization

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **damp-peer-oscillations idle-hold-time initial-wait** *number*

Tree [initial-wait](#)

Range 0 to 2048

Default 0

Introduced 16.0.R1

Platforms All

### **max-wait** *number*

Synopsis	Maximum session idle time after repeated instability
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations idle-hold-time max-wait</b> <i>number</i>
Tree	<a href="#">max-wait</a>
Range	1 to 2048
Default	60
Introduced	16.0.R1
Platforms	All

### **second-wait** *number*

Synopsis	Time that doubles after each repeated session failure
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damp-peer-oscillations idle-hold-time second-wait</b> <i>number</i>
Tree	<a href="#">second-wait</a>
Description	This command defines the hold time that doubles after each repeated session failure that occurs in a short span of time.
Range	1 to 2048
Default	5
Introduced	16.0.R1
Platforms	All

### **damping** *boolean*

Synopsis	Use BGP route damping to reduce route flap
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>damping</b> <i>boolean</i>
Tree	<a href="#">damping</a>
Introduced	16.0.R1
Platforms	All

### **default-label-preference**

Synopsis	Enter the <b>default-label-preference</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-label-preference</b>
Tree	<a href="#">default-label-preference</a>
Introduced	19.5.R1
Platforms	All

### **ebgp number**

Synopsis	Default preference for EBGp
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-label-preference ebgp number</b>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

### **ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-label-preference ibgp number</b>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

### **default-preference**

Synopsis	Enter the <b>default-preference</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>default-preference</b>
Tree	<a href="#">default-preference</a>
Introduced	19.5.R1
Platforms	All

**ebgp number**

Synopsis	Default preference for EBGp
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>default-preference ebgp number</b>
Tree	<a href="#">ebgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**ibgp number**

Synopsis	Default preference for IBGP
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>default-preference ibgp number</b>
Tree	<a href="#">ibgp</a>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**ebgp-default-reject-policy**

Synopsis	Enable the <b>ebgp-default-reject-policy</b> context
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>ebgp-default-reject-policy</b>
Tree	<a href="#">ebgp-default-reject-policy</a>
Introduced	19.5.R1

Platforms All

### **export** *boolean*

Synopsis Enable default reject export policy for external peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy export** *boolean*

Tree [export](#)

Default true

Introduced 19.5.R1

Platforms All

### **import** *boolean*

Synopsis Enable default reject import policy for external peers

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **ebgp-default-reject-policy import** *boolean*

Tree [import](#)

Default true

Introduced 19.5.R1

Platforms All

### **enforce-first-as** *boolean*

Synopsis Enforce the configured peer AS value in received routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **enforce-first-as** *boolean*

Tree [enforce-first-as](#)

Description When configured to **true** for an EBGp session, all routes received from an EBGp peer are checked to ensure that the most recent ASN in the AS\_PATH attribute of each route matches the configured AS of the session. If there is not a match, the session is reset (if the **update-fault-tolerance** command in the **error-handling** context is set to **false**) or the session is left up but the route is treated as withdrawn (if **update-fault-tolerance** is set to **true**).

This command does not flap an established session because it applies only to routes received after the command is issued.

When unconfigured, the command inherits the value of the group-level setting (**true** or **false**). The command cannot be explicitly configured to **false**.

When this command inherits a value of **false**, received routes are not checked for compliance with the rule.

Introduced	16.0.R1
Platforms	All

## error-handling

Synopsis	Enter the <b>error-handling</b> context
Context	<b>configure service vprn string bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) error-handling</b>
Tree	<a href="#">error-handling</a>
Introduced	16.0.R1
Platforms	All

## update-fault-tolerance *boolean*

Synopsis	Tolerate non-critical errors in UPDATE messages
Context	<b>configure service vprn string bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) error-handling update-fault-tolerance boolean</b>
Tree	<a href="#">update-fault-tolerance</a>
Description	<p>When configured to <b>true</b>, non-critical errors are handled with treat-as-withdraw, attribute-discard, and other non-disruptive approaches that do not cause a session reset. Critical errors still trigger a session reset.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, all errors trigger a session reset.</p>
Introduced	16.0.R1
Platforms	All

## evpn-link-bandwidth

Synopsis	Enter the <b>evpn-link-bandwidth</b> context
Context	<b>configure service vprn string bgp neighbor (ipv4-address-with-zone   ipv6-address-with-zone) evpn-link-bandwidth</b>
Tree	<a href="#">evpn-link-bandwidth</a>
Introduced	22.7.R1
Platforms	All

**add-to-received-bgp** *number*

Synopsis	Weight added to received PE-CE BGP routes
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>evpn-link-bandwidth add-to-received-bgp</b> <i>number</i>
Tree	<a href="#">add-to-received-bgp</a>
Description	This command configures the weight value added to all BGP PE-CE routes for the purpose of weighted ECMP if EVPN-IFL and BGP PE-CE routes are combined into the same ECMP set.  For the load-balancing between EVPN-IFL and BGP PE-CE routes the <b>configure service vprn bgp eibgp-loadbalance</b> command must already be configured in the system.
Range	1 to 128
Introduced	22.7.R1
Platforms	All

**export**

Synopsis	Enable the <b>export</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>export</b>
Tree	<a href="#">export</a>
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	Export policy name
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>export policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1

Platforms All

### extended-nh-encoding

Synopsis Enable the **extended-nh-encoding** context

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **extended-nh-encoding**

Tree [extended-nh-encoding](#)

Introduced 19.5.R1

Platforms All

### ipv4 boolean

Synopsis Enable/disable family type ipv4.

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **extended-nh-encoding ipv4 boolean**

Tree [ipv4](#)

Default false

Introduced 19.5.R1

Platforms All

### family

Synopsis Enable the **family** context

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **family**

Tree [family](#)

Introduced 16.0.R1

Platforms All

### flow-ipv4 boolean

Synopsis Advertise support for the flowspec-IPv4 address family

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **family flow-ipv4 boolean**

Tree [flow-ipv4](#)

Default false

Introduced 16.0.R1  
Platforms All

### **flow-ipv6** *boolean*

Synopsis Advertise support for the flowspec-IPv6 address family  
Context **configure** **service** **vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **family** **flow-ipv6** *boolean*  
Tree [flow-ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ipv4** *boolean*

Synopsis Add support for the IPv4 address family  
Context **configure** **service** **vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **family** **ipv4** *boolean*  
Tree [ipv4](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ipv6** *boolean*

Synopsis Advertise MP-BGP support for the IPv6 address family  
Context **configure** **service** **vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **family** **ipv6** *boolean*  
Tree [ipv6](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **label-ipv4** *boolean*

Synopsis Advertise support for the label-IPv4 address family

Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv4** *boolean*

Synopsis	Advertise support for the MCAST-IPv4 address family
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family mcast-ipv4</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mcast-ipv6** *boolean*

Synopsis	Advertise support for the MCAST-IPv6 address family
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>family mcast-ipv6</b> <i>boolean</i>
Tree	<a href="#">mcast-ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **fast-external-failover** *boolean*

Synopsis	Drop external BGP session immediately when link fails
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>fast-external-failover</b> <i>boolean</i>
Tree	<a href="#">fast-external-failover</a>
Description	<p>When this command inherits a value of <b>true</b>, the router drops an external BGP session on a single-hop route immediately when the local interface goes down.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p>



When configured to **false**, the BGP session remains up until the hold time expires.

Introduced 16.0.R1  
 Platforms All

## graceful-restart

Synopsis Enable the **graceful-restart** context  
 Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) graceful-restart**  
 Tree [graceful-restart](#)  
 Introduced 16.0.R1  
 Platforms All

## gr-notification *boolean*

Synopsis Perform graceful restart procedures after NOTIFICATION  
 Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) graceful-restart gr-notification *boolean***  
 Tree [gr-notification](#)  
 Description When configured to **true**, the Graceful Restart capability sent by the router indicates support for NOTIFICATION messages. If the peer also supports this capability, the session is restarted gracefully (while preserving forwarding) if either peer sends a NOTIFICATION message due to some type of event or error.  
 When configured to **false**, NOTIFICATION messages are not supported.  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## long-lived

Synopsis Enable the **long-lived** context  
 Context **configure service vprn string bgp neighbor (ipv4-address-with-zone | ipv6-address-with-zone) graceful-restart long-lived**  
 Tree [long-lived](#)  
 Introduced 16.0.R1  
 Platforms All

**advertise-stale-to-all-neighbors** *boolean*

Synopsis	Advertise stale routes to all BGP peers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">advertise-stale-to-all-neighbors</a> <i>boolean</i>
Tree	<a href="#">advertise-stale-to-all-neighbors</a>
Default	false
Introduced	16.0.R1
Platforms	All

**advertised-stale-time** *number*

Synopsis	Advertised long-lived stale time for LLGR routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">advertised-stale-time</a> <i>number</i>
Tree	<a href="#">advertised-stale-time</a>
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

**family** [[family-type](#)] *keyword*

Synopsis	Enter the <b>family</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>
Introduced	16.0.R1
Platforms	All

**[family-type]** *keyword*

Synopsis	Address family type for LLGR
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">graceful-restart</a> <a href="#">long-lived</a> <a href="#">family</a> <i>keyword</i>
Tree	<a href="#">family</a>

Options	ipv4, ipv6, flow-ipv4, flow-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertised-stale-time** *number*

Synopsis	LLGR stale routes time for family override
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family</b> <i>keyword</i> <b>advertised-stale-time</b> <i>number</i>
Tree	<a href="#">advertised-stale-time</a>
Description	This command configures the long-lived stale routes time that is advertised by the router in its LLGR capability.  This command applies to all AFI/SAFI in the advertised LLGR capability with a family-specific override.
Range	0 to 16777215
Default	86400
Introduced	16.0.R1
Platforms	All

### **helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived family</b> <i>keyword</i> <b>helper-override-stale-time</b> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>
Description	This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability. This is a family-specific override value.
Range	0 to 16777216
Default	16777216
Introduced	16.0.R1
Platforms	All

### **forwarding-bits-set** *keyword*

Synopsis	BGP LLGR forwarding-bit behavior for address family
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Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived forwarding-bits-set</b> <i>keyword</i>
Tree	<a href="#">forwarding-bits-set</a>
Description	<p>This command determines the setting of the F bit in the GR and LLGR capabilities advertised by the router. When the F bit is set for an address family, it indicates that the advertising router is able to preserve forwarding state for the routes of that address family across the last restart. When the session is re-established after a restart and the F bit is not set, all stale routes from the peer are immediately removed for the corresponding address family.</p> <p>This command allows the F bit to be set for all address families or only for non-forwarding address families (L2-VPN, route target, flow-IPv4, and flow-IPv6).</p>
Options	none, all, non-fwd
Default	none
Introduced	16.0.R1
Platforms	All

### **helper-override-restart-time** *number*

Synopsis	Locally-configured override for restart time
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived helper-override-restart-time</b> <i>number</i>
Tree	<a href="#">helper-override-restart-time</a>
Description	<p>This command overrides the restart time advertised by a peer (in its GR capability) with a locally-configured value. This override applies only to AFI/SAFI that were included in the GR capability of the peer. The restart-time is always zero for AFI/SAFI not included in the GR capability. This command is useful if the local router wants to force the LLGR phase to begin after a set time for all protected AFI/SAFI.</p>
Range	0 to 4095
Introduced	16.0.R1
Platforms	All

### **helper-override-stale-time** *number*

Synopsis	Locally-configured stale routes override time
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived helper-override-stale-time</b> <i>number</i>
Tree	<a href="#">helper-override-stale-time</a>
Description	<p>This command configures a locally-imposed LLGR stale time that overrides the long-lived stale routes time that is advertised by the router in its LLGR capability.</p>

This command applies to all AFI/SAFI in the advertised LLGR capability except for any AFI/SAFI with a family-specific override.

Range	0 to 16777215
Introduced	16.0.R1
Platforms	All

### **without-no-export** *boolean*

Synopsis	Advertise LLGR stale routes to non-LLGR peers
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart long-lived</b> <b>without-no-export</b> <i>boolean</i>
Tree	<a href="#">without-no-export</a>
Description	<p>When configured to <b>true</b>, LLGR stale routes can be advertised to any peer (EBGP or IBGP) that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0.</p> <p>When configured to <b>false</b>, LLGR stale routes are not advertised to any EBGP peer that did not signal the LLGR capability. For IBGP and confederation-EBGP peers that did not advertise the LLGR capability, the local preference attribute in the advertised stale routes is automatically set to 0 and a NO_EXPORT standard community is automatically added to the routes.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **restart-time** *number*

Synopsis	Restart time advertised by GR capability
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart</b> <b>restart-time</b> <i>number</i>
Tree	<a href="#">restart-time</a>
Range	0 to 4095
Default	300
Introduced	16.0.R1
Platforms	All

**stale-routes-time** *number*

Synopsis	Maximum time to maintain routes after graceful restart
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>graceful-restart stale-routes-time</b> <i>number</i>
Tree	<b>stale-routes-time</b>
Range	1 to 3600
Default	360
Introduced	16.0.R1
Platforms	All

**group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Neighbor to group
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>group</b> <i>reference</i>
Tree	<b>group</b>
Reference	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp group</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b>
Tree	<b>hold-time</b>
Introduced	16.0.R1
Platforms	All

**minimum-hold-time** *number*

Synopsis	Minimum time BGP waits between successive messages
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b> <b>minimum-hold-time</b> <i>number</i>
Tree	<b>minimum-hold-time</b>
Range	0   3 to 65536
Default	0
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Maximum hold time between successive messages
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>hold-time</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Description	<p>The BGP hold time specifies the maximum time BGP waits between successive messages (either keepalive or update) from its peer, before closing the connection.</p> <p>Even though the implementation allows setting the keepalive timer at the BGP neighbor level times separately, the configured keepalive timer is overridden by this value under the following circumstances:</p> <ul style="list-style-type: none"> <li>• If the specified hold time is less than the configured keepalive time, then the operational keepalive time is set to a third of the hold-time; the configured keepalive time is not changed.</li> <li>• If the hold time is set to zero, the operational value of the keepalive time is set to zero; the configured keepalive time is not changed. This means that the connection with the peer is up permanently and no keepalive packets are sent to the peer.</li> </ul> <p>When unconfigured, the command setting is inherited from the BGP group-level configuration.</p>
Range	0   3 to 65535
Introduced	16.0.R1
Platforms	All

**import**

Synopsis	Enable the <b>import</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>import</b>

Tree	<a href="#">import</a>
Introduced	16.0.R1
Platforms	All

### **policy** (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **initial-send-delay-zero** *boolean*

Synopsis	Send BGP updates as soon as the session comes up
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>initial-send-delay-zero</b> <i>boolean</i>
Tree	<a href="#">initial-send-delay-zero</a>
Description	<p>When configured to <b>true</b>, BGP updates are sent as soon as the session comes up.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, BGP waits to send UPDATE messages for the minimum route advertisement time after a session is established.</p>
Introduced	16.0.R1
Platforms	All

### **keepalive** *number*

Synopsis	Time after which the BGP KEEPALIVE message is sent
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Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>keepalive</b> <i>number</i>
Tree	<a href="#">keepalive</a>
Range	0 to 21845
Introduced	16.0.R1
Platforms	All

### **label-preference** *number*

Synopsis	Route preference for routes from labeled-unicast peers
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>label-preference</b> <i>number</i>
Tree	<a href="#">label-preference</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **link-bandwidth**

Synopsis	Enter the <b>link-bandwidth</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b>
Tree	<a href="#">link-bandwidth</a>
Introduced	16.0.R3
Platforms	All

### **accept-from-ebgp**

Synopsis	Enable the <b>accept-from-ebgp</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> <b>accept-from-ebgp</b>
Tree	<a href="#">accept-from-ebgp</a>
Introduced	16.0.R4
Platforms	All

**ipv4 boolean**

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">link-bandwidth accept-from-ebgp</a> <a href="#">ipv4 boolean</a>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**ipv6 boolean**

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">link-bandwidth accept-from-ebgp</a> <a href="#">ipv6 boolean</a>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

**label-ipv4 boolean**

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">link-bandwidth accept-from-ebgp</a> <a href="#">label-ipv4 boolean</a>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

**add-to-received-ebgp**

Synopsis	Enable the <b>add-to-received-ebgp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">link-bandwidth add-to-received-ebgp</a>
Tree	<a href="#">add-to-received-ebgp</a>
Introduced	16.0.R3

Platforms All

### **ipv4** *boolean*

Synopsis Support Link Bandwidth EC in IPv4 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth add-to-received-ebgp** **ipv4** *boolean*

Tree [ipv4](#)

Default false

Introduced 16.0.R3

Platforms All

### **ipv6** *boolean*

Synopsis Support Link Bandwidth EC in IPv6 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth add-to-received-ebgp** **ipv6** *boolean*

Tree [ipv6](#)

Default false

Introduced 16.0.R3

Platforms All

### **label-ipv4** *boolean*

Synopsis Support Link Bandwidth EC in label-IPv4 routes

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth add-to-received-ebgp** **label-ipv4** *boolean*

Tree [label-ipv4](#)

Default false

Introduced 16.0.R3

Platforms All

### **aggregate-used-paths**

Synopsis Enable the **aggregate-used-paths** context

Context **configure service vprn** *string* **bgp neighbor** (*ipv4-address-with-zone* | *ipv6-address-with-zone*) **link-bandwidth aggregate-used-paths**

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Tree	<a href="#">aggregate-used-paths</a>
Introduced	16.0.R4
Platforms	All

### **ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> <b>aggregate-used-paths</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **ipv6** *boolean*

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> <b>aggregate-used-paths</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp</b> <b>neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>link-bandwidth</b> <b>aggregate-used-paths</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

## send-to-ebgp

Synopsis	Enable the <b>send-to-ebgp</b> context
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp</b>
Tree	<a href="#">send-to-ebgp</a>
Introduced	16.0.R4
Platforms	All

## ipv4 boolean

Synopsis	Support Link Bandwidth EC in IPv4 routes
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R4
Platforms	All

## ipv6 boolean

Synopsis	Support Link Bandwidth EC in IPv6 routes
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp ipv6 boolean</b>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R4
Platforms	All

## label-ipv4 boolean

Synopsis	Support Link Bandwidth EC in label-IPv4 routes
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>link-bandwidth send-to-ebgp label-ipv4 boolean</b>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	16.0.R4

Platforms All

### **local-address** (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

Synopsis Local IP address used when communicating with BGP peers

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **local-address** (*ipv4-address-no-zone | ipv6-address-no-zone | interface-name*)

Tree [local-address](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

### **local-as**

Synopsis Enter the **local-as** context

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **local-as**

Tree [local-as](#)

Introduced 16.0.R1

Platforms All

### **as-number** *number*

Synopsis Local (or virtual) BGP AS number

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **local-as as-number** *number*

Tree [as-number](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **prepend-global-as** *boolean*

Synopsis Prepend global ASN when advertising routes to BGP peer

Context **configure service vprn string bgp neighbor** (*ipv4-address-with-zone | ipv6-address-with-zone*) **local-as prepend-global-as** *boolean*

Tree [prepend-global-as](#)

Description	When configured to <b>true</b> , the global ASN is added to the AS_PATH attribute in outbound routes sent to the peer. When configured to <b>false</b> , the global ASN is not included in the AS_PATH attribute.
Default	true
Introduced	16.0.R1
Platforms	All

### **private** *boolean*

Synopsis	Hide the local ASN in sent paths learned from peering
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-as private</b> <i>boolean</i>
Tree	<a href="#">private</a>
Description	When configured to <b>true</b> , the local AS number is only advertised to peers that use the local ASN for establishing BGP peering sessions. When configured to <b>false</b> , the local ASN is advertised to all peers, including those that can use the global ASN for establishing BGP peering sessions.
Default	false
Introduced	16.0.R1
Platforms	All

### **local-preference** *number*

Synopsis	Default local preference if not in incoming routes
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>local-preference</b> <i>number</i>
Tree	<a href="#">local-preference</a>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>loop-detect</b> <i>keyword</i>
Tree	<a href="#">loop-detect</a>

Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	All

### **loop-detect-threshold** *number*

Synopsis	Threshold for the global ASN in a received AS path
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>loop-detect-threshold</b> <i>number</i>
Tree	<a href="#">loop-detect-threshold</a>
Range	0 to 15
Introduced	16.0.R6
Platforms	All

### **med-out** (*number* | *keyword*)

Synopsis	Default MED attribute value to advertise to peers
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>med-out</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">med-out</a>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	All

### **min-route-advertisement** *number*

Synopsis	Minimum interval between successive prefix updates
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>min-route-advertisement</b> <i>number</i>
Tree	<a href="#">min-route-advertisement</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All



## monitor

Synopsis	Enable the <b>monitor</b> context
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>monitor</b>
Tree	<b>monitor</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of BMP monitoring
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>monitor admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## all-stations *boolean*

Synopsis	Send BMP messages to all configured stations
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>monitor all-stations boolean</b>
Tree	<b>all-stations</b>
Description	<p>When configured to <b>true</b>, this command specifies that BMP messages are to be sent to all configured BMP monitoring stations.</p> <p>When configured to <b>false</b>, the command is not used to indicate the stations which can receive BMP messages. The <b>station</b> command (at the same context level) identifies the BMP stations for which BMP messages are to be sent.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## route-monitoring

Synopsis	Enter the <b>route-monitoring</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring</b>
Tree	<a href="#">route-monitoring</a>
Introduced	16.0.R1
Platforms	All

### **post-policy** *boolean*

Synopsis	Allow post-policy route-monitoring messages to be sent
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring post-policy</b> <i>boolean</i>
Tree	<a href="#">post-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **pre-policy** *boolean*

Synopsis	Allow pre-policy route-monitoring messages to be sent
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor route-monitoring pre-policy</b> <i>boolean</i>
Tree	<a href="#">pre-policy</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **station** [[station-name](#)] *reference*

Synopsis	Add a list entry for <b>station</b>
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>monitor station</b> <i>reference</i>
Tree	<a href="#">station</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[station-name] reference**

Synopsis	BMP monitoring station
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>monitor station reference</b>
Tree	<b>station</b>
Reference	<b>configure bmp station string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**multihop number**

Synopsis	TTL in IP packet headers for EBGp peers multi-hops away
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>multihop number</b>
Tree	<b>multihop</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

**multipath-eligible boolean**

Synopsis	Allow routes from this peer in multipath eligibility
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>multipath-eligible boolean</b>
Tree	<b>multipath-eligible</b>
Introduced	19.5.R1
Platforms	All

**next-hop-self boolean**

Synopsis	Advertise routes with local address as next-hop address
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>next-hop-self boolean</b>
Tree	<b>next-hop-self</b>

Description	<p>When configured to <b>true</b>, this command configures BGP to advertise routes to members of a group using a local address of the BGP instance as the BGP next-hop address.</p> <p>Note that this command is set without exception, regardless of the route source (EBGP or IBGP) or its family. When used with VPN-IPv4 and VPN-IPv6 routes, the <b>configure router bgp rr-vpn-forwarding</b> command should also be configured.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, protocol standard behavior is applied to determine whether to set <b>next-hop-self</b> in advertised routes.</p>
Introduced	16.0.R1
Platforms	All

## origin-validation

Synopsis	Enable the <b>origin-validation</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b>
Tree	<a href="#">origin-validation</a>
Introduced	19.7.R1
Platforms	All

## ipv4 boolean

Synopsis	Enable support for unlabeled unicast IPv4 routes
Context	<b>configure service vpn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.7.R1
Platforms	All

## ipv6 boolean

Synopsis	Enable support for unlabeled unicast IPv6 routes
Context	<b>configure service vpn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>ipv6 boolean</b>
Tree	<a href="#">ipv6</a>
Default	false

Introduced	19.7.R1
Platforms	All

### **label-ipv4** *boolean*

Synopsis	Enable support for labeled-unicast IPv4 routes
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>origin-validation</b> <b>label-ipv4</b> <i>boolean</i>
Tree	<a href="#">label-ipv4</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **passive** *boolean*

Synopsis	Use passive mode for BGP communication
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>passive</b> <i>boolean</i>
Tree	<a href="#">passive</a>
Introduced	16.0.R1
Platforms	All

### **path-mtu-discovery** *boolean*

Synopsis	Enable path MTU discovery
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>path-mtu-discovery</b> <i>boolean</i>
Tree	<a href="#">path-mtu-discovery</a>
Description	<p>When configured to <b>true</b>, Path MTU Discovery (PMTUD) is enabled for the associated TCP connections.</p> <p>When set to <b>true</b>, PMTUD is activated toward an IPv4 BGP neighbor and the Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, this device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value so that the IP MTU constraint can be accommodated.</p> <p>When PMTUD is configured to <b>false</b> and there is no TCP MSS configuration that can be associated with a BGP neighbor (in either the BGP configuration or the first hop IP</p>

interface configuration), the router advertises a value of only 1024 bytes as the TCP MSS option value, limiting received TCP segments to that size.

Introduced	16.0.R1
Platforms	All

### **peer-as** *number*

Synopsis	Peer AS number
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-as</b> <i>number</i>
Tree	<a href="#">peer-as</a>
Description	<p>This command configures the autonomous system number for the peer. The peer AS number must be configured for each configured peer.</p> <p>For EBGP peers, the peer AS number configured must be different from the autonomous system number configured for this router under the global level since the peer will be in a different autonomous system than this router.</p> <p>For IBGP peers, the peer AS number must be the same as the autonomous system number of this router configured under the global level.</p>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **peer-creation-type** *keyword*

Synopsis	Peer creation type
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-creation-type</b> <i>keyword</i>
Tree	<a href="#">peer-creation-type</a>
Options	static, dynamic, dynamic-if-remote, dynamic-if-local
Default	static
Introduced	16.0.R1
Platforms	All

### **peer-ip-tracking** *boolean*

Synopsis	Enable BGP peer tracking
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>peer-ip-tracking</b> <i>boolean</i>

Tree	<a href="#">peer-ip-tracking</a>
Description	<p>When configured to <b>true</b>, this command enables BGP peer tracking.</p> <p>Peer tracking should be used with caution. Peer tracking can tear a session down even if the loss of connectivity turns out to be short-lived (for example, while the IGP protocol is re-converging). Next-hop tracking, which is always enabled, handles temporary connectivity issues more effectively.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, peer tracking is disabled.</p>
Introduced	16.0.R1
Platforms	All

### **preference number**

Synopsis	Route preference for routes learned from all peers
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>preference number</b>
Tree	<a href="#">preference</a>
Description	<p>This command configures the route preference for routes learned from the configured peers.</p> <p>The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.</p> <p>When unconfigured, the command setting is inherited from the group-level configuration.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **prefix-limit [family] keyword**

Synopsis	Enter the <b>prefix-limit</b> list instance
Context	<b>configure service vprn string bgp neighbor</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-limit keyword</b>
Tree	<a href="#">prefix-limit</a>
Introduced	16.0.R1
Platforms	All

**[family]** *keyword*

Synopsis	Address family to which the limit applies
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i>
Tree	<b>prefix-limit</b>
Options	ipv4, ipv6, mcast-ipv4, flow-ipv4, flow-ipv6, mcast-ipv6, label-ipv4
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**hold-excess** *number*

Synopsis	Percentage of maximum routes to install in route table
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>hold-excess</b> <i>number</i>
Tree	<b>hold-excess</b>
Description	<p>This command specifies the percentage of maximum routes that are allowed to be installed in the route table for the configured address family. If a peer within scope of the configuration exceeds the limit, the overflow routes are held in the BGP RIB as inactive routes and are ineligible for forwarding and advertisement to other peers. If the <b>post-import</b> command is configured to <b>true</b>, only routes not rejected by import policies count toward the limit.</p> <p>A BGP route in an overflow state is reconsidered for activation and reinstallation when an UPDATE message is received for the route.</p> <p>This command is mutually exclusive with the <b>idle-timeout</b> and <b>log-only</b> commands.</p>
Range	1 to 100
Introduced	23.7.R1
Platforms	All

**idle-timeout** *number*

Synopsis	Time which BGP peering remains idle before reconnecting
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>idle-timeout</b> <i>number</i>
Tree	<b>idle-timeout</b>
Description	<p>This command defines the idle time after an administrative take-down before BGP re-establishes a session and reconnects to a peer.</p> <p>When unconfigured, the command inherits the value from the group-level configuration.</p>



Range	1 to 1024
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <b>keyword</b> <b>log-only</b> <i>boolean</i>
Tree	<b>log-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **maximum** *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <b>keyword</b> <b>maximum</b> <i>number</i>
Tree	<b>maximum</b>
Description	This command configures the maximum number of BGP routes than can be received from a peer before administrative action is taken.
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R2
Platforms	All

### **post-import** *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <b>keyword</b> <b>post-import</b> <i>boolean</i>
Tree	<b>post-import</b>
Default	false
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Percentage threshold that triggers a warning message
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>prefix-limit</b> <i>keyword</i> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 100
Default	90
Introduced	16.0.R1
Platforms	All

**remove-private**

Synopsis	Enable the <b>remove-private</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private</b>
Tree	<b>remove-private</b>
Introduced	16.0.R1
Platforms	All

**limited** *boolean*

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private limited</b> <i>boolean</i>
Tree	<b>limited</b>
Default	false
Introduced	16.0.R1
Platforms	All

**replace** *boolean*

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private replace</b> <i>boolean</i>
Tree	<b>replace</b>

Default	false
Introduced	19.10.R1
Platforms	All

### **skip-peer-as** *boolean*

Synopsis	Keep private ASN if it is the same as the BGP peer ASN
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>remove-private skip-peer-as</b> <i>boolean</i>
Tree	<a href="#">skip-peer-as</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **send-communities**

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities</b>
Tree	<a href="#">send-communities</a>
Introduced	16.0.R1
Platforms	All

### **extended** *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities extended</b> <i>boolean</i>
Tree	<a href="#">extended</a>
Description	<p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP extended communities are sent to peers in the Extended Communities attribute.</p> <p>When configured to <b>false</b>, all extended communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

## large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities large</b> <i>boolean</i>
Tree	<b>large</b>
Description	<p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP large communities are sent to peers in the Large Communities attribute.</p> <p>When configured to <b>false</b>, all large communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

## standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-communities standard</b> <i>boolean</i>
Tree	<b>standard</b>
Description	<p>When unconfigured, this command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>true</b>.</p> <p>When this command inherits a value of <b>true</b>, BGP standard communities are sent to peers in the Communities attribute.</p> <p>When configured to <b>false</b>, all standard communities are removed from all routes advertised to BGP peers.</p>
Introduced	16.0.R1
Platforms	All

## send-default

Synopsis	Enable the <b>send-default</b> context
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>send-default</b>
Tree	<b>send-default</b>
Introduced	19.7.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Export policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">send-default</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	19.7.R1
Platforms	All

### **ipv4** *boolean*

Synopsis	Enable IPv4 family type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">send-default</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **ipv6** *boolean*

Synopsis	Enable IPv6 family type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">send-default</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **split-horizon** *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <a href="#">ipv4-address-with-zone</a>   <a href="#">ipv6-address-with-zone</a> ) <a href="#">split-horizon</a> <i>boolean</i>
Tree	<a href="#">split-horizon</a>

Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When unconfigured, the command inherits the value of the group-level setting (<b>true</b> or <b>false</b>). The command cannot be explicitly configured to <b>false</b>.</p> <p>When this command inherits a value of <b>false</b>, the use of split-horizon is disabled.</p>
Introduced	16.0.R1
Platforms	All

### **tcp-mss** (*number* | *keyword*)

Synopsis	TCP maximum segment size override
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>tcp-mss</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">tcp-mss</a>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Options	ip-stack
Introduced	21.2.R1
Platforms	All

### **third-party-nexthop** *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp neighbor</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>third-party-nexthop</b> <i>boolean</i>
Tree	<a href="#">third-party-nexthop</a>

Introduced	16.0.R1
Platforms	All

### **ttl-security** *number*

Synopsis	Minimum TTL value for an incoming BGP packet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>ttl-security</b> <i>number</i>
Tree	<a href="#">ttl-security</a>
Description	This command configures the minimum TTL value that BGP will accept from an incoming packet. A packet with a TTL value less than the minimum configured TTL value is discarded.  When unconfigured, the command inherits the value of the group-level setting.
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	BGP peer type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp neighbor</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	All

### **next-hop-resolution**

Synopsis	Enter the <b>next-hop-resolution</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp next-hop-resolution</a>
Tree	<a href="#">next-hop-resolution</a>
Introduced	16.0.R1
Platforms	All

**policy reference**

Synopsis	Policy that filters routes for BGP next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp next-hop-resolution</a> <a href="#">policy reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <a href="#">string</a>
Introduced	16.0.R1
Platforms	All

**use-bgp-routes boolean**

Synopsis	Use BGP routes to resolve BGP next hops
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp next-hop-resolution</a> <a href="#">use-bgp-routes boolean</a>
Tree	<a href="#">use-bgp-routes</a>
Description	<p>When configured to <b>true</b>, BGP routes resolve BGP next hops. When this command is enabled, any unlabeled IPv4 or IPv6 BGP route received from a VPRN BGP peer becomes resolvable by up to four other BGP routes in order to resolve the route to a VPRN IP interface. A VPRN BGP route is not resolvable by another VPRN BGP route or by a BGP-VPN route.</p> <p>This command also allows unlabeled IPv4 or IPv6 BGP routes leaked from the GRT with unresolved next hops (in the GRT) to be resolvable by BGP-VPN routes (of the VPRN).</p> <p>When configured to <b>false</b>, BGP next hops are not resolved.</p>
Default	false
Introduced	19.10.R1
Platforms	All

**use-leaked-routes**

Synopsis	Enter the <b>use-leaked-routes</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp next-hop-resolution</a> <a href="#">use-leaked-routes</a>
Tree	<a href="#">use-leaked-routes</a>
Introduced	23.7.R1
Platforms	All

**static boolean**

Synopsis	Use leaked static routes to resolve BGP next hop
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Context	<b>configure service vprn string</b> <i>bgp next-hop-resolution use-leaked-routes static boolean</i>
Tree	<a href="#">static</a>
Description	<p>When configured to <b>true</b>, the router allows any non-leaked unlabeled unicast IPv4 or IPv6 route in the BGP RIB to be resolved by a leaked static route with direct next hops. A BGP route resolved this way cannot resolve other routes (including BGP routes) and cannot be redistributed into non-BGP protocols, such as IGP.</p> <p>When configured to <b>false</b>, the router prevents the use of leaked static routes to resolve BGP routes.</p>
Default	false
Introduced	23.7.R1
Platforms	All

### **path-mtu-discovery boolean**

Synopsis	Enable Path MTU Discovery
Context	<b>configure service vprn string</b> <i>bgp path-mtu-discovery boolean</i>
Tree	<a href="#">path-mtu-discovery</a>
Description	<p>When configured to <b>true</b>, Path MTU Discovery (PMTUD) is activated toward an IPv4 BGP neighbor. The Don't Fragment (DF) bit is set in the IP header of all IPv4 packets sent to the peer. If any device along the path toward the peer cannot forward the packet because the IP MTU of the interface is smaller than the IP packet size, the device drops the packet and sends an ICMP or ICMPv6 error message encoding the interface MTU. When the router receives the ICMP or ICMPv6 message, it lowers the TCP maximum segment size limit from the previous value to accommodate the IP MTU constraint.</p> <p>When configured to <b>false</b>, PMTUD is disabled and there is no TCP MSS configuration to associate with a BGP neighbor (in either the BGP configuration or the first-hop IP interface configuration). The router advertises a TCP MSS option of only 1024 bytes, limiting the received TCP segments to that size.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **peer-ip-tracking boolean**

Synopsis	Enable BGP peer tracking
Context	<b>configure service vprn string</b> <i>bgp peer-ip-tracking boolean</i>
Tree	<a href="#">peer-ip-tracking</a>
Default	false
Introduced	16.0.R1

Platforms All

### **peer-tracking-policy** *reference*

Synopsis Policy for BGP peer tracking on router instance

Context **configure** [service vprn string bgp peer-tracking-policy reference](#)

Tree [peer-tracking-policy](#)

Description This command specifies the name of a policy statement to use with the BGP peer-tracking function on BGP sessions where peer tracking is enabled.

When unconfigured, the default peer-tracking policy allows any type of route to match the neighbor IP address except aggregate routes and LDP shortcut routes.

Peer tracking should be used with caution. The peer-tracking policy should only permit one of direct-interface or direct routes to be advertised to a BGP peer. Advertising both routes causes the best route to oscillate.

Reference **configure** [policy-options policy-statement string](#)

Introduced 16.0.R1

Platforms All

### **preference** *number*

Synopsis Route preference for routes learned from all peers

Context **configure** [service vprn string bgp preference number](#)

Tree [preference](#)

Description This command configures the route preference for routes learned from the configured peers.

The lower the preference value, the higher the chance of the route being the active route. The router assigns BGP routes the highest default preference as compared to routes that are direct, static or learned via MPLS or OSPF.

Range 1 to 255

Default 170

Introduced 16.0.R1

Platforms All

### **rapid-withdrawal** *boolean*

Synopsis Send BGP withdrawal UPDATE messages immediately

Context **configure** [service vprn string bgp rapid-withdrawal boolean](#)

Tree	<a href="#">rapid-withdrawal</a>
Description	When configured to <b>true</b> , UPDATE messages containing withdrawn NLRI are sent immediately to a peer without waiting for the MRAI timer to expire. UPDATE messages containing reachable NLRI continue to wait for the MRAI timer to expire, or for a rapid update trigger.  When configured to <b>false</b> , withdrawal processing continues with the normal behavior.
Default	false
Introduced	16.0.R1
Platforms	All

### **remove-private**

Synopsis	Enable the <b>remove-private</b> context
Context	<b>configure service vprn string bgp remove-private</b>
Tree	<a href="#">remove-private</a>
Introduced	16.0.R1
Platforms	All

### **limited *boolean***

Synopsis	Remove private ASNs up to first public ASN encountered
Context	<b>configure service vprn string bgp remove-private limited <i>boolean</i></b>
Tree	<a href="#">limited</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **replace *boolean***

Synopsis	Replace private ASN with global ASN before advertising
Context	<b>configure service vprn string bgp remove-private replace <i>boolean</i></b>
Tree	<a href="#">replace</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **skip-peer-as** *boolean*

Synopsis	Keep private ASN if AS-PATH contains eBGP peer's ASN
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp remove-private skip-peer-as</a> <i>boolean</i>
Tree	<a href="#">skip-peer-as</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **rib-management**

Synopsis	Enter the <b>rib-management</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp rib-management</a>
Tree	<a href="#">rib-management</a>
Introduced	16.0.R1
Platforms	All

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp rib-management ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

### **leak-import**

Synopsis	Enter the <b>leak-import</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp rib-management ipv4 leak-import</a>
Tree	<a href="#">leak-import</a>
Introduced	16.0.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv4</a> <a href="#">leak-import</a> <a href="#">policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**route-table-import**

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv4</a> <a href="#">route-table-import</a>
Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv4</a> <a href="#">route-table-import</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Description	This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.  When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.

Aggregate routes are always imported into each RIB, independent of the specified policy.

Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.

When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

## leak-import

Synopsis	Enter the <b>leak-import</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv6</a> <a href="#">leak-import</a>
Tree	<a href="#">leak-import</a>
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">rib-management</a> <a href="#">ipv6</a> <a href="#">leak-import</a> <a href="#">policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255

Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## route-table-import

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure service vprn string bgp rib-management ipv6 route-table-import</b>
Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

## policy-name *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure service vprn string bgp rib-management ipv6 route-table-import policy-name <i>reference</i></b>
Tree	<a href="#">policy-name</a>
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Introduced	16.0.R1
Platforms	All

## label-ipv4

Synopsis	Enter the <b>label-ipv4</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management label-ipv4</a>
Tree	<a href="#">label-ipv4</a>
Introduced	16.0.R1
Platforms	All

## leak-import

Synopsis	Enter the <b>leak-import</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management label-ipv4 leak-import</a>
Tree	<a href="#">leak-import</a>
Introduced	16.0.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management label-ipv4 leak-import policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## route-table-import

Synopsis	Enter the <b>route-table-import</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management label-ipv4 route-table-import</a>



Tree	<a href="#">route-table-import</a>
Introduced	16.0.R1
Platforms	All

### **policy-name** *reference*

Synopsis	Name of policy that controls route importation into RIB
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management label-ipv4 route-table-import policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Description	<p>This command specifies the name of a policy that controls the importation of active routes from the IP route table into one of the BGP RIBs.</p> <p>When this command is configured, routes dropped or rejected by the policy are not installed in the associated RIB. Rejected routes cannot be advertised to BGP peers associated with the RIB, but they can still be used to resolve BGP next hops of routes in that RIB. If the active route for a prefix is rejected by the policy, the best BGP route for that prefix in the BGP RIB can be advertised to peers as though it is used.</p> <p>Aggregate routes are always imported into each RIB, independent of the specified policy.</p> <p>Route modifications specified in the actions of the policy are ignored and have no effect on the imported routes.</p> <p>When unconfigured, or if the command refers to an empty policy, all non-BGP routes from the IP route table are imported into the applicable RIB.</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **label-ipv6**

Synopsis	Enter the <b>label-ipv6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp rib-management label-ipv6</a>
Tree	<a href="#">label-ipv6</a>
Introduced	22.2.R1
Platforms	All

### **leak-import**

Synopsis	Enter the <b>leak-import</b> context
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Context	<b>configure service vprn string</b> <a href="#">bgp rib-management label-ipv6 leak-import</a>
Tree	<a href="#">leak-import</a>
Introduced	22.2.R1
Platforms	All

### **policy** (*policy-expr-string* | *string*)

Synopsis	Leak import policy name
Context	<b>configure service vprn string</b> <a href="#">bgp rib-management label-ipv6 leak-import policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies one or more leak import policies.  Policy names are limited to 64 characters except for the first policy. Only one object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT).
String Length	1 to 255
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	22.2.R1
Platforms	All

### **router-id** *string*

Synopsis	Router ID for the BGP instance in the AS
Context	<b>configure service vprn string</b> <a href="#">bgp router-id</a> <i>string</i>
Tree	<a href="#">router-id</a>
Description	This command specifies the router ID to be used with the BGP instance.  Changing the BGP router ID on an active BGP instance causes the BGP instance to restart with the new router ID.  When an SR OS is configured with an IPv6-only BOF and no IPv4 system interface address, explicitly-defined IPv4 router IDs are required for BGP as there is no mechanism to derive the router ID from an IPv6 system interface address.
Introduced	16.0.R1
Platforms	All

## send-communities

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure service vprn string bgp send-communities</b>
Tree	<a href="#">send-communities</a>
Introduced	16.0.R1
Platforms	All

## extended *boolean*

Synopsis	Advertise the Extended Communities attribute to peers
Context	<b>configure service vprn string bgp send-communities extended boolean</b>
Tree	<a href="#">extended</a>
Default	true
Introduced	16.0.R1
Platforms	All

## large *boolean*

Synopsis	Advertise the Large Communities attribute to peers
Context	<b>configure service vprn string bgp send-communities large boolean</b>
Tree	<a href="#">large</a>
Default	true
Introduced	16.0.R1
Platforms	All

## standard *boolean*

Synopsis	Advertise the Communities attribute to peers
Context	<b>configure service vprn string bgp send-communities standard boolean</b>
Tree	<a href="#">standard</a>
Default	true
Introduced	16.0.R1
Platforms	All

## send-default

Synopsis	Enter the <b>send-default</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a>
Tree	<a href="#">send-default</a>
Introduced	19.7.R1
Platforms	All

## export-policy *reference*

Synopsis	Export policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	19.7.R1
Platforms	All

## ipv4 *boolean*

Synopsis	Enable IPv4 family type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	19.7.R1
Platforms	All

## ipv6 *boolean*

Synopsis	Enable IPv6 family type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp</a> <a href="#">send-default</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	19.7.R1
Platforms	All

**split-horizon** *boolean*

Synopsis	Prevent routes being reflected back to best-route peer
Context	<b>configure</b> <i>service vprn string bgp split-horizon boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split-horizon.</p> <p>This command prevents routes from being reflected back to a peer that sends the best route. It applies to routes of all address families and to any type of sending peer; confed-EBGP, EBGP and IBGP.</p> <p>Enabling the split-horizon functionality may have a detrimental impact on peer and route scaling and should only be used when absolutely necessary.</p> <p>When configured to <b>false</b>, the use of split-horizon is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**tcp-mss** *number*

Synopsis	TCP maximum segment size override
Context	<b>configure</b> <i>service vprn string bgp tcp-mss number</i>
Tree	<a href="#">tcp-mss</a>
Description	<p>This command configures an override for the TCP maximum segment size to use with a specific peer or set of peers (depending on the scope of the command).</p> <p>The configured value controls two properties of the TCP connection as follows:</p> <p>TCP MSS option - The router advertises the TCP MSS option value in the TCP SYN packet it sends as part of the 3-way handshake. The advertised value may be lower than the configured value, depending on the IP MTU of the first hop IP interface. The peers must abide by this value when sending TCP segments to the local router.</p> <p>TCP maximum segment size - The actual transmitted size may be lower than the configured value, depending on the TCP MSS option value signaled by the peers, the effect of path MTU discovery, or other factors.</p>
Range	384 to 9746
Introduced	21.2.R1
Platforms	All

**third-party-nexthop** *boolean*

Synopsis	Apply third-party next-hop processing to EBGP peers
Context	<b>configure</b> <i>service vprn string bgp third-party-nexthop boolean</i>

Tree	<a href="#">third-party-nexthop</a>
Description	<p>When configured to <b>true</b>, this command enables the router to send third-party next hop to EBGp peers in the same subnet as the source peer. The address family of the transport must match the address family of the route.</p> <p>When an IPv4 or IPv6 route is received from one EBGp peer and advertised to another EBGp peer in the same IP subnet, the BGP next hop is left unchanged.</p> <p>When configured to <b>false</b>, third-party next-hop processing is disabled and the next hop carries the IP address of the interface used to establish the TCP connection to the peer.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## bgp-evpn

Synopsis	Enter the <b>bgp-evpn</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn</a>
Tree	<a href="#">bgp-evpn</a>
Introduced	20.10.R1
Platforms	All

## mpls [[bgp-instance](#)] *number*

Synopsis	Enter the <b>mpls</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i>
Tree	<a href="#">mpls</a>
Introduced	20.10.R1
Platforms	All

## [[bgp-instance](#)] *number*

Synopsis	BGP instance ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i>
Tree	<a href="#">mpls</a>
Range	1
Notes	This element is part of a list key.
Introduced	20.10.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of BGP-EVPN MPLS

Context **configure service vprn string bgp-evpn mpls number admin-state keyword**

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 20.10.R1

Platforms All

### **auto-bind-tunnel**

Synopsis Enter the **auto-bind-tunnel** context

Context **configure service vprn string bgp-evpn mpls number auto-bind-tunnel**

Tree [auto-bind-tunnel](#)

Description Commands in this context configure the automatic binding parameters of a BGP-EVPN service using tunnels to MP-BGP peers.

Introduced 20.10.R1

Platforms All

### **allow-flex-algo-fallback** *boolean*

Synopsis Enable flexible algorithm fallback

Context **configure service vprn string bgp-evpn mpls number auto-bind-tunnel allow-flex-algo-fallback boolean**

Tree [allow-flex-algo-fallback](#)

Description When configured to **true**, a BGP router with a Flex-Algorithm action configured (via the **configure policy-options policy-statement entry action flex-algo** command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.

When configured to **false**, the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.

Default false

Introduced 20.10.R3

Platforms All

**ecmp number**

Synopsis	Maximum ECMP routes allowed
Context	<b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel</b> <b>ecmp number</b>
Tree	<b>ecmp</b>
Description	This command configures the maximum number of tunnels that can be used as ECMP next hops for the VPRN. This value overrides the ECMP value configured at the <b>configure service vprn</b> context level.
Range	1 to 32
Default	1
Introduced	20.10.R1
Platforms	All

**enforce-strict-tunnel-tagging boolean**

Synopsis	Allow enforcement of strict tunnel tagging
Context	<b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel</b> <b>enforce-strict-tunnel-tagging boolean</b>
Tree	<b>enforce-strict-tunnel-tagging</b>
Default	false
Introduced	20.10.R1
Platforms	All

**resolution keyword**

Synopsis	Resolution method for tunnel selection
Context	<b>configure service vprn string bgp-evpn mpls number auto-bind-tunnel</b> <b>resolution keyword</b>
Tree	<b>resolution</b>
Options	none, filter, any
Default	none
Introduced	20.10.R1
Platforms	All



## resolution-filter

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a>
Tree	<a href="#">resolution-filter</a>
Description	Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-EVPN routes within the automatic binding of the BGP-EVPN MPLS service to tunnels to MP-BGP peers.
Introduced	20.10.R1
Platforms	All

## bgp boolean

Synopsis	Use BGP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">bgp boolean</a>
Tree	<a href="#">bgp</a>
Description	When configured to <b>true</b> , BGP searches the BGP LSP for the address of the BGP next hop.  When configured to <b>false</b> , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.
Default	false
Introduced	20.10.R1
Platforms	All

## ldp boolean

Synopsis	Use LDP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">ldp boolean</a>
Tree	<a href="#">ldp</a>
Description	When configured to <b>true</b> , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.  When configured to <b>false</b> , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

### **mpls-fwd-policy** *boolean*

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">mpls-fwd-policy</a> <i>boolean</i>
Tree	<a href="#">mpls-fwd-policy</a>
Description	When configured to <b>true</b> , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.  When configured to <b>false</b> , the MPLS forwarding policy is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

### **rib-api** *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rib-api</a> <i>boolean</i>
Tree	<a href="#">rib-api</a>
Description	When configured to <b>true</b> , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.  When configured to <b>false</b> , the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

### **rsvp** *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <a href="#">number</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rsvp</a> <i>boolean</i>
Tree	<a href="#">rsvp</a>
Description	When configured to <b>true</b> , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP

metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.

When configured to **false**, the RSVP LSP is not used for next-hop resolution.

Default	false
Introduced	20.10.R1
Platforms	All

### **sr-isis** *boolean*

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter sr-isis</a> <i>boolean</i>
Tree	<a href="#">sr-isis</a>
Description	<p>When configured to <b>true</b>, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.</p> <p>When configured to <b>false</b>, IS-IS tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	20.10.R1
Platforms	All

### **sr-ospf** *boolean*

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter sr-ospf</a> <i>boolean</i>
Tree	<a href="#">sr-ospf</a>
Description	<p>When configured to <b>true</b>, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF instance.</p> <p>When configured to <b>false</b>, OSPF tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	20.10.R1
Platforms	All

**sr-ospf3** *boolean*

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter sr-ospf3</b> <i>boolean</i>
Tree	<b>sr-ospf3</b>
Description	When configured to <b>true</b> , BGP uses an OSPF3 tunnel type to determine the address of the BGP next hop.  The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OPSF3 instance.  When configured to <b>false</b> , OSPF3 tunneling is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

**sr-policy** *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter sr-policy</b> <i>boolean</i>
Tree	<b>sr-policy</b>
Description	When configured to <b>true</b> , this command instructs BGP to use an SR policy to determine the address of the BGP next hop. The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.  When configured to <b>false</b> , SR policies are not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

**sr-te** *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>auto-bind-tunnel resolution-filter sr-te</b> <i>boolean</i>
Tree	<b>sr-te</b>
Description	When configured to <b>true</b> , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.

When configured to **false**, SR-TE tunneling is not used for next-hop resolution.

Default	false
Introduced	20.10.R1
Platforms	All

### udp *boolean*

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">auto-bind-tunnel resolution-filter</a> <a href="#">udp boolean</a>
Tree	<a href="#">udp</a>
Description	When configured to <b>true</b> , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to <b>false</b> , MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	20.10.R1
Platforms	All

### default-route-tag *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">default-route-tag string</a>
Tree	<a href="#">default-route-tag</a>
Description	This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed. When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority. The following are examples of the conflict priority handling: <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag X</b> and <b>proxy-arp evpn-route-tag Y</b>, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> </ul>

- If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB.

The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.

Introduced	20.10.R1
Platforms	All

## domain-id *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Domain ID of received BGP route before readvertisement
Context	<b>configure service vpn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>domain-id</b> <i>string</i>
Tree	<b>domain-id</b>
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <pre>Seg Len=1 / 65000:1:128</pre> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <pre>Seg Len=2 / 65000:2:70 / 65000:1:128</pre> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p>
Introduced	21.10.R1
Platforms	All

**dynamic-egress-label-limit** *boolean*

Synopsis	Enables dynamic egress label limit
Context	<b>configure service vprn string bgp-evpn mpls number dynamic-egress-label-limit boolean</b>
Tree	<a href="#">dynamic-egress-label-limit</a>
Description	<p>When configured to <b>true</b>, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.</p> <p>For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.</p> <p>For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.</p> <p>When configured to <b>false</b> this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.</p>
Default	false
Introduced	22.2.R1
Platforms	All

**evi** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVPN instance ID
Context	<b>configure service vprn string bgp-evpn mpls number evi number</b>
Tree	<a href="#">evi</a>
Description	This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) that is associated with the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment.
Range	1 to 16777215
Introduced	22.10.R1
Platforms	All

**evpn-link-bandwidth**

Synopsis	Enter the <b>evpn-link-bandwidth</b> context
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Context	<b>configure service vprn string bgp-evpn mpls number evpn-link-bandwidth</b>
Tree	<a href="#">evpn-link-bandwidth</a>
Introduced	22.7.R1
Platforms	All

## advertise

Synopsis	Enable the <b>advertise</b> context
Context	<b>configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise</b>
Tree	<a href="#">advertise</a>
Introduced	22.7.R1
Platforms	All

## max-dynamic-weight *number*

Synopsis	Maximum dynamic weight of the route
Context	<b>configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise max-dynamic-weight number</b>
Tree	<a href="#">max-dynamic-weight</a>
Description	This command configures the maximum weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. If weight dynamic is configured, the actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight.
Range	1 to 128
Default	128
Introduced	22.7.R1
Platforms	All

## weight (*number* | *keyword*)

Synopsis	Weight of the route
Context	<b>configure service vprn string bgp-evpn mpls number evpn-link-bandwidth advertise weight (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">weight</a>
Description	This command configures the weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service.



If set to **dynamic**, the weight is dynamically set based on the number of BGP PE-CE paths for the IP-Prefix that is advertised in an EVPN IP-Prefix route.

Range	1 to 128
Options	dynamic
Default	dynamic
Introduced	22.7.R1
Platforms	All

### **weighted-ecmp** *boolean*

Synopsis	Enable weighted ECMP
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>evpn-link-bandwidth</b> <b>weighted-ecmp</b> <i>boolean</i>
Tree	<b>weighted-ecmp</b>
Description	<p>When configured to <b>true</b>, the router supports the processing of the EVPN link bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the VPRN route table.</p> <p>Flows to an IP Prefix received with a weight and a zero ESI value are sprayed according to the weight. If the EVPN IP-Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not an integer).</p> <p>The command also enables the weighted ECMP functionality for BGP CEs that are configured with an <b>evpn-link-bandwidth add-to-received-bgp</b> weight.</p> <p>When configured to <b>false</b>, the router disables the processing of the EVPN link bandwidth extended community.</p>
Default	false
Introduced	22.7.R1
Platforms	All

### **route-distinguisher** (*string* | *keyword*)

Synopsis	Route distinguisher
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>bgp-evpn mpls</b> <i>number</i> <b>route-distinguisher</b> ( <i>string</i>   <i>keyword</i> )
Tree	<b>route-distinguisher</b>
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.
Options	auto-rd

Introduced	20.10.R1
Platforms	All

## send-tunnel-encap

Synopsis	Enter the <b>send-tunnel-encap</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">send-tunnel-encap</a>
Tree	<a href="#">send-tunnel-encap</a>
Introduced	20.10.R1
Platforms	All

## mpls *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS encapsulation
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">send-tunnel-encap mpls</a> <i>boolean</i>
Tree	<a href="#">mpls</a>
Default	true
Introduced	20.10.R1
Platforms	All

## mpls-over-udp *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable MPLS over UDP encapsulation
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">send-tunnel-encap mpls-over-udp</a> <i>boolean</i>
Tree	<a href="#">mpls-over-udp</a>
Default	false
Introduced	20.10.R1
Platforms	All

**vrf-export**

Synopsis	Enable the <b>vrf-export</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>vrf-export</b>
Tree	<a href="#">vrf-export</a>
Description	<p>Commands in this context specify route policies that control how routes are exported from the local VRF to other VRFs on the same or remote PE routers (via MP-BGP). Aggregate routes are not advertised via MP-BGP protocols to other MP-BGP peers. Route policies are configured in the <b>configure policy-options</b> context.</p>
Introduced	20.10.R1
Platforms	All

**policy** (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <b>vrf-export</b> <b>policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	20.10.R1
Platforms	All

## vrf-import

Synopsis	Enable the <b>vrf-import</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">vrf-import</a>
Tree	<a href="#">vrf-import</a>
Description	<p>Commands in this context specify route policies that control how VPN-IP and EVPN-IFL routes that are exported by other VRFs on the same or remote PEs, are imported into the local VRF.</p> <p>Route policies are configured in the <b>configure policy-options</b> context.</p> <p>Unless the preference value is changed by the policy, the preference value for BGP-VPN and EVPN-IFL routes specified in this context is set to 170 when imported from remote PE routers, or the value is retained from the protocol preference value of the exported route when imported from other VRFs on the same router.</p>
Introduced	20.10.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-evpn mpls number</a> <a href="#">vrf-import</a> <a href="#">policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.

Introduced	20.10.R1
Platforms	All

## **vrf-target**

Synopsis	Enter the <b>vrf-target</b> context
Context	<b>configure service vprn string bgp-evpn mpls number vrf-target</b>
Tree	<b>vrf-target</b>
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	20.10.R1
Platforms	All

## **community string**

Synopsis	Extended BGP community
Context	<b>configure service vprn string bgp-evpn mpls number vrf-target community string</b>
Tree	<b>community</b>
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	20.10.R1
Platforms	All

## **export-community string**

Synopsis	Communities sent to remote PE neighbors
Context	<b>configure service vprn string bgp-evpn mpls number vrf-target export-community string</b>
Tree	<b>export-community</b>

String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	20.10.R1
Platforms	All

### **import-community** *string*

Synopsis	Communities accepted from remote PE neighbors
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">mpls</a> <i>number</i> <a href="#">vrf-target</a> <b>import-community</b> <i>string</i>
Tree	<a href="#">import-community</a>
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	20.10.R1
Platforms	All

### **segment-routing-v6** [[bgp-instance](#)] *number*

Synopsis	Enter the <b>segment-routing-v6</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[bgp-instance]** *number*

Synopsis	BGP instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-evpn</a> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**admin-state** *keyword*

Synopsis	Administrative state of segment routing over IPv6
Context	<b>configure service vpn</b> <i>string</i> <b>bgp-evpn segment-routing-v6</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**default-route-tag** *string*

Synopsis	Default route tag
Context	<b>configure service vpn</b> <i>string</i> <b>bgp-evpn segment-routing-v6</b> <i>number</i> <b>default-route-tag</b> <i>string</i>
Tree	<b>default-route-tag</b>
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> <i>X</i> and <b>proxy-arp evpn-route-tag</b> <i>Y</i>, the EVPN uses route tag <i>Y</i> when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> <li>• If a given IP-prefix route is tagged in the route-table with tag <i>A</i> and the R-VPLS, in which the route is advertised, uses <i>B</i> as the <b>default-route-tag</b>, then EVPN keeps tag <i>A</i> when sending the route to the BGP RIB.</li> </ul> <p>The <b>default-route-tag</b> configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## domain-id string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Domain ID of received BGP route before readvertisement
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number domain-id string</b>
Tree	<b>domain-id</b>
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <pre>Seg Len=1 / 65000:1:128</pre> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <pre>Seg Len=2 / 65000:2:70 / 65000:1:128</pre> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## evi number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	EVI information
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number evi number</b>
Tree	<b>evi</b>
Description	This command configures the EVI that identifies the BGP EVPN instance in a VPRN (for the EVPN-IFL model) or an R-VPLS (for the EVPN-IFF model) that is associated with



the Layer 3 Ethernet segment. This configuration is required on the PEs attached to the Ethernet segment and on the remote PEs that need to create ES destinations to the MH Layer 3 Ethernet segment.

Range	1 to 16777215
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### evpn-link-bandwidth

Synopsis	Enter the <b>evpn-link-bandwidth</b> context
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number evpn-link-bandwidth</b>
Tree	<b>evpn-link-bandwidth</b>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### advertise

Synopsis	Enable the <b>advertise</b> context
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number evpn-link-bandwidth advertise</b>
Tree	<b>advertise</b>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### max-dynamic-weight *number*

Synopsis	Maximum dynamic weight of the route
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number evpn-link-bandwidth advertise max-dynamic-weight number</b>
Tree	<b>max-dynamic-weight</b>
Description	This command configures the maximum weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service. The actual advertised weight is the minimum of the number of BGP PE-CE paths for the prefix and the configured maximum weight.
Range	1 to 128
Default	128
Introduced	23.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **weight** (*number* | *keyword*)

Synopsis Weight of the route

Context **configure service vprn** *string* **bgp-evpn segment-routing-v6** *number* **evpn-link-bandwidth advertise weight** (*number* | *keyword*)

Tree **weight**

Description This command configures the weight advertised in the EVPN link bandwidth extended community for the advertised EVPN IP-Prefix routes for the service.

Range 1 to 128

Options dynamic

Default dynamic

Introduced 23.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **weighted-ecmp** *boolean*

Synopsis Enable weighted ECMP

Context **configure service vprn** *string* **bgp-evpn segment-routing-v6** *number* **evpn-link-bandwidth weighted-ecmp** *boolean*

Tree **weighted-ecmp**

Description When configured to **true**, the router supports the processing of the EVPN link bandwidth extended community when installing an ECMP set for an EVPN IP-Prefix route in the VPRN route table.

Flows to an IP Prefix received with a weight and a zero ESI value are sprayed according to the weight. If the EVPN IP-Prefix route received with the weight has a non-zero ESI, the weight is divided into the number of PEs attached to the Ethernet Segment (and rounded up if the result is not an integer).

The command also enables the weighted ECMP functionality for BGP CEs that are configured with an **evpn-link-bandwidth add-to-received-bgp** weight.

When configured to **false**, the router disables the processing of the EVPN link bandwidth extended community.

Default false

Introduced 23.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**resolution** *keyword*

Synopsis	Resolution options for routes
Context	<b>configure</b> <b>service vpn</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>resolution</b> <i>keyword</i>
Tree	<b>resolution</b>
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**route-distinguisher** (*string* | *keyword*)

Synopsis	Route distinguisher
Context	<b>configure</b> <b>service vpn</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>route-distinguisher</b> ( <i>string</i>   <i>keyword</i> )
Tree	<b>route-distinguisher</b>
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs.  Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the <b>configure service system</b> level.
Options	auto-rd
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**source-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	<b>configure</b> <b>service vpn</b> <i>string</i> <b>bgp-evpn</b> <b>segment-routing-v6</b> <i>number</i> <b>source-address</b> <i>string</i>
Tree	<b>source-address</b>
Description	When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.  When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.

A source IPv6 address must be configured in this context or in the base router context.  
The system does not check if the address entered is a valid local address.

Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## srv6

Synopsis	Enter the <b>srv6</b> context
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number srv6</b>
Tree	<b>srv6</b>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## default-locator *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number srv6 default-locator string</b>
Tree	<b>default-locator</b>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## instance *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing IPv6 instance
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number srv6 instance reference</b>
Tree	<b>instance</b>
Reference	<b>configure service vprn string segment-routing-v6 number</b>

Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## vrf-export

Synopsis	Enable the <b>vrf-export</b> context
Context	<b>configure service vprn string</b> <a href="#">bgp-evpn segment-routing-v6 number vrf-export</a>
Tree	<a href="#">vrf-export</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	<b>configure service vprn string</b> <a href="#">bgp-evpn segment-routing-v6 number vrf-export policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## vrf-import

Synopsis	Enable the <b>vrf-import</b> context
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number vrf-import</b>
Tree	<b>vrf-import</b>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number vrf-import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## vrf-target

Synopsis	Enter the <b>vrf-target</b> context
Context	<b>configure service vprn string bgp-evpn segment-routing-v6 number vrf-target</b>

Tree	<a href="#">vrf-target</a>
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **community** *string*

Synopsis	Extended BGP community
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <a href="#">community</a> <i>string</i>
Tree	<a href="#">community</a>
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **export-community** *string*

Synopsis	Communities sent to remote PE neighbors
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <a href="#">export-community</a> <i>string</i>
Tree	<a href="#">export-community</a>
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**import-community** *string*

Synopsis	Communities accepted from remote PE neighbors
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-evpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <b>import-community</b> <i>string</i>
Tree	<a href="#">import-community</a>
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**bgp-ipvpn**

Synopsis	Enter the <b>bgp-ipvpn</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a>
Tree	<a href="#">bgp-ipvpn</a>
Introduced	21.2.R1
Platforms	All

**attribute-set**

Synopsis	Enter the <b>attribute-set</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <b>attribute-set</b>
Tree	<a href="#">attribute-set</a>
Description	<p>Commands in this context configure the handling of attribute set (ATTR_SET) attributes attached to VPN-IP routes imported into or exported from the VPRN.</p> <p>ATTR_SET is an optional transitive BGP path attribute standardized by RFC 6368 that is added to BGP L3 VPN routes to provide logical separation between the BGP domain of a customer and the BGP domain of a service provider.</p>
Introduced	23.10.R1
Platforms	All

**export** *boolean*

Synopsis	Add ATTR_SET path attribute to exported VPN-IP routes
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Context	<b>configure service vprn string bgp-ipvpn attribute-set export boolean</b>
Tree	<b>export</b>
Description	<p>When configured to <b>true</b>, the router adds an ATTR_SET path attribute to all VPN-IP routes that come from the VRF export of BGP routes advertised by PE-CE peers of the VPRN. This attribute contains an exact copy of all BGP path attributes (post-import policy) of the PE-CE BGP route, excluding the NEXT_HOP, MP_REACH, and MP_UNREACH attributes, as well as the AS4_PATH or AS4_AGGREGATOR attributes. The origin AS in the ATTR_SET encodes the ASN (or confederation ID, if configured) of the exporting VPRN service. Neither the VRF export policy nor a regular BGP export policy is allowed to modify the contents of the ATTR_SET.</p> <p>When configured to <b>false</b>, the router does not add an ATTR_SET path attribute to VPN-IP routes exported by the VPRN. Nokia recommends configuring this command to <b>false</b>, unless there is a requirement for the VPRN to deliver an independent domain L3 VPN service.</p>
Default	false
Introduced	23.10.R1
Platforms	All

### import keyword

Synopsis	Reception behavior of ATTR_SET
Context	<b>configure service vprn string bgp-ipvpn attribute-set import keyword</b>
Tree	<b>import</b>
Description	<p>This command configures the reception behavior for ATTR_SETs in received VPN-IP routes.</p> <ul style="list-style-type: none"> <li>• <b>accept</b> — BGP accepts and processes ATTR_SETs in received unicast VPN-IP routes (MPLS or SRv6) when they are imported into the VPRN. The path attributes contained inside the ATTR_SET are used for best path selection within the VPRN, instead of the outer path attributes attached to the imported VPN-IP route. The path attributes inside the ATTR_SET determine the path attributes of BGP routes advertised to PE-CE peers of the VPRN. However, the ATTR_SET is removed at the time of advertisement. VPRN BGP routes with attributes derived from <b>accept</b> processing can only be advertised to EBGp peers and IBGP route reflector client peers. VPRN BGP routes cannot be advertised to BGP confederation peers. If the origin AS in the ATTR_SET attribute does not match the configured ASN, VPRN BGP routes with attributes derived from <b>accept</b> processing are advertised to IBGP peers that are not covered by a cluster configuration.</li> <li>• <b>drop</b> — BGP ignores and silently discards ATTR_SETs in received VPN-IP routes when they are imported into the VPRN. The path attributes contained inside the ATTR_SET are not used for best path selection within the VPRN. If a VPRN is not involved in an independent domain L3 VPN service, Nokia recommends configuring this command to use the <b>drop</b> option.</li> <li>• <b>ignore</b> — BGP ignores ATTR_SETs in received VPN-IP routes when they are imported into the VPRN. The path attributes contained inside the ATTR_SET are not</li> </ul>

used for best path selection within the VPRN. With the **ignore** option, the ATTR\_SET attribute is transmitted unchanged to the CE. Nokia recommends not to configure this command to use the **ignore** option in most deployments.

Options	ignore, accept, drop
Default	ignore
Introduced	23.10.R1
Platforms	All

## mpls

Synopsis	Enter the <b>mpls</b> context
Context	<b>configure service vprn string bgp-ipvpn mpls</b>
Tree	<b>mpls</b>
Introduced	21.2.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of BGP-IPVPN MPLS
Context	<b>configure service vprn string bgp-ipvpn mpls admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	All

## auto-bind-tunnel

Synopsis	Enter the <b>auto-bind-tunnel</b> context
Context	<b>configure service vprn string bgp-ipvpn mpls auto-bind-tunnel</b>
Tree	<b>auto-bind-tunnel</b>
Description	Commands in this context configure the automatic binding parameters of a BGP-IPVPN service using tunnels to MP-BGP peers.
Introduced	21.2.R1
Platforms	All

**allow-flex-algo-fallback** *boolean*

Synopsis	Enable flexible algorithm fallback
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvprn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">allow-flex-algo-fallback</a> <i>boolean</i>
Tree	<a href="#">allow-flex-algo-fallback</a>
Description	When configured to <b>true</b> , a BGP router with a Flex-Algorithm action configured (via the <b>configure policy-options policy-statement entry action flex-algo</b> command) can resolve to a tunnel with algorithm 0 if no target Flex-Algorithm tunnel is available.  When configured to <b>false</b> , the BGP router can resolve only to the intended Flex-Algorithm tunnel, which may cause traffic loss if no corresponding Flex-Algorithm tunnel is available.
Default	false
Introduced	21.2.R1
Platforms	All

**ecmp** *number*

Synopsis	Maximum ECMP routes allowed
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvprn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">ecmp</a> <i>number</i>
Tree	<a href="#">ecmp</a>
Description	This command configures the maximum number of tunnels that can be used as ECMP next hops for the VPRN. This value overrides the ECMP value configured at the <b>configure service vprn</b> context level.
Range	1 to 32
Default	1
Introduced	21.2.R1
Platforms	All

**enforce-strict-tunnel-tagging** *boolean*

Synopsis	Allow enforcement of strict tunnel tagging
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvprn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">enforce-strict-tunnel-tagging</a> <i>boolean</i>
Tree	<a href="#">enforce-strict-tunnel-tagging</a>
Description	When configured to <b>true</b> , the system must only consider LSPs marked with an administrative tag for next-hop resolution.

When configured to **false**, tagged RSVP and SR-TE LSPs are considered first. The system then uses untagged LSPs of other types.

Default	false
Introduced	21.2.R1
Platforms	All

### **resolution** *keyword*

Synopsis	Resolution method for tunnel selection
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution</a> <i>keyword</i>
Tree	<a href="#">resolution</a>
Options	none, filter, any
Default	none
Introduced	21.2.R1
Platforms	All

### **resolution-filter**

Synopsis	Enter the <b>resolution-filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a>
Tree	<a href="#">resolution-filter</a>
Description	Commands in this context configure the subset of tunnel types that can be used in the resolution of BGP-IPVPN routes within the automatic binding of the BGP-IPVPN MPLS service to tunnels to MP-BGP peers.
Introduced	21.2.R1
Platforms	All

### **bgp** *boolean*

Synopsis	Use BGP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">bgp</a> <i>boolean</i>
Tree	<a href="#">bgp</a>
Description	When configured to <b>true</b> , BGP searches the BGP LSP for the address of the BGP next hop.  When configured to <b>false</b> , BGP tunneling is not used and inter-area or inter-as prefixes are not resolved.

Default	true
Introduced	21.2.R1
Platforms	All

**gre boolean**

Synopsis	Use GRE tunneling for next-hop resolution
Context	<b>configure service vpn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter gre boolean</b>
Tree	<a href="#">gre</a>
Description	When configured to <b>true</b> , this command enables setting the tunnel type for the auto bind tunnel.
Default	false
Introduced	21.2.R1
Platforms	All

**ldp boolean**

Synopsis	Use LDP tunneling for next-hop resolution
Context	<b>configure service vpn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter ldp boolean</b>
Tree	<a href="#">ldp</a>
Description	When configured to <b>true</b> , BGP searches for an LDP LSP with a FEC prefix corresponding to the address of the BGP next hop.  When configured to <b>false</b> , LDP tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

**mpls-fwd-policy boolean**

Synopsis	Use MPLS forwarding policy for next-hop resolution
Context	<b>configure service vpn string bgp-ipvpn mpls auto-bind-tunnel resolution-filter mpls-fwd-policy boolean</b>
Tree	<a href="#">mpls-fwd-policy</a>
Description	When configured to <b>true</b> , BGP uses the MPLS forwarding policy to determine the address of the BGP next hop.

When configured to **false**, the MPLS forwarding policy is not used for next-hop resolution.

Default	false
Introduced	21.2.R1
Platforms	All

### **rib-api** *boolean*

Synopsis	Use RIB API gRPC service for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rib-api</a> <i>boolean</i>
Tree	<a href="#">rib-api</a>
Description	When configured to <b>true</b> , BGP uses tunnels programmed using the RIB API gRPC service to resolve the next hops of routes imported into the EVPN service.  When configured to <b>false</b> , the RIB API service tunnels are not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

### **rsvp** *boolean*

Synopsis	Use RSVP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls auto-bind-tunnel</a> <a href="#">resolution-filter</a> <a href="#">rsvp</a> <i>boolean</i>
Tree	<a href="#">rsvp</a>
Description	When configured to <b>true</b> , BGP searches the best metric RSVP LSP to determine the address of the BGP next hop. This address can correspond to the system interface or to another loopback interface used by the BGP instance on the remote node. The LSP metric is provided by MPLS in the tunnel table. In the case of multiple RSVP LSPs with the same lowest metric, BGP selects the LSP with the lowest tunnel ID.  When configured to <b>false</b> , the RSVP LSP is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

**sr-isis boolean**

Synopsis	Use IS-IS SR tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-isis boolean</a>
Tree	<a href="#">sr-isis</a>
Description	<p>When configured to <b>true</b>, BGP uses an IS-IS tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered IS-IS instance.</p> <p>When configured to <b>false</b>, IS-IS tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	21.2.R1
Platforms	All

**sr-ospf boolean**

Synopsis	Use OSPF SR tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf boolean</a>
Tree	<a href="#">sr-ospf</a>
Description	<p>When configured to <b>true</b>, BGP uses an OSPF tunnel type to determine the address of the BGP next hop.</p> <p>The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPF instance.</p> <p>When configured to <b>false</b>, OSPF tunneling is not used for next-hop resolution.</p>
Default	false
Introduced	21.2.R1
Platforms	All

**sr-ospf3 boolean**

Synopsis	Use OSPFv3 SR tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls auto-bind-tunnel resolution-filter sr-ospf3 boolean</a>
Tree	<a href="#">sr-ospf3</a>
Description	When configured to <b>true</b> , BGP uses an OSPFv3 tunnel type to determine the address of the BGP next hop.

The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered OSPFv3 instance.

When configured to **false**, OSPFv3 tunneling is not used for next-hop resolution.

Default	false
Introduced	21.2.R1
Platforms	All

### **sr-policy** *boolean*

Synopsis	Use SR policies for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <b>sr-policy</b> <i>boolean</i>
Tree	<a href="#">sr-policy</a>
Description	When configured to <b>true</b> , SR policies are used to determine the address of the BGP next hop.  The SR policy search criteria includes a non-null endpoint and color value that matches the BGP next hop and color extended community value, respectively, of the EVPN route.  When configured to <b>false</b> , SR policies are not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

### **sr-te** *boolean*

Synopsis	Use SR-TE tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">mpls</a> <a href="#">auto-bind-tunnel</a> <a href="#">resolution-filter</a> <b>sr-te</b> <i>boolean</i>
Tree	<a href="#">sr-te</a>
Description	When configured to <b>true</b> , BGP uses an SR-TE tunnel type to determine the address of the BGP next hop.  The SR tunnel to the BGP next hop is selected in the TTM from the lowest-numbered tunnel ID.  When configured to <b>false</b> , SR-TE tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All



**udp boolean**

Synopsis	Use MPLS over UDP tunneling for next-hop resolution
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls auto-bind-tunnel resolution-filter</a> <a href="#">udp boolean</a>
Tree	<a href="#">udp</a>
Description	When configured to <b>true</b> , BGP uses an MPLS over UDP tunnel type to determine the address of the BGP next hop. When configured to <b>false</b> , MPLS over UDP tunneling is not used for next-hop resolution.
Default	false
Introduced	21.2.R1
Platforms	All

**weighted-ecmp boolean**

Synopsis	Allow weighted load-balancing
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls auto-bind-tunnel</a> <a href="#">weighted-ecmp boolean</a>
Tree	<a href="#">weighted-ecmp</a>
Description	When configured to <b>true</b> , this command enables weighted ECMP for packets using tunnels that a VPRN automatically binds to. Packets are sprayed across LSPs in the ECMP according to the outcome of the hash algorithm and the configured load balancing weight of each LSP. When configured to <b>false</b> , this command disables weighted ECMP for next-hop tunnel selection.
Default	false
Introduced	21.2.R1
Platforms	All

**domain-id string**

Synopsis	Domain ID of received BGP route before readvertisement
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">bgp-ipvpn mpls domain-id</a> <a href="#">string</a>
Tree	<a href="#">domain-id</a>
Description	This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i> . Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The

VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).

Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).

In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:

Seg Len=1 / 65000:1:128

If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:

Seg Len=2 / 65000:2:70 / 65000:1:128

That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.

Introduced 21.10.R1

Platforms All

### **dynamic-egress-label-limit** *boolean*

Synopsis Enables dynamic egress label limit

Context **configure** *service vprn string bgp-ipvpn mpls dynamic-egress-label-limit boolean*

Tree [dynamic-egress-label-limit](#)

Description When configured to **true**, this command relaxes the egress MPLS label limit check when resolving BGP next hops in the tunnel table.

For VPRN services, the OAM label is never computed and, therefore, one more egress label is allowed.

For EVPN (Epipe and VPLS) services, the system only computes the control word and ESI label if they are used. For the control word, the system reduces the egress label limit by one label if the control word is configured in the service. When configured, the ESI label is not counted for Epipes or VPLS services without an ES.

When configured to **false** this command, for EVPN, Epipe, and VPLS services, always accounts for the ESI label and control word.

Default false

Introduced 22.2.R1

Platforms All

### **route-distinguisher** (*string* | *keyword*)

Synopsis Route distinguisher

Context	<b>configure service vprn</b> <i>string</i> <b>bgp-ipvpn mpls route-distinguisher</b> ( <i>string</i>   <i>keyword</i> )
Tree	<a href="#">route-distinguisher</a>
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify which VPN the route belongs to.
Options	auto-rd
Introduced	21.2.R1
Platforms	All

## vrf-export

Synopsis	Enable the <b>vrf-export</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>bgp-ipvpn mpls vrf-export</b>
Tree	<a href="#">vrf-export</a>
Description	Commands in this context specify route policies that control how routes are exported from the local VRF to other VRFs on the same or remote PE routers (via MP-BGP). Aggregate routes are not advertised via MP-BGP protocols to other MP-BGP peers. Route policies are configured in the <b>configure policy-options</b> context.
Introduced	21.2.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	<b>configure service vprn</b> <i>string</i> <b>bgp-ipvpn mpls vrf-export policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255

Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

## vrf-import

Synopsis	Enable the <b>vrf-import</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>bgp-ipvpn mpls vrf-import</b>
Tree	<b>vrf-import</b>
Description	<p>Commands in this context specify route policies that control how VPN-IP and EVPN-IFL routes that are exported by other VRFs on the same or remote PEs, are imported into the local VRF.</p> <p>Route policies are configured in the <b>configure policy-options</b> context.</p> <p>Unless the preference value is changed by the policy, the preference value for BGP-VPN and EVPN-IFL routes specified in this context is set to 170 when imported from remote PE routers, or the value is retained from the protocol preference value of the exported route when imported from other VRFs on the same router.</p>
Introduced	21.2.R1
Platforms	All

## policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	<b>configure service vpn</b> <i>string</i> <b>bgp-ipvpn mpls vrf-import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p>

Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.

String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.2.R1
Platforms	All

### **vrf-target**

Synopsis	Enter the <b>vrf-target</b> context
Context	<b>configure service vprn string bgp-ipvpn mpls vrf-target</b>
Tree	<b>vrf-target</b>
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	21.2.R1
Platforms	All

### **community string**

Synopsis	Extended BGP community
Context	<b>configure service vprn string bgp-ipvpn mpls vrf-target community string</b>
Tree	<b>community</b>
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	21.2.R1

Platforms All

### **export-community** *string*

Synopsis Communities sent to remote PE neighbors

Context **configure** [service vprn](#) *string* [bgp-ipvpn mpls vrf-target](#) **export-community** *string*

Tree [export-community](#)

String Length 10 to 28

Notes The following elements are part of a choice: **community** or (**export-community** and **import-community**).

Introduced 21.2.R1

Platforms All

### **import-community** *string*

Synopsis Communities accepted from remote PE neighbors

Context **configure** [service vprn](#) *string* [bgp-ipvpn mpls vrf-target](#) **import-community** *string*

Tree [import-community](#)

String Length 10 to 28

Notes The following elements are part of a choice: **community** or (**export-community** and **import-community**).

Introduced 21.2.R1

Platforms All

### **segment-routing-v6** [[bgp-instance](#)] *number*

Synopsis Enter the **segment-routing-v6** list instance

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) **segment-routing-v6** *number*

Tree [segment-routing-v6](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[bgp-instance]** *number*

Synopsis BGP instance

Context **configure** [service vprn](#) *string* [bgp-ipvpn](#) **segment-routing-v6** *number*

Tree	<a href="#">segment-routing-v6</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of segment routing over IPv6
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **default-route-tag** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default route tag
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <b>default-route-tag</b> <i>string</i>
Tree	<a href="#">default-route-tag</a>
Description	<p>This command configures a route tag that is used when sending a route to the BGP application (for the corresponding service and BGP instance). If the corresponding BGP instance is enabled, the command cannot be changed.</p> <p>When used for BGP EVPN contexts, only one route tag can be passed to BGP for matching on export policies. In case of a conflict with other route tags pushed by EVPN, the default route tag has the least priority.</p> <p>The following are examples of the conflict priority handling:</p> <ul style="list-style-type: none"> <li>• If a service is configured with both <b>default-route-tag</b> X and <b>proxy-arp evpn-route-tag</b> Y, the EVPN uses route tag Y when sending EVPN proxy-arp routes to the BGP RIB for advertisement.</li> </ul>

- If a given IP-prefix route is tagged in the route-table with tag *A* and the R-VPLS, in which the route is advertised, uses *B* as the **default-route-tag**, then EVPN keeps tag *A* when sending the route to the BGP RIB.

The **default-route-tag** configuration is only supported on EVPN and IP-VPN service routes. The route tag for ES and AD per-ES routes is always zero.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## domain-id *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Domain ID of received BGP route before readvertisement
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>bgp-ipvpn</b> <b>segment-routing-v6</b> <i>number</i> <b>domain-id</b> <i>string</i>
Tree	<b>domain-id</b>
Description	<p>This command specifies the domain ID. The domain ID identifies the network from which the BGP route was received before the RTM advertises it to a different neighbor. The domain ID is part of a domain, represented as domain-id:isf_safi_type in the D-PATH attribute, as described in <i>draft-ietf-bess-evpn-ipvpn-interworking</i>. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN-IFL and BGP-IPVPN) or multiple instances of the same owner (for example, VPRN with two BGP-IPVPN instances).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p> <p>In the following example, suppose a gateway receives prefix P in an EVPN-IFL instance with the following D-PATH from neighbor N:</p> <pre>Seg Len=1 / 65000:1:128</pre> <p>If the router imports the route in VPRN-1, BGP-EVPN SRv6 instance with domain 65000:2, it readvertises it to its BGP-IPVPN MPLS instance as follows:</p> <pre>Seg Len=2 / 65000:2:70 / 65000:1:128</pre> <p>That is, the gateway prepends the local domain ID and family to the D-PATH before readvertising the route into a different instance.</p>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR



**resolution** *keyword*

Synopsis	Resolution options for routes
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp-ipvpn</b> <b>segment-routing-v6</b> <i>number</i> <b>resolution</b> <i>keyword</i>
Tree	<b>resolution</b>
Options	route-table, tunnel-table, fallback-tunnel-to-route-table
Default	route-table
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**route-distinguisher** (*string* | *keyword*)

Synopsis	Route distinguisher
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp-ipvpn</b> <b>segment-routing-v6</b> <i>number</i> <b>route-distinguisher</b> ( <i>string</i>   <i>keyword</i> )
Tree	<b>route-distinguisher</b>
Description	This command specifies a unique route distinguisher (RD) to be associated with each routing instance to identify the VPN to which the route belongs.  Alternatively, the system can automatically generate an RD based on the BGP automatic RD range configured at the <b>configure service system</b> level.
Options	auto-rd
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**source-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>bgp-ipvpn</b> <b>segment-routing-v6</b> <i>number</i> <b>source-address</b> <i>string</i>
Tree	<b>source-address</b>
Description	When configured, this command specifies the source IPv6 address used in the SA field of the outer IPv6 header of the SRv6 encapsulated packet.  When not configured, the source IPv6 address is inherited from the configuration of the global default address in the <b>router "base" segment-routing segment-routing-v6 source-address</b> context.

A source IPv6 address must be configured in this context or in the base router context.  
The system does not check if the address entered is a valid local address.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## srv6

Synopsis	Enter the <b>srv6</b> context
Context	<b>configure service vprn string bgp-ipvpn segment-routing-v6 number srv6</b>
Tree	<a href="#">srv6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## default-locator *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Default route locator
Context	<b>configure service vprn string bgp-ipvpn segment-routing-v6 number srv6 default-locator string</b>
Tree	<a href="#">default-locator</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## instance *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Segment Routing IPv6 instance
Context	<b>configure service vprn string bgp-ipvpn segment-routing-v6 number srv6 instance reference</b>
Tree	<a href="#">instance</a>
Reference	<b>configure service vprn string segment-routing-v6 number</b>

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## vrf-export

Synopsis	Enable the <b>vrf-export</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-export</a>
Tree	<a href="#">vrf-export</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-export</a> <a href="#">policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## vrf-import

Synopsis	Enable the <b>vrf-import</b> context
Context	<b>configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-import</b>
Tree	<b>vrf-import</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## policy (*policy-expr-string* | *string*)

Synopsis	Policy name
Context	<b>configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-import policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	<p>This command configures VRF route policies that control routes between local VRFs and other VRFs on the same or remote PE routers (using MP-BGP).</p> <p>Each referenced object is either a policy logical expression or the name of a single policy.</p> <p>Only one referenced object can be a policy logical expression consisting of policy names (enclosed in square brackets) and logical operators (AND, OR, NOT). The objects are evaluated in the specified order to determine whether to accept or reject the route.</p> <p>Only the first policy can have the maximum length and the rest can be up to 64 characters.</p> <p>Aggregate routes are not advertised using MP-BGP protocols to the other MP-BGP peers.</p>
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## vrf-target

Synopsis	Enter the <b>vrf-target</b> context
Context	<b>configure service vprn string bgp-ipvpn segment-routing-v6 number vrf-target</b>

Tree	<a href="#">vrf-target</a>
Description	<p>Commands in this context configure the route target that is added to advertised routes or compared against received routes from other VRFs on the same or remote PE routers (via MP-BGP).</p> <p>BGP-VPN and EVPN-IFL routes imported using a VRF target configuration use the BGP preference value of 170 when imported from remote PE routers, or retain the protocol preference value of the exported route when imported from other VRFs in the same router.</p> <p>Configured VRF import or export policies override the VRF target policy.</p>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **community** *string*

Synopsis	Extended BGP community
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <a href="#">community</a> <i>string</i>
Tree	<a href="#">community</a>
Description	This command configures an extended BGP community in the form type:x:y. Type can only be target and x and y are 16-bit integers.
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **export-community** *string*

Synopsis	Communities sent to remote PE neighbors
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">bgp-ipvpn</a> <a href="#">segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <a href="#">export-community</a> <i>string</i>
Tree	<a href="#">export-community</a>
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**import-community** *string*

Synopsis	Communities accepted from remote PE neighbors
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-ipvpn segment-routing-v6</a> <i>number</i> <a href="#">vrf-target</a> <b>import-community</b> <i>string</i>
Tree	<a href="#">import-community</a>
String Length	10 to 28
Notes	The following elements are part of a choice: <b>community</b> or ( <b>export-community</b> and <b>import-community</b> ).
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**bgp-shared-queue**

Synopsis	Enable the <b>bgp-shared-queue</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-shared-queue</a>
Tree	<a href="#">bgp-shared-queue</a>
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	Committed information rate for shared queue
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-shared-queue</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 100000000
Units	kilobps
Options	max
Default	4000
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	Peak information rate for shared queue
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">bgp-shared-queue</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )

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Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	4000
Introduced	16.0.R1
Platforms	All

### **bgp-vpn-backup**

Synopsis	Enter the <b>bgp-vpn-backup</b> context
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-vpn-backup</a>
Tree	<a href="#">bgp-vpn-backup</a>
Introduced	16.0.R1
Platforms	All

### **ipv4 *boolean***

Synopsis	Allow BGP-VPN to be used as backup for IPv4 prefixes
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-vpn-backup</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ipv6 *boolean***

Synopsis	Allow BGP-VPN to be used as backup for IPv6 prefixes
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">bgp-vpn-backup</a> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

**carrier-carrier-vpn** *boolean*

Synopsis	Allow VPRN service to support a Carrier Supporting Carrier model
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">carrier-carrier-vpn</a> <i>boolean</i>
Tree	<a href="#">carrier-carrier-vpn</a>
Default	false
Introduced	16.0.R1
Platforms	All

**class-forwarding** *boolean*

Synopsis	Allow packet forwarding based on forwarding class
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">class-forwarding</a> <i>boolean</i>
Tree	<a href="#">class-forwarding</a>
Default	false
Introduced	19.10.R1
Platforms	All

**confederation**

Synopsis	Enter the <b>confederation</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">confederation</a>
Tree	<a href="#">confederation</a>
Introduced	16.0.R1
Platforms	All

**confed-as-num** *number*

Synopsis	Confederation number within an autonomous system
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">confederation</a> <a href="#">confed-as-num</a> <i>number</i>
Tree	<a href="#">confed-as-num</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All



**members** [*as-number*] *number*

Synopsis	Add a list entry for <b>members</b>
Context	<b>configure service vprn string confederation members</b> <i>number</i>
Tree	<b>members</b>
Max. Instances	256
Introduced	16.0.R1
Platforms	All

**[as-number]** *number*

Synopsis	Confederation AS number
Context	<b>configure service vprn string confederation members</b> <i>number</i>
Tree	<b>members</b>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**customer** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service customer ID
Context	<b>configure service vprn string customer</b> <i>reference</i>
Tree	<b>customer</b>
Reference	<b>configure service customer</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**d-path-length-ignore** *boolean*

Synopsis	Enable D-PATH length ignore
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Context	<b>configure service vprn</b> <i>string</i> <b>d-path-length-ignore</b> <i>boolean</i>
Tree	<b>d-path-length-ignore</b>
Description	When configured to <b>true</b> , the VPRN RTM ignores the D-PATH domain segment length for best path selection purposes (for routes in the VPRN). This allows the user to control whether the RTM considers the D-PATH length when comparing two VPN routes with different RDs.  When configured to <b>false</b> , the router does not ignore the D-PATH domain segment length.
Default	false
Introduced	21.10.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure service vprn</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **dhcp-server**

Synopsis	Enter the <b>dhcp-server</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server</b>
Tree	<b>dhcp-server</b>
Introduced	16.0.R1
Platforms	All

### **dhcpv4** [*name*] *string*

Synopsis	Enter the <b>dhcpv4</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i>
Tree	<b>dhcpv4</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	DHCP server name
Context	<b>configure service vprn string dhcp-server dhcpv4 string</b>
Tree	<b>dhcpv4</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCP server
Context	<b>configure service vprn string dhcp-server dhcpv4 string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure service vprn string dhcp-server dhcpv4 string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure service vprn string dhcp-server dhcpv4 string failover</b>
Tree	<b>failover</b>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the failover mechanism

Context **configure** *service vprn string dhcp-server dhcpv4 string failover admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-mclt-on-takeover** *boolean*

Synopsis Ignore maximum client lead during takeover from partner

Context **configure** *service vprn string dhcp-server dhcpv4 string failover ignore-mclt-on-takeover boolean*

Tree [ignore-mclt-on-takeover](#)

Description When configured to **true**, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.

When configured to **false**, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-client-lead-time** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Maximum time that DHCP server can extend client's lease

Context **configure** *service vprn string dhcp-server dhcpv4 string failover maximum-client-lead-time number*

Tree [maximum-client-lead-time](#)

Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **partner-down-delay** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover partner-down-delay</a> <i>number</i>
Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i>
Tree	<a href="#">peer</a>

Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [address] *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sync-tag *string*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### startup-wait-time *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure service vprn string dhcp-server dhcpv4 string failover startup-wait-time number</b>
Tree	<a href="#">startup-wait-time</a>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **force-renews** *boolean*

Synopsis	Send FORCERENEW messages to force renewals of leases
Context	<b>configure service vprn string dhcp-server dhcpv4 string force-renews boolean</b>
Tree	<a href="#">force-renews</a>
Description	When configured to <b>true</b> , FORCERENEW messages are enabled for DHCP.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-hold**

Synopsis	Enter the <b>lease-hold</b> context
Context	<b>configure service vprn string dhcp-server dhcpv4 string lease-hold</b>
Tree	<a href="#">lease-hold</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **additional-scenarios**

Synopsis	Enter the <b>additional-scenarios</b> context
Context	<b>configure service vprn string dhcp-server dhcpv4 string lease-hold additional-scenarios</b>
Tree	<a href="#">additional-scenarios</a>

Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **internal-lease-ipsec** *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">lease-hold</a> <a href="#">additional-scenarios internal-lease-ipsec</a> <i>boolean</i>
Tree	<a href="#">internal-lease-ipsec</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **solicited-release** *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">lease-hold</a> <a href="#">additional-scenarios solicited-release</a> <i>boolean</i>
Tree	<a href="#">solicited-release</a>
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **time** *number*

Synopsis	Lease hold time
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">lease-hold</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**pool** [*pool-name*] *string*

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv4 string pool string</i>
Tree	<i>pool</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[pool-name]** *string*

Synopsis	DHCP server pool name
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv4 string pool string</i>
Tree	<i>pool</i>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv4 string pool string description string</i>
Tree	<i>description</i>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv4 string pool string failover</i>
Tree	<i>failover</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-mclt-on-takeover** *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <b>ignore-mclt-on-takeover</b> <i>boolean</i>
Tree	<a href="#">ignore-mclt-on-takeover</a>
Description	<p>When configured to <b>true</b>, the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.</p> <p>When configured to <b>false</b>, the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-client-lead-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <b>maximum-client-lead-time</b> <i>number</i>
Tree	<a href="#">maximum-client-lead-time</a>

Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **partner-down-delay** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <b>partner-down-delay</b> <i>number</i>
Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <b>peer</b> <i>reference</i>
Tree	<a href="#">peer</a>

Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [address] *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sync-tag *string*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### startup-wait-time *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover startup-wait-time</b> <i>number</i>
Tree	<b>startup-wait-time</b>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-lease-time** *number*

Synopsis	Maximum lease time
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>max-lease-time</b> <i>number</i>
Tree	<b>max-lease-time</b>
Range	10 to 315446399
Units	seconds
Default	864000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-lease-time** *number*

Synopsis	Minimum lease time
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>min-lease-time</b> <i>number</i>
Tree	<b>min-lease-time</b>
Range	10 to 315446399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**minimum-free**

Synopsis	Enter the <b>minimum-free</b> context
Context	<b>configure service vprn string dhcp-server dhcpv4 string pool string minimum-free</b>
Tree	<b>minimum-free</b>
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**absolute number**

Synopsis	Minimum number of free addresses in this pool or subnet
Context	<b>configure service vprn string dhcp-server dhcpv4 string pool string minimum-free absolute number</b>
Tree	<b>absolute</b>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event-when-depleted boolean**

Synopsis	Generate notification when addresses are depleted
Context	<b>configure service vprn string dhcp-server dhcpv4 string pool string minimum-free event-when-depleted boolean</b>
Tree	<b>event-when-depleted</b>
Description	When configured to <b>true</b> , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted.  When configured to <b>false</b> , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**percent** *number*

Synopsis	Minimum free addresses as a percentage
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">minimum-free percent</a> <i>number</i>
Tree	<a href="#">percent</a>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nak-non-matching-subnet** *boolean*

Synopsis	Send NAK if no match for request address pool range
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">nak-non-matching-subnet</a> <i>boolean</i>
Tree	<a href="#">nak-non-matching-subnet</a>
Description	When configured to <b>true</b> , a NAK response when the local DHCPv4 server receives a DHCP request with option 50 (the client is trying to request a previously allocated message). If the address-allocation algorithm uses a pool that does not contain the requested address, the system returns the DHCP NAK.  When configured to <b>false</b> or unconfigured, the system drops the DHCP packet.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**offer-time** *number*

Synopsis	Time interval during which a DHCP offer remains valid
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">offer-time</a> <i>number</i>
Tree	<a href="#">offer-time</a>
Range	10 to 600
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure service vprn string dhcp-server dhcpv4 string pool string options</b>
Tree	<b>options</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option [number] (number | keyword)**

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure service vprn string dhcp-server dhcpv4 string pool string options option (number   keyword)</b>
Tree	<b>option</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number] (number | keyword)**

Synopsis	DHCP option to send identification strings to client
Context	<b>configure service vprn string dhcp-server dhcpv4 string pool string options option (number   keyword)</b>
Tree	<b>option</b>
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ascii-string string**

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure service vprn string dhcp-server dhcpv4 string pool string options option (number   keyword) ascii-string string</b>
Tree	<b>ascii-string</b>



String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option as time duration
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<a href="#">duration</a>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Empty DHCP option.
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-address** *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv4-address</a> <i>string</i>
Tree	<a href="#">ipv4-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">netbios-node-type</a> <i>keyword</i>
Tree	<a href="#">netbios-node-type</a>
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet** [[ipv4-prefix](#)] *string*

Synopsis	Enter the <b>subnet</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">subnet</a> <i>string</i>
Tree	<a href="#">subnet</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv4-prefix]** *string*

Synopsis IPv4 prefix for the subnet  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [pool](#) *string* [subnet](#) *string*  
 Tree [subnet](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address-range** [[start](#)] *string* [end](#) *string*

Synopsis Enter the **address-range** list instance  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [pool](#) *string* [subnet](#) *string* [address-range](#) *string* [end](#) *string*  
 Tree [address-range](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[start]** *string*

Synopsis Lower bound of the IP address range  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string* [pool](#) *string* [subnet](#) *string* [address-range](#) *string* [end](#) *string*  
 Tree [address-range](#)  
 Description This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end** *string*

Synopsis Upper bound of the IP address range

Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>address-range</b> <i>string</i> <b>end</b> <i>string</i>
Tree	<b>address-range</b>
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover-control-type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>address-range</b> <i>string</i> <b>end</b> <i>string</i> <b>failover-control-type</b> <i>keyword</i>
Tree	<b>failover-control-type</b>
Options	local, remote, access-driven
Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **drain** *boolean*

Synopsis	Prevent new lease assignment from this subnet
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>drain</b> <i>boolean</i>
Tree	<b>drain</b>
Description	When configured to <b>true</b> , new leases cannot be assigned and existing leases are kept up until they are released. When configured to <b>false</b> , the subnet is active and new leases can be assigned.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**exclude-addresses** [*start*] *string end string*

Synopsis	Add a list entry for <b>exclude-addresses</b>
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</i>
Tree	<b>exclude-addresses</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[start]** *string*

Synopsis	Lower bound of the IP address range
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</i>
Tree	<b>exclude-addresses</b>
Description	This command specifies the start of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end** *string*

Synopsis	Upper bound of the IP address range
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv4 string pool string subnet string exclude-addresses string end string</i>
Tree	<b>exclude-addresses</b>
Description	This command specifies the end of a range of IP addresses that are excluded from the pool of IP addresses in this subnet.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-declined** *number*

Synopsis	Maximum number of declined addresses allowed
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Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>maximum-declined</b> <i>number</i>
Tree	<b>maximum-declined</b>
Max. Range	0 to 4294967295
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **minimum-free**

Synopsis	Enter the <b>minimum-free</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>minimum-free</b>
Tree	<b>minimum-free</b>
Description	Commands in this context specify the minimum number of free addresses in this pool.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **absolute** *number*

Synopsis	Minimum number of free addresses in this pool or subnet
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>minimum-free absolute</b> <i>number</i>
Tree	<b>absolute</b>
Range	0 to 255
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event-when-depleted** *boolean*

Synopsis	Generate notification when addresses are depleted
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>minimum-free event-when-depleted</b> <i>boolean</i>
Tree	<b>event-when-depleted</b>

Description	When configured to <b>true</b> , a system-generated event is generated when all available addresses in the pool or subnet of a local DHCP server are depleted. When configured to <b>false</b> , no action is taken when all available addresses in the pool or subnet of a local DHCP server are depleted.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### percent *number*

Synopsis	Minimum free addresses as a percentage
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv4 string pool string subnet string minimum-free percent number</i>
Tree	<b>percent</b>
Range	0 to 100
Default	1
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### options

Synopsis	Enter the <b>options</b> context
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv4 string pool string subnet string options</i>
Tree	<b>options</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### option [*number*] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv4 string pool string subnet string options option (number   keyword)</i>
Tree	<b>option</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number]** (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>option</b>
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string</b> <i>string</i>
Tree	<b>ascii-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duration** *number*

Synopsis	DHCP option as time duration
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv4</b> <i>string</i> <b>pool</b> <i>string</i> <b>subnet</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<b>duration</b>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## empty

Synopsis Empty DHCP option

Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* [subnet](#) *string* [options](#) [option](#) (*number* | *keyword*) **empty**

Tree [empty](#)

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

Synopsis DHCP option specified as hexadecimal string

Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* [subnet](#) *string* [options](#) [option](#) (*number* | *keyword*) **hex-string** *string*

Tree [hex-string](#)

String Length 1 to 256

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4-address *string*

Synopsis DHCP option as a list of IPv4 addresses

Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv4](#) *string* [pool](#) *string* [subnet](#) *string* [options](#) [option](#) (*number* | *keyword*) **ipv4-address** *string*

Tree [ipv4-address](#)

Max.  
Instances 4

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis DHCP option as NetBIOS node type

Context **configure service vprn** *string dhcp-server dhcpv4 string pool string subnet string options option (number | keyword) netbios-node-type keyword*

Tree [netbios-node-type](#)

Options b-node, p-node, m-node, h-node

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool-selection**

Synopsis Enter the **pool-selection** context

Context **configure service vprn** *string dhcp-server dhcpv4 string pool-selection*

Tree [pool-selection](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-gi-address**

Synopsis Enable the **use-gi-address** context

Context **configure service vprn** *string dhcp-server dhcpv4 string pool-selection use-gi-address*

Tree [use-gi-address](#)

Description Commands in this context configure gateway interface (GI) address matching. When configured, the pool can be used for address matching even if a subnet is not found. If the local user database name is not used, addresses are provided only by GI. If a user must be blocked from getting an address, the server maps to a local user database and configures the user with no address.

A pool can include multiple subnets. Since the GI is shared by multiple subnets in a subscriber interface, the pool can provide IP addresses from any of the subnets included when the GI is matched to one of its subnets. This allows a pool to be created that represents a sub-net.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**scope** *keyword*

Synopsis	GI address-matching scope
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool-selection use-gi-address scope</a> <i>keyword</i>
Tree	<a href="#">scope</a>
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**use-pool-from-client**

Synopsis	Enable the <b>use-pool-from-client</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool-selection use-pool-from-client</a>
Tree	<a href="#">use-pool-from-client</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**delimiter** *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">pool-selection use-pool-from-client delimiter</a> <i>string</i>
Tree	<a href="#">delimiter</a>
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-db** *reference*

Synopsis	Local user database for authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i> <a href="#">user-db</a> <i>reference</i>

Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-identification** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv4</a> <i>string</i> <b>user-identification</b> <i>keyword</i>
Tree	<a href="#">user-identification</a>
Options	mac-circuit-id, client-id, mac, circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcpv6** [[name](#)] *string*

Synopsis	Enter the <b>dhcpv6</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i>
Tree	<a href="#">dhcpv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	DHCP server name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i>
Tree	<a href="#">dhcpv6</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCP server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**auto-provisioned** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Auto-provision the pools of this server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <b>auto-provisioned</b> <i>boolean</i>
Tree	<a href="#">auto-provisioned</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**defaults**

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <b>defaults</b>
Tree	<a href="#">defaults</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <b>defaults options</b>
Tree	<a href="#">options</a>

Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option** [[number](#)] (*number* | *keyword*)

Synopsis Enter the **option** list instance  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [defaults options option](#) (*number* | *keyword*)  
 Tree [option](#)  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis DHCP option to send as identification string  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [defaults options option](#) (*number* | *keyword*)  
 Tree [option](#)  
 Range 1 to 65535  
 Options dns-server, domain-name  
 Notes This element is part of a list key.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis DHCP option specified as an ASCII string  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [defaults options option](#) (*number* | *keyword*) [ascii-string](#) *string*  
 Tree [ascii-string](#)  
 String Length 1 to 127  
 Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **duration**, **empty**, **hex-string**, or **ipv6-address**.  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## domain-string *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">defaults options option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">domain-string</a> <i>string</i>
Tree	<a href="#">domain-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## duration *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">defaults options option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">duration</a> <i>number</i>
Tree	<a href="#">duration</a>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## empty

Synopsis	Empty DHCP option
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">defaults options option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">empty</a>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>ipv6-address</b> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime** *number*

Synopsis	Time this lease remains preferred
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">defaults</a> <b>preferred-lifetime</b> <i>number</i>
Tree	<a href="#">preferred-lifetime</a>
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.  Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue



to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rebind-time** *number*

Synopsis	Rebind time for the lease
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>rebind-time</b> <i>number</i>
Tree	<b>rebind-time</b>
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **renew-time** *number*

Synopsis	Renew time for the lease
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>renew-time</b> <i>number</i>
Tree	<b>renew-time</b>

Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** *number*

Synopsis	Time for the lease to remain valid
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>defaults</b> <b>valid-lifetime</b> <i>number</i>
Tree	<b>valid-lifetime</b>
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).</p>
Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failover**

Synopsis Enter the **failover** context  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [failover](#)  
 Tree [failover](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the failover mechanism  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [failover](#) [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-mclt-on-takeover** *boolean*

Synopsis Ignore maximum client lead during takeover from partner  
 Context **configure** [service vprn](#) *string* [dhcp-server dhcpv6](#) *string* [failover](#) [ignore-mclt-on-takeover](#) *boolean*  
 Tree [ignore-mclt-on-takeover](#)

Description	When configured to <b>true</b> , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.  When configured to <b>false</b> , the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### maximum-client-lead-time *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure service vpn string dhcp-server dhcpv6 string failover maximum-client-lead-time number</b>
Tree	<a href="#">maximum-client-lead-time</a>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.
Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### partner-down-delay *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure service vpn string dhcp-server dhcpv6 string failover partner-down-delay number</b>

Tree	<a href="#">partner-down-delay</a>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer reference</a>
Tree	<a href="#">peer</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[address]** *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer reference</a>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sync-tag** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover peer reference</a> <b>sync-tag</b> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**startup-wait-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">failover</a> <b>startup-wait-time</b> <i>number</i>
Tree	<a href="#">startup-wait-time</a>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-rapid-commit** *boolean*

Synopsis	Ignore Rapid Commit option
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <b>ignore-rapid-commit</b> <i>boolean</i>

Tree	<a href="#">ignore-rapid-commit</a>
Description	When configured to <b>true</b> , the server ignores the Rapid Commit option sent by the client and uses the regular message exchange.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## interface-id-mapping *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Map hosts within interface-to-prefix combinations
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">interface-id-mapping</a> <i>boolean</i>
Tree	<a href="#">interface-id-mapping</a>
Description	When configured to <b>true</b> , this command specifies an interface-mapping method that uses a combination of unique /64 prefixes and interface IDs. A /64 prefix is allocated to each interface ID, and all clients with the same interface ID are assigned an address from the prefix. This method is used for bridging clients in the same local loop and SAP, so that sharing the prefix allows communication to stay local. For SLAAC-based assignment, downstream neighbor discovery is automatically enabled to resolve the assigned address.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-hold

Synopsis	Enter the <b>lease-hold</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">lease-hold</a>
Tree	<a href="#">lease-hold</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## additional-scenarios

Synopsis	Enter the <b>additional-scenarios</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>lease-hold additional-scenarios</b>
Tree	<b>additional-scenarios</b>
Description	Commands in this context configure additional types of leases or triggers that cause the system to hold up leases.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **internal-lease-ipsec** *boolean*

Synopsis	Apply the lease hold timer to local IPsec clients
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>lease-hold additional-scenarios internal-lease-ipsec</b> <i>boolean</i>
Tree	<b>internal-lease-ipsec</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **solicited-release** *boolean*

Synopsis	Apply lease hold timer for solicited releases
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>lease-hold additional-scenarios solicited-release</b> <i>boolean</i>
Tree	<b>solicited-release</b>
Description	This command enables the server to hold up a lease even for a solicited release, for example, when the server receives a normal DHCP release message.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **time** *number*

Synopsis	Lease hold time
Context	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i> <b>lease-hold time</b> <i>number</i>
Tree	<b>time</b>
Range	1 to 631152000
Units	seconds



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-query** *boolean*

Synopsis Handle and reply to lease query messages  
 Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [lease-query](#) *boolean*  
 Tree [lease-query](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool** [[pool-name](#)] *string*

Synopsis Enter the **pool** list instance  
 Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [pool](#) *string*  
 Tree [pool](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[pool-name]** *string*

Synopsis DHCP server pool name  
 Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [pool](#) *string*  
 Tree [pool](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix**

Synopsis Enter the **delegated-prefix** context  
 Context **configure** [service](#) [vprn](#) *string* [dhcp-server](#) [dhcpv6](#) *string* [pool](#) *string* [delegated-prefix](#)  
 Tree [delegated-prefix](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **length** *number*

Synopsis	Prefix length for pool if unspecified by client
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">delegated-prefix</a> <b>length</b> <i>number</i>
Tree	<a href="#">length</a>
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum** *number*

Synopsis	Maximum delegated prefix length for this pool
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">delegated-prefix</a> <b>maximum</b> <i>number</i>
Tree	<a href="#">maximum</a>
Range	48 to 127
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **minimum** *number*

Synopsis	Minimum delegated prefix length for this pool
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">delegated-prefix</a> <b>minimum</b> <i>number</i>
Tree	<a href="#">minimum</a>
Range	48 to 127
Default	48
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**exclude-prefix** [[ipv6-prefix](#)] *string*

Synopsis	Add a list entry for <b>exclude-prefix</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">exclude-prefix</a> <i>string</i>
Tree	<a href="#">exclude-prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[[ipv6-prefix](#)]** *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">exclude-prefix</a> <i>string</i>
Tree	<a href="#">exclude-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the failover mechanism
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-mclt-on-takeover** *boolean*

Synopsis	Ignore maximum client lead during takeover from partner
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <b>ignore-mclt-on-takeover</b> <i>boolean</i>
Tree	<a href="#">ignore-mclt-on-takeover</a>
Description	When configured to <b>true</b> , the remote IP address range can be taken over immediately when the intercommunication link enters the PARTNER-DOWN state, without having to wait for the MCLT to expire.  When configured to <b>false</b> , the DHCP lease time for new clients is restricted to the MCLT during a failure. For existing clients, the lease time is gradually reduced over time to the MCLT by consecutive DHCP renewals.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-client-lead-time** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum time that DHCP server can extend client's lease
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover</a> <b>maximum-client-lead-time</b> <i>number</i>
Tree	<a href="#">maximum-client-lead-time</a>
Description	This command configures the maximum client lead time (MCLT), which is the maximum time that a DHCP server can extend the client's lease time beyond the lease time

currently known by the DHCP partner node. In dual-homed environments, the initial lease time for all DHCP clients is restricted to the MCLT by default. Consecutive DHCP renewals can extend the lease time beyond the MCLT.

Range	600 to 86399
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **partner-down-delay** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delay to prevent lease duplication during link failure
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>partner-down-delay</b> <i>number</i>
Tree	<b>partner-down-delay</b>
Description	This command configures the interval before a failed intercommunication link transitions from the COMM-INT state to the PARTNER-DOWN state. This delay prevents IP lease duplication during link failure by not allowing new IP addresses to be assigned from the remote IP address range. This timer is intended to provide the operator with enough time to remedy the failed situation and avoid duplication of IP addresses and prefixes during the failure.
Range	0 to 86399
Units	seconds
Default	86399
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer** [**address**] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>failover</b> <b>peer</b> <i>reference</i>
Tree	<b>peer</b>
Max. Instances	1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [address] *reference*

Synopsis	IP address of the failover peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sync-tag *string*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag that identifies synchronizing server or pool pairs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">failover peer</a> <i>reference</i> <a href="#">sync-tag</a> <i>string</i>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### startup-wait-time *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time between initialization and assuming active role
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Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv6 string pool string failover startup-wait-time number</i>
Tree	<a href="#">startup-wait-time</a>
Description	This command configures a delay that avoids transient issues during the initialization process. During startup wait time, each failover peer waits after the initialization process before assuming the active role for the prefix designated as local or remote.
Range	60 to 3600
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## options

Synopsis	Enter the <b>options</b> context
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv6 string pool string options</i>
Tree	<a href="#">options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option [[number](#)] (*number | keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv6 string pool string options option (number   keyword)</i>
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [\[number\]](#) (*number | keyword*)

Synopsis	DHCP option to send as identification string
Context	<b>configure service vprn</b> <i>string dhcp-server dhcpv6 string pool string options option (number   keyword)</i>
Tree	<a href="#">option</a>
Range	1 to 65535

Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string</b> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>domain-string</b> <i>string</i>
Tree	<a href="#">domain-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">options</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<a href="#">duration</a>
Range	10 to 315446399



Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## empty

Synopsis	Empty DHCP option
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>empty</b>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>hex-string</b> <a href="#">string</a>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <a href="#">string</a> <a href="#">pool</a> <a href="#">string</a> <a href="#">options</a> <a href="#">option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <b>ipv6-address</b> <a href="#">string</a>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix** [ipv6-prefix] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv6-prefix]** *string*

Synopsis	IPv6 prefix to be excluded from available pool prefixes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **drain** *boolean*

Synopsis	No new leases can be assigned
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">drain</a> <i>boolean</i>
Tree	<a href="#">drain</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover-control-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Failover control type for this range
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <b>failover-control-type</b> <i>keyword</i>
Tree	<a href="#">failover-control-type</a>
Options	local, remote, access-driven
Default	local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <b>options</b>
Tree	<a href="#">options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <b>options</b> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number]** (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <b>options</b> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>

Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string</b> <i>string</i>
Tree	<b>ascii-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>domain-string</b> <i>string</i>
Tree	<b>domain-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option specified as time
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>options</b> <b>option</b> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<b>duration</b>

Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## empty

Synopsis	Empty DHCP option
Context	<b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (number   keyword) empty</b>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (number   keyword) hex-string string</b>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure service vprn string dhcp-server dhcpv6 string pool string prefix string options option (number   keyword) ipv6-address string</b>
Tree	<a href="#">ipv6-address</a>

Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** *number*

Synopsis	Time this lease remains preferred
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>preferred-lifetime</b> <i>number</i>
Tree	<b>preferred-lifetime</b>
Description	This command configures the preferred lifetime of the IPv6 lease address or prefix. When the preferred lifetime expires, any derived addresses are deprecated. The preferred lifetime must be less than or equal to the valid lifetime.  Each address or prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address/prefix without interruption. The lifetimes are transmitted from the addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length-threshold** [**prefix-length**] *number*

Synopsis	Enter the <b>prefix-length-threshold</b> list instance
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i>
Tree	<b>prefix-length-threshold</b>
Max. Instances	8

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[prefix-length]** *number*

Synopsis	Delegated prefix length for pool thresholds
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i>
Tree	<b>prefix-length-threshold</b>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**absolute** *number*

Synopsis	Minimum number of free prefixes for this prefix length
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>absolute</b> <i>number</i>
Tree	<b>absolute</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**event-when-depleted** *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>prefix-length-threshold</b> <i>number</i> <b>event-when-depleted</b> <i>boolean</i>
Tree	<b>event-when-depleted</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**percent** *number*

Synopsis	Minimum percentage of free prefixes for prefix length
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-length-threshold number percent number</i>
Tree	<i>percent</i>
Range	1 to 100
Notes	The following elements are part of a choice: <b>absolute</b> or <b>percent</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-type**

Synopsis	Enter the <b>prefix-type</b> context
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-type</i>
Tree	<i>prefix-type</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pd** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-PD prefixes from this prefix pool
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-type pd boolean</i>
Tree	<i>pd</i>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**wan-host *boolean*****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocate IA-NA or SLAAC prefixes from this prefix pool
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string prefix string prefix-type wan-host boolean</i>
Tree	<i>wan-host</i>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rebind-time *number***

Synopsis	Rebind time for the lease
Context	<b>configure</b> <i>service vprn string dhcp-server dhcpv6 string pool string prefix string rebind-time number</i>
Tree	<i>rebind-time</i>
Description	<p>This command configures the rebind time, known as T2, at which the client contacts the addressing authority to extend the lifetimes of its leases.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew or reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses or prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured rebind timer value should always be less than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**renew-time** *number*

Synopsis	Renew time for the lease
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>renew-time</b> <i>number</i>
Tree	<b>renew-time</b>
Description	<p>This command configures the renew time, known as T1, at which the client makes a transition to the lease-renewal state.</p> <p>The IP addressing authority (such as the DHCP server, RADIUS, or ESM) controls the time for extending lifetimes on assigned addresses/prefixes through the T1 and T2 parameters assigned to an identity association (IA). At renew time, T1, the client initiates a renew/reply message exchange to extend the lifetimes of any addresses in the IA. The client includes an IA option with all addresses/prefixes currently assigned to the IA in its renew message.</p> <p>Recommended values for T1 and T2 are 0.5 and 0.8 times the shortest preferred lifetime of the addresses or prefixes in the IA that the addressing authority is willing to extend, respectively. The configured renew timer value should always be shorter than or equal to the rebind timer. The T1 and T2 values are carried in the IPV6 address option in the IA.</p>
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** *number*

Synopsis	Time for the lease to remain valid
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>dhcp-server</b> <b>dhcpv6</b> <i>string</i> <b>pool</b> <i>string</i> <b>prefix</b> <i>string</i> <b>valid-lifetime</b> <i>number</i>
Tree	<b>valid-lifetime</b>
Description	<p>This command configures a valid lifetime for a DHCPv6 lease address or prefix. The valid lifetime is the length of time an address and prefix remains in the valid state. The valid lifetime must be greater than or equal to the preferred lifetime. When the valid lifetime expires, the address and prefix becomes invalid and must not be used in communications. RFC 2461 recommends a default value of 30 days.</p> <p>Each address and prefix assigned to the client has associated preferred and valid lifetimes specified by the address assignment authority (such as the DHCP server, RADIUS, or ESM). To request an extension of the lifetimes assigned to an address, the client sends a renew message to the addressing authority. The authority sends a reply message to the client with the new lifetimes, allowing the client to continue to use the address and prefix without interruption. The lifetimes are transmitted from the</p>

addressing authority to the client in the identity association (IA) option at the top level of the message (not the address or prefix level).

Range	300 to 315446399
Units	seconds
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length-threshold** [[prefix-length](#)] *number*

Synopsis	Enter the <b>prefix-length-threshold</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix-length-threshold</a> <i>number</i>
Tree	<a href="#">prefix-length-threshold</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[prefix-length]** *number*

Synopsis	Delegated prefix length for pool thresholds
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix-length-threshold</a> <i>number</i>
Tree	<a href="#">prefix-length-threshold</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **event-when-depleted** *boolean*

Synopsis	Generate a notification when this pool is depleted
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix-length-threshold</a> <i>number</i> <a href="#">event-when-depleted</a> <i>boolean</i>
Tree	<a href="#">event-when-depleted</a>
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **minimum-free-percent** *number*

Synopsis	Percentage of free prefixes for this prefix length
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool</a> <i>string</i> <a href="#">prefix-length-threshold</a> <i>number</i> <b>minimum-free-percent</b> <i>number</i>
Tree	<a href="#">minimum-free-percent</a>
Range	0 to 100
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool-selection**

Synopsis	Enter the <b>pool-selection</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <b>pool-selection</b>
Tree	<a href="#">pool-selection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-link-address**

Synopsis	Enable the <b>use-link-address</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv6</a> <i>string</i> <a href="#">pool-selection</a> <b>use-link-address</b>
Tree	<a href="#">use-link-address</a>
Description	This command configures the local pool selection for DHCPv6 address or prefix assignment to use the link address. When configured, the selected pool contains a prefix covering the link address.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scope** *keyword*

Synopsis	Scope of the IP address selection
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Context	<b>configure service vprn string dhcp-server dhcpv6 string pool-selection use-link-address scope keyword</b>
Tree	<a href="#">scope</a>
Options	subnet, pool
Default	subnet
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### use-pool-from-client

Synopsis	Enable the <b>use-pool-from-client</b> context
Context	<b>configure service vprn string dhcp-server dhcpv6 string pool-selection use-pool-from-client</b>
Tree	<a href="#">use-pool-from-client</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### delimiter *string*

Synopsis	Delimiter to combine primary and secondary pool names
Context	<b>configure service vprn string dhcp-server dhcpv6 string pool-selection use-pool-from-client delimiter string</b>
Tree	<a href="#">delimiter</a>
Description	This command configures a single ASCII character that separates the pool names in DHCP vendor-specific option 82, which identifies the address pool to be used for this client.
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### server-id

Synopsis	Enter the <b>server-id</b> context
Context	<b>configure service vprn string dhcp-server dhcpv6 string server-id</b>
Tree	<a href="#">server-id</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## duid-enterprise

Synopsis Enter the **duid-enterprise** context

Context **configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise**

Tree [duid-enterprise](#)

Notes The following elements are part of a choice: **duid-enterprise** or **duid-link-local**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis DUID enterprise server ID specified as an ASCII string

Context **configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise ascii-string string**

Tree [ascii-string](#)

String Length 1 to 58

Notes The following elements are part of a choice: **ascii-string** or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

Synopsis DUID enterprise server ID specified as a hex string

Context **configure service vprn string dhcp-server dhcpv6 string server-id duid-enterprise hex-string string**

Tree [hex-string](#)

String Length 1 to 118

Notes The following elements are part of a choice: **ascii-string** or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## duid-link-local

Synopsis Derive DUID server ID from a system link-layer address

Context	<b>configure service vprn string dhcp-server dhcpv6 string server-id duid-link-local</b>
Tree	<a href="#">duid-link-local</a>
Notes	The following elements are part of a choice: <b>duid-enterprise</b> or <b>duid-link-local</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-identification** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	User identification method for the DHCP server
Context	<b>configure service vprn string dhcp-server dhcpv6 string user-identification keyword</b>
Tree	<a href="#">user-identification</a>
Options	duid, interface-id, interface-id-link-local
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dns**

Synopsis	Enable the <b>dns</b> context
Context	<b>configure service vprn string dns</b>
Tree	<a href="#">dns</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of DNS
Context	<b>configure service vprn string dns admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **default-domain** *string*

Synopsis	Domain name added in DNS retries
Context	<b>configure service vprn</b> <i>string dns default-domain string</i>
Tree	<a href="#">default-domain</a>
Description	This command configures the DNS domain name to be added in DNS retries when a DNS query is not replied or an empty DNS reply is received.  The name can contain only alphabetical characters (A-Z), numeric characters (0-9), the minus sign (-), and the period (.).
String Length	1 to 255
Introduced	20.2.R1
Platforms	All

### **ipv4-source-address** (*keyword* | *ipv4-unicast-address*)

Synopsis	Source address to contact an IPv4 DNS server
Context	<b>configure service vprn</b> <i>string dns ipv4-source-address (keyword   ipv4-unicast-address)</i>
Tree	<a href="#">ipv4-source-address</a>
Options	use-interface-ip
Default	use-interface-ip
Introduced	16.0.R1
Platforms	All

### **ipv6-source-address** (*keyword* | *ipv6-unicast-address*)

Synopsis	Source address to contact an IPv6 DNS server
Context	<b>configure service vprn</b> <i>string dns ipv6-source-address (keyword   ipv6-unicast-address)</i>
Tree	<a href="#">ipv6-source-address</a>
Options	use-interface-ip
Default	use-interface-ip
Introduced	16.0.R1
Platforms	All

### **server** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	DNS server used for DNS name resolution
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Context	<b>configure service vprn string dns server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>server</b>
Max. Instances	3
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **ecmp number**

Synopsis	Maximum equal-cost routes for routing table instance
Context	<b>configure service vprn string ecmp number</b>
Tree	<b>ecmp</b>
Description	<p>This command configures ECMP and defines the number of routes for path sharing. ECMP can be used only for routes learned with the same preference and the same protocol.</p> <p>If available ECMP routes at the best preference exceed the maximum ECMP routes allowed, the system selects the route using the following criteria:</p> <ol style="list-style-type: none"> <li>1. The system selects the lowest next hop router ID.</li> <li>2. If the next hop goes to the same neighbor, the system selects the next hop with the lowest interface index.</li> </ol>
Range	1 to 64
Default	1
Introduced	16.0.R1
Platforms	All

### **ecmp-unequal-cost boolean**

Synopsis	Enable ECMP unequal cost capability
Context	<b>configure service vprn string ecmp-unequal-cost boolean</b>
Tree	<b>ecmp-unequal-cost</b>
Default	false
Introduced	19.7.R1
Platforms	All

**entropy-label** *boolean*

Synopsis	Use entropy label
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">entropy-label</a> <i>boolean</i>
Tree	<a href="#">entropy-label</a>
Description	<p>When configured to <b>true</b>, this command enables the use of entropy labels.</p> <p>The entropy label and indicator (EL/ELI) are inserted on relevant packets. Applicable packets are those for which at least one LSP in the stack at the far end has advertised the entropy-label capability. These LSPs are in LDP or RSVP tunnels used by an IGP or BGP shortcut. If the tunnel is of type RSVP, the entropy-label capability must also be enabled under the <b>configure router mpls</b> or <b>configure router mpls lsp</b> context.</p> <p>This command also results in other traffic that is forwarded over an LDP or RSVP LSP for which this router is the LER, and for which there is no explicit service endpoint on this router, to have the EL/ELI enabled, subject to the LSP far-end advertising entropy-label-capability. An example of such traffic includes packets arriving on a stitched LDP LSP forwarded over an RSVP LSP.</p> <p>The entropy label and the hash label features are mutually exclusive. The entropy label cannot be configured on a spoke SDP or service where the hash label feature has already been configured.</p> <p>When configured to <b>false</b>, the use of entropy labels is disabled.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**export-inactive-bgp** *boolean*

Synopsis	Export preferred BGP route even if inactive
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">export-inactive-bgp</a> <i>boolean</i>
Tree	<a href="#">export-inactive-bgp</a>
Description	When configured to <b>true</b> , the preferred BGP route learned by a VPRN is exported as the VPN-IP route even if it is inactive in the route table because a preferred BGP VPRN route from another PE is present. This overrides the default state in which the

VPRN cannot export an inactive BGP route. For the BGP route to be exported, the VRF export policy must accept it. This command applies to both MPLS VPN and SRv6 VPN routes. In SRv6 VPN routes the advertised instruction is an End.DT, while in MPLS VPN routes the advertised label is a per-next-hop label. This “best-external” type of route advertisement is useful in active/standby multi-homing scenarios because it ensures that all PEs know about the backup path provided by the standby PE.

When configured to **false**, the preferred BGP route is not exported if it is inactive.

Default	false
Introduced	16.0.R1
Platforms	All

### **export-inactive-bgp-enhanced** *boolean*

Synopsis	Export best BGP route when better non-BGP route present
Context	<b>configure service vpn</b> <i>string</i> <b>export-inactive-bgp-enhanced</b> <i>boolean</i>
Tree	<a href="#">export-inactive-bgp-enhanced</a>
Description	<p>When configured to <b>true</b>, the router allows a BGP route that is inactive (because a better non-BGP route for the same prefix is present) to be exportable as a VPN-IP route.</p> <p>A BGP route learned from a VPRN BGP peer is exportable as a VPN-IP route, only if it is the best route for the prefix and is installed in the route table of the VPRN. If the <b>export-inactive-bgp</b> command is <b>true</b> in the VPRN configuration, this rule is relaxed, and the best inactive VPRN BGP route is exportable as a VPN-IP route, provided that the active installed route for the prefix is an imported VPN-IP route.</p> <p>The rule described in the preceding paragraph can be relaxed even further by configuring this command to <b>true</b>. When this command is <b>true</b>, the best inactive VPRN BGP route (best amongst all routes received from all CEs) is exportable as a VPN-IP route, regardless of the route type of the active installed route.</p> <p>The configuration of this command overrides the <b>export-inactive-bgp</b> command. If this command is <b>true</b>, the <b>export-inactive-bgp</b> command does not need to be <b>true</b>.</p> <p>When configured to <b>false</b>, the router disables allowing an inactive BGP route in the presence of a better non-BGP route to be exportable as a VPN-IP route.</p>
Default	false
Introduced	23.7.R1
Platforms	All

### **fib-priority** *keyword*

Synopsis	FIB priority for VPRN BGP routes
Context	<b>configure service vpn</b> <i>string</i> <b>fib-priority</b> <i>keyword</i>
Tree	<a href="#">fib-priority</a>

Options	standard, high
Default	standard
Introduced	16.0.R1
Platforms	All

## firewall

Synopsis	Enter the <b>firewall</b> context
Context	<b>configure service vprn string firewall</b>
Tree	<b>firewall</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## domain [*name*] *string*

Synopsis	Enter the <b>domain</b> list instance
Context	<b>configure service vprn string firewall domain string</b>
Tree	<b>domain</b>
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [*name*] *string*

Synopsis	Firewall domain name
Context	<b>configure service vprn string firewall domain string</b>
Tree	<b>domain</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the firewall domain
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dhcpv6-server**

Synopsis	Enter the <b>dhcpv6-server</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <b>dhcpv6-server</b>
Tree	<a href="#">dhcpv6-server</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <b>dhcpv6-server</b> <i>name</i> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router name
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Context	<b>configure service vprn</b> <i>string</i> <b>firewall domain</b> <i>string</i> <b>dhcpv6-server router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **nat-group** *reference*



### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group for this domain
Context	<b>configure service vprn</b> <i>string</i> <b>firewall domain</b> <i>string</i> <b>nat-group</b> <i>reference</i>
Tree	<a href="#">nat-group</a>
Reference	<b>configure isa nat-group</b> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **prefix** [[ip-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>firewall domain</b> <i>string</i> <b>prefix</b> <i>string</i>
Tree	<a href="#">prefix</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **[ip-prefix]** *string*

Synopsis	IP prefix and prefix length for the domain firewall
Context	<b>configure service vprn</b> <i>string</i> <b>firewall domain</b> <i>string</i> <b>prefix</b> <i>string</i>
Tree	<a href="#">prefix</a>

Description	This command configures a prefix for which firewall functionality applies within the domain. Prefixes cannot be shared or duplicated across multiple domains in the same routing context. A domain can contain multiple prefixes.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <a href="#">prefix</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WLAN GW group used for NAT
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">firewall domain</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flowspec**

Synopsis	Enter the <b>flowspec</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">flowspec</a>
Tree	<a href="#">flowspec</a>
Introduced	16.0.R1

Platforms All

### **filter-cam-type** *keyword*

Synopsis Filter policy type for FlowSpec embedding

Context **configure** [service](#) [vprn](#) *string* [flowspec](#) [filter-cam-type](#) *keyword*

Tree [filter-cam-type](#)

Description This command specifies the filter type that is required to embed FlowSpec entries. The filter type defines the match criteria that are available in the filter policy.

Options normal, packet-length

Default normal

Introduced 20.7.R1

Platforms All

### **ip-filter-max-size** *number*

Synopsis Maximum number of flowspec rule entries in IPv4 filter

Context **configure** [service](#) [vprn](#) *string* [flowspec](#) [ip-filter-max-size](#) *number*

Tree [ip-filter-max-size](#)

Description This command configures the maximum number of IPv4 flowspec routes, or rules, that can be entered in the auto-created embedded filter, fSpec-X. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).

The sum of the maximum-size value and the highest offset in any IPv4 filter that embeds IPv4 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.

The maximum size can be adjusted up or down at any time. If the current number of IPv4 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.

Range 0 to 262143

Default 512

Introduced 16.0.R1

Platforms All

### **ipv6-filter-max-size** *number*

Synopsis Maximum number of flowspec rule entries in IPv6 filter



Context	<b>configure service vprn</b> <i>string</i> <b>flowspec ipv6-filter-max-size</b> <i>number</i>
Tree	<a href="#">ipv6-filter-max-size</a>
Description	<p>This command configures the maximum number of IPv6 flowspec routes or rules that can be embedded into an ingress IPv6 filter policy for a specified routing instance. Flowspec filter entries embedded in a filter policy in this routing instance will use filter entries from the range between the embedding offset and (offset + ip-filter-max-size – 1).</p> <p>The sum of the maximum-size value and the highest offset in any IPv6 filter that embeds IPv6 flowspec rules from this routing instance (excluding filters that embed at offset 262143) must not exceed 262143.</p> <p>The maximum size can be adjusted up or down at any time. If the current number of IPv6 flowspec rules is greater than the new maximum, the extra rules are removed immediately but retained in the BGP RIB. If the limit is increased, new rules are programmed only as they are received in new BGP updates.</p>
Range	0 to 262143
Default	512
Introduced	16.0.R1
Platforms	All

## grt-leaking

Synopsis	Enter the <b>grt-leaking</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>grt-leaking</b>
Tree	<a href="#">grt-leaking</a>
Introduced	16.0.R1
Platforms	All

## allow-local-management *boolean*

Synopsis	Enable management traffic
Context	<b>configure service vprn</b> <i>string</i> <b>grt-leaking allow-local-management</b> <i>boolean</i>
Tree	<a href="#">allow-local-management</a>
Description	<p>When configured to <b>true</b>, this command enables the support of specific management protocols over VPRN interfaces that terminate on Base routing context IPv4 and IPv6 interface addresses, including Base loopback and system addresses.</p> <p>This command does not control the support for management protocols terminating on VPRN interfaces directly.</p>
Default	false
Introduced	16.0.R1

Platforms All

## export-grt

Synopsis Enter the **export-grt** context

Context **configure service vprn string grt-leaking export-grt**

Tree [export-grt](#)

Introduced 16.0.R1

Platforms All

## policy-name (*policy-expr-string* | *string*)

Synopsis Route policy name or policy logical expression

Context **configure service vprn string grt-leaking export-grt policy-name** (*policy-expr-string* | *string*)

Tree [policy-name](#)

String Length 1 to 255

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms All

## export-limit *number*

Synopsis Maximum number of routes exported from VRF to GRT

Context **configure service vprn string grt-leaking export-limit number**

Tree [export-limit](#)

Range 0 to 1000

Default 5

Introduced 16.0.R1

Platforms All

## export-v6-limit *number*

Synopsis Maximum number of IPv6 routes exported from VPRN to GRT

Context	<b>configure service vprn</b> <i>string</i> <b>grt-leaking export-v6-limit</b> <i>number</i>
Tree	<a href="#">export-v6-limit</a>
Range	0 to 1000
Default	5
Introduced	16.0.R1
Platforms	All

### **grt-lookup** *boolean*

Synopsis	Enable global route table lookup
Context	<b>configure service vprn</b> <i>string</i> <b>grt-leaking grt-lookup</b> <i>boolean</i>
Tree	<a href="#">grt-lookup</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **import-grt**

Synopsis	Enter the <b>import-grt</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>grt-leaking import-grt</b>
Tree	<a href="#">import-grt</a>
Introduced	16.0.R4
Platforms	All

### **policy-name** (*policy-expr-string* | *string*)

Synopsis	Route policy name or policy logical expression
Context	<b>configure service vprn</b> <i>string</i> <b>grt-leaking import-grt policy-name</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy-name</a>
String Length	1 to 255
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4

Platforms All

## gsmp

Synopsis Enter the **gsmp** context  
 Context **configure service vprn string gsmp**  
 Tree [gsmp](#)  
 Introduced 16.0.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of GSMP  
 Context **configure service vprn string gsmp admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

## group [[name](#)] *string*

Synopsis Enter the **group** list instance  
 Context **configure service vprn string gsmp group string**  
 Tree [group](#)  
 Max. Instances 1024  
 Introduced 16.0.R1  
 Platforms All

## [[name](#)] *string*

Synopsis GSMP group name  
 Context **configure service vprn string gsmp group string**  
 Tree [group](#)  
 String Length 1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the GSMP group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmp group</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **ancp**

Synopsis	Enter the <b>ancp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmp group</a> <i>string</i> <b>ancp</b>
Tree	<a href="#">ancp</a>
Introduced	16.0.R1
Platforms	All

### **dynamic-topology-discovery** *boolean*

Synopsis	Enable the ANCP dynamic topology discovery capability
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmp group</a> <i>string</i> <b>ancp</b> <a href="#">dynamic-topology-discovery</a> <i>boolean</i>
Tree	<a href="#">dynamic-topology-discovery</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **oam** *boolean*

Synopsis	Enable GSMP ANCP OAM capability at startup of GSMP connection
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Context	<b>configure service vprn</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>ancp oam</b> <i>boolean</i>
Tree	<b>oam</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure service vprn</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **hold-multiplier** *number*

Synopsis	Hold-multiplier for the GSMP connections in this group
Context	<b>configure service vprn</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>hold-multiplier</b> <i>number</i>
Tree	<b>hold-multiplier</b>
Range	1 to 100
Default	3
Introduced	16.0.R1
Platforms	All

### **idle-filter** *boolean*

Synopsis	Filter ANCP messages from IDLE DSL lines
Context	<b>configure service vprn</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>idle-filter</b> <i>boolean</i>
Tree	<b>idle-filter</b>
Default	false
Introduced	16.0.R1
Platforms	All

**keepalive** *number*

Synopsis	Keepalive value for the GSMP connections in this group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmg group</a> <i>string</i> <a href="#">keepalive</a> <i>number</i>
Tree	<a href="#">keepalive</a>
Range	1 to 25
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**neighbor** [[remote-address](#)] *string*

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmg group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

**[remote-address]** *string*

Synopsis	GSMP neighbor remote IP address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmg group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i>
Tree	<a href="#">neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the GSMP neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gsmg group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [service](#) [vpn](#) *string* [gsm](#) [group](#) *string* [neighbor](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **local-address** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Restrict connections to this local address only within the service running ANCP

Context **configure** [service](#) [vpn](#) *string* [gsm](#) [group](#) *string* [neighbor](#) *string* [local-address](#) *string*

Tree [local-address](#)

Introduced 16.0.R1

Platforms All

### **priority-marking**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **priority-marking** context

Context **configure** [service](#) [vpn](#) *string* [gsm](#) [group](#) *string* [neighbor](#) *string* [priority-marking](#)

Tree [priority-marking](#)

Introduced 16.0.R1

Platforms All



**dscp** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DSCP that is used while remarking the in profile packets
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>priority-marking</b> <b>dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

**prec** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Precedence priority marking
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>priority-marking</b> <b>prec</b> <i>number</i>
Tree	<b>prec</b>
Range	0 to 7
Notes	The following elements are part of a choice: <b>dscp</b> or <b>prec</b> .
Introduced	16.0.R1
Platforms	All

**persistence** *boolean*

Synopsis	Store DSL line information when the GSMP connection terminates
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>gsmp group</b> <i>string</i> <b>persistence</b> <i>boolean</i>
Tree	<b>persistence</b>

Default	false
Introduced	16.0.R1
Platforms	All

## gtp

Synopsis	Enter the <b>gtp</b> context
Context	<b>configure service vprn string gtp</b>
Tree	<b>gtp</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## s11

Synopsis	Enter the <b>s11</b> context
Context	<b>configure service vprn string gtp s11</b>
Tree	<b>s11</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## interface [interface-name] reference

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure service vprn string gtp s11 interface reference</b>
Tree	<b>interface</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [interface-name] reference

Synopsis	Interface name
Context	<b>configure service vprn string gtp s11 interface reference</b>
Tree	<b>interface</b>
Reference	<b>configure service vprn string interface string</b>
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **apn-policy** *reference*

Synopsis	Access Point Name (APN) policy for the S11 interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gtp s11 interface reference</a> <a href="#">apn-policy reference</a>
Tree	<a href="#">apn-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt gtp apn-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-profile-map**

Synopsis	Enter the <b>peer-profile-map</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gtp s11 peer-profile-map</a>
Tree	<a href="#">peer-profile-map</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix** [[peer-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gtp s11 peer-profile-map prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[peer-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP prefix and prefix length of the subnet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">gtp s11 peer-profile-map prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer-profile** *reference*

Synopsis Peer profile used for peers in this prefix

Context **configure service vprn** *string* **gtp s11 peer-profile-map prefix** (*ipv4-prefix* | *ipv6-prefix*)  
**peer-profile** *reference*

Tree **peer-profile**

Reference **configure subscriber-mgmt gtp peer-profile** *string*

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **upf-data-endpoint**

Synopsis Enable the **upf-data-endpoint** context

Context **configure service vprn** *string* **gtp upf-data-endpoint**

Tree **upf-data-endpoint**

Description Commands in this context configure a GTP-U service endpoint used by BNG CUPS FWA sessions.

Introduced 21.2.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fpe** *reference*

Synopsis FPE used to encapsulate and decapsulate GTP-U traffic

Context **configure service vprn** *string* **gtp upf-data-endpoint fpe** *reference*

Tree **fpe**

Reference **configure fwd-path-ext fpe** *number*

Notes This element is mandatory.

Introduced 21.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface** *reference*

Synopsis	Interface on which the GTP-U packets terminate
Context	<b>configure service vprn</b> <i>string</i> <b>gtp upf-data-endpoint</b> <i>interface reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i>
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**uplink**

Synopsis	Enable the <b>uplink</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>gtp uplink</b>
Tree	<a href="#">uplink</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**apn** *string*

Synopsis	Network Identifier part of APN
Context	<b>configure service vprn</b> <i>string</i> <b>gtp uplink apn</b> <i>string</i>
Tree	<a href="#">apn</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pdn-type** *keyword*

Synopsis	Default 3GPP PDN in GTP
Context	<b>configure service vprn</b> <i>string</i> <b>gtp uplink pdn-type</b> <i>keyword</i>
Tree	<a href="#">pdn-type</a>
Options	ipv4, ipv6, ipv4v6
Default	ipv4
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peer-profile-map

Synopsis Enter the **peer-profile-map** context

Context **configure service vprn string gtp uplink peer-profile-map**

Tree [peer-profile-map](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix [[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis Enter the **prefix** list instance

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**

Tree [prefix](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[peer-prefix](#)] ([ipv4-prefix](#) | [ipv6-prefix](#))

Synopsis IP prefix and prefix length of the subnet

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#))**

Tree [prefix](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## peer-profile *reference*

Synopsis Peer profile name

Context **configure service vprn string gtp uplink peer-profile-map prefix ([ipv4-prefix](#) | [ipv6-prefix](#)) [peer-profile reference](#)**

Tree [peer-profile](#)

Reference **configure subscriber-mgmt gtp peer-profile string**

Notes This element is mandatory.

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **hash-label** *boolean*

Synopsis	Include hash label
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">hash-label</a> <i>boolean</i>
Tree	<a href="#">hash-label</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **igmp**

Synopsis	Enable the <b>igmp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp</a>
Tree	<a href="#">igmp</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **forwarding-group-interface** [forwarding-service](#) *string* [group-interface-name](#) *reference*

Synopsis	Enter the <b>forwarding-group-interface</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **forwarding-service** *string*

Synopsis	Forwarding service for a subscriber interface in a retailer context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface-name** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference import-policy reference</a>
Tree	<a href="#">import-policy</a>
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-group-sources number</a>
Tree	<a href="#">maximum-number-group-sources</a>
Description	<p>This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.</p>
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-groups number</a>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis Maximum number of sources that are allowed per group  
 Context **configure** [service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference maximum-number-sources number](#)  
 Tree [maximum-number-sources](#)  
 Range 1 to 1000  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mcac**

Synopsis Enter the **mcac** context  
 Context **configure** [service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference mcac](#)  
 Tree [mcac](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth**

Synopsis Enter the **bandwidth** context  
 Context **configure** [service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference mcac bandwidth](#)  
 Tree [bandwidth](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mandatory** (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels  
 Context **configure** [service vprn string igmp forwarding-group-interface forwarding-service string group-interface-name reference mcac bandwidth mandatory \(number | keyword\)](#)  
 Tree [mandatory](#)

Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <a href="#">reference</a> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <a href="#">reference</a> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <a href="#">reference</a> <a href="#">mcac</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.

Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference	<b>configure mcac policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure service vprn</b> <i>string</i> <b>igmp forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-interval</b> <i>number</i>
Tree	<b>query-interval</b>
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure service vprn</b> <i>string</i> <b>igmp forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-last-member-interval</b> <i>number</i>
Tree	<b>query-last-member-interval</b>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### query-response-interval *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### query-source-address *string*

Synopsis	Source address for IGMP queries
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">query-source-address</a> <i>string</i>
Tree	<a href="#">query-source-address</a>
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### router-alert-check *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sub-hosts-only *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i>
Tree	<a href="#">sub-hosts-only</a>

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subnet-check** *boolean*

Synopsis	Allow subnet checking
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <b>subnet-check</b> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-if-query-source-address** *string*

Synopsis	Default query-source address for all group interfaces
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp group-if-query-source-address</a> <i>string</i>
Tree	<a href="#">group-if-query-source-address</a>
Introduced	16.0.R1
Platforms	All

**group-interface** [[group-interface-name](#)] *reference*

Synopsis	Enter the <b>group-interface</b> list instance
----------	--

Context	<b>configure service vprn string igmp group-interface reference</b>
Tree	<a href="#">group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[group-interface-name] reference**

Synopsis	Group interface name
Context	<b>configure service vprn string igmp group-interface reference</b>
Tree	<a href="#">group-interface</a>
Reference	<b>configure service vprn string subscriber-interface string group-interface string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state keyword**

Synopsis	Administrative state of IGMP
Context	<b>configure service vprn string igmp group-interface reference admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy reference**

Synopsis	Import policy that filters IGMP packets
Context	<b>configure service vprn string igmp group-interface reference import-policy reference</b>
Tree	<a href="#">import-policy</a>
Description	<p>This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.</p> <p>When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).</p>

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Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mcac

Synopsis Enter the **mcac** context

Context **configure service vprn string igmp group-interface reference mcac**

Tree [mcac](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bandwidth

Synopsis Enter the **bandwidth** context

Context **configure service vprn string igmp group-interface reference mcac bandwidth**

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mandatory (*number | keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure service vprn string igmp group-interface reference mcac bandwidth mandatory (*number | keyword*)**

Tree [mandatory](#)

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## total (*number | keyword*)

Synopsis Maximum allowed bandwidth

Context **configure service vprn string igmp group-interface reference mcac bandwidth total (*number | keyword*)**

Tree [total](#)

Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp group-interface</a> <i>reference</i> <a href="#">mcac interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp group-interface</a> <i>reference</i> <a href="#">mcac policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy</a> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages  
Context **configure service vprn** *string* **igmp group-interface** *reference* **query-interval** *number*  
Tree [query-interval](#)  
Range 2 to 1024  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
Context **configure service vprn** *string* **igmp group-interface** *reference* **query-last-member-interval** *number*  
Tree [query-last-member-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
Context **configure service vprn** *string* **igmp group-interface** *reference* **query-response-interval** *number*  
Tree [query-response-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis Source address for IGMP queries  
Context **configure service vprn** *string* **igmp group-interface** *reference* **query-source-address** *string*

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Tree	<a href="#">query-source-address</a>
Description	This command configures the query source IP address for the group interface. This IP address overrides the source IP address configured at the router level.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-hosts-only** *boolean*

Synopsis	Allow IGMP traffic from known hosts only
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i>
Tree	<a href="#">sub-hosts-only</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet-check** *boolean*

Synopsis	Allow subnet checking
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">subnet-check</a> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface** [[ip-interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[ip-interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of IGMP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

### **import-policy** *reference*

Synopsis Import policy that filters IGMP packets

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* **import-policy** *reference*

Tree [import-policy](#)

Description This command configures the IGMP import policy, or filter, for an interface subscriber or a group interface. An IGMP filter is also known as a black or white list, and it is defined as a router policy option.

When redirection is applied, only the import policy from the subscriber is in effect. The import policy under the group interface is applicable only for IGMP states received directly on the SAP (AN in IGMP proxy mode).

Reference **configure** [policy-options policy-statement](#) *string*

Introduced 16.0.R1

Platforms All

### **maximum-number-group-sources** *number*

Synopsis Maximum number of group sources for this interface

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* **maximum-number-group-sources** *number*

Tree [maximum-number-group-sources](#)

Description This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range 1 to 32000

Introduced 16.0.R1

Platforms All

### **maximum-number-groups** *number*

Synopsis Maximum number of groups for this interface

Context **configure** [service vpn](#) *string* [igmp interface](#) *string* **maximum-number-groups** *number*

Tree [maximum-number-groups](#)

Range 1 to 16000

Introduced 16.0.R1  
 Platforms All

### **maximum-number-sources** *number*

Synopsis Maximum number of sources that are allowed per group  
 Context **configure** [service vprn string igmp interface string maximum-number-sources number](#)  
 Tree [maximum-number-sources](#)  
 Range 1 to 1000  
 Introduced 16.0.R1  
 Platforms All

### **mcac**

Synopsis Enter the **mcac** context  
 Context **configure** [service vprn string igmp interface string mcac](#)  
 Tree [mcac](#)  
 Introduced 16.0.R1  
 Platforms All

### **bandwidth**

Synopsis Enter the **bandwidth** context  
 Context **configure** [service vprn string igmp interface string mcac bandwidth](#)  
 Tree [bandwidth](#)  
 Introduced 16.0.R1  
 Platforms All

### **mandatory** (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels  
 Context **configure** [service vprn string igmp interface string mcac bandwidth mandatory \(number | keyword\)](#)  
 Tree [mandatory](#)  
 Range 0 to 2147483647  
 Options unlimited

Default	unlimited
Introduced	16.0.R1
Platforms	All

### **total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a>
Tree	<a href="#">mc-constraints</a>
Introduced	16.0.R1
Platforms	All



**level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All

**[level-id]** *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bandwidth** *number*

Synopsis	Bandwidth available for this level
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> <a href="#">bandwidth</a> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**number-down** [[number-lag-port-down](#)] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i>
Tree	<a href="#">number-down</a>

Introduced	16.0.R1
Platforms	All

### **[number-lag-port-down] number**

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure</b> <a href="#">service vprn string igmp interface string mcac mc-constraints number-down number</a>
Tree	<a href="#">number-down</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level number**

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure</b> <a href="#">service vprn string igmp interface string mcac mc-constraints number-down number level number</a>
Tree	<a href="#">level</a>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **use-lag-port-weight boolean**

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure</b> <a href="#">service vprn string igmp interface string mcac mc-constraints use-lag-port-weight boolean</a>
Tree	<a href="#">use-lag-port-weight</a>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

Default	false
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">mcac policy reference</a>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy string</a>
Introduced	16.0.R1
Platforms	All

### **query-interval number**

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">query-interval number</a>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

**redundant-mcast** *boolean*

Synopsis	Use interface as a redundant-pair member for multicast
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">redundant-mcast</a> <i>boolean</i>
Tree	<a href="#">redundant-mcast</a>
Default	false
Introduced	16.0.R1
Platforms	All

**router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

## ssm-translate

Synopsis	Enter the <b>ssm-translate</b> context
Context	<b>configure service vprn string igmp interface string ssm-translate</b>
Tree	<b>ssm-translate</b>
Introduced	16.0.R1
Platforms	All

## group-range **start string end string**

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure service vprn string igmp interface string ssm-translate group-range start string end string</b>
Tree	<b>group-range</b>
Introduced	16.0.R1
Platforms	All

## **start string**

Synopsis	Lower bound of the IP address group range
Context	<b>configure service vprn string igmp interface string ssm-translate group-range start string end string</b>
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## **end string**

Synopsis	Upper bound of the IP address group range
Context	<b>configure service vprn string igmp interface string ssm-translate group-range start string end string</b>
Tree	<b>group-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">ssm-translate group-range start string end string</a> <a href="#">source string</a>
Tree	<a href="#">source</a>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">ssm-translate group-range start string end string</a> <a href="#">source string</a>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">static</a>
Tree	<a href="#">static</a>
Introduced	16.0.R1
Platforms	All

**group** [[group-address](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">igmp interface string</a> <a href="#">static group string</a>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

**[group-address]** *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">static group</a> <i>string</i>
Tree	<a href="#">group</a>
Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	any source address (*,G)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">starg</a>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .

Introduced	16.0.R2
Platforms	All

### **group-range** *start string end string step string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i>
Tree	<a href="#">group-range</a>
Introduced	16.0.R1
Platforms	All

### **start** *string*

Synopsis	IP address for the start of the static group range
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **end** *string*

Synopsis	IP address for the end of the static group range
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">igmp</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **step** *string*

Synopsis	Step interval in the group-range address
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Context	<b>configure service vprn string igmp interface string static group-range start string end string step string</b>
Tree	<a href="#">group-range</a>
MD-CLI Default	0.0.0.1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure service vprn string igmp interface string static group-range start string end string step string source string</b>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All

### **[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure service vprn string igmp interface string static group-range start string end string step string source string</b>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **starg**

Synopsis	any source address (*,G)
Context	<b>configure service vprn string igmp interface string static group-range start string end string step string starg</b>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .

Introduced	16.0.R2
Platforms	All

**subnet-check** *boolean*

Synopsis	Allow subnet checking
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <b>subnet-check</b> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp interface</a> <i>string</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Description	This command configures the timing of the host-query messages that solicit group membership information. The messages are sent to the all-systems multicast group address, 224.0.0.1.
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

**query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Description	This command configures the timing of the query-message interval, defining the interval for leave-group messages among others. The lower the interval that is configured, the faster the detection of the loss of the last member of a group.
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp robust-count</a> <i>number</i>
Tree	<a href="#">robust-count</a>
Description	This command configures the level of expected packet loss on a subnet. If a subnet anticipates losses, this value can be increased.
Range	2 to 10
Default	2
Introduced	16.0.R1

Platforms All

## ssm-translate

Synopsis Enter the **ssm-translate** context  
Context **configure service vprn string igmp ssm-translate**  
Tree [ssm-translate](#)  
Introduced 16.0.R1  
Platforms All

## group-range [start string end string](#)

Synopsis Enter the **group-range** list instance  
Context **configure service vprn string igmp ssm-translate group-range start string end string**  
Tree [group-range](#)  
Introduced 16.0.R1  
Platforms All

## start *string*

Synopsis Lower bound of the IP address group range  
Context **configure service vprn string igmp ssm-translate group-range start string end string**  
Tree [group-range](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

## end *string*

Synopsis Upper bound of the IP address group range  
Context **configure service vprn string igmp ssm-translate group-range start string end string**  
Tree [group-range](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

**source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service vprn string igmp ssm-translate group-range start string end string source string</a>
Tree	<a href="#">source</a>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">service vprn string igmp ssm-translate group-range start string end string source string</a>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**igmp-host-tracking**

Synopsis	Enter the <b>igmp-host-tracking</b> context
Context	<b>configure</b> <a href="#">service vprn string igmp-host-tracking</a>
Tree	<a href="#">igmp-host-tracking</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of IGMP host tracking
Context	<b>configure</b> <a href="#">service vprn string igmp-host-tracking admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**expiry-time** *number*

Synopsis	Time that the system continues to track inactive hosts
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">igmp-host-tracking expiry-time</a> <i>number</i>
Tree	<a href="#">expiry-time</a>
Range	1 to 65535
Units	seconds
Default	260
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-nh-metric** *boolean*

Synopsis	Ignore next hop metric
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ignore-nh-metric</a> <i>boolean</i>
Tree	<a href="#">ignore-nh-metric</a>
Default	false
Introduced	16.0.R1
Platforms	All

**interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Interface name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i>

Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **cflowd-parameters**

Synopsis	Enter the <b>cflowd-parameters</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>cflowd-parameters</b>
Tree	<a href="#">cflowd-parameters</a>
Introduced	16.0.R1
Platforms	All

### **sampling** [[sampling-type](#)] *keyword*

Synopsis	Enter the <b>sampling</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <b>sampling</b> <i>keyword</i>
Tree	<a href="#">sampling</a>
Introduced	16.0.R1
Platforms	All

### **[sampling-type]** *keyword*

Synopsis	Traffic sampling type
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i>
Tree	<b>sampling</b>
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **direction** *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i> <b>direction</b> <i>keyword</i>
Tree	<b>direction</b>
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R1
Platforms	All

### **sample-profile** (*keyword* | *number*)

Synopsis	Sample profile ID
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i> <b>sample-profile</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>sample-profile</b>
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All



**type keyword**

Synopsis	Type of cflowd analysis
Context	<b>configure service vpn string interface string cflowd-parameters sampling keyword type keyword</b>
Tree	<a href="#">type</a>
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**cpu-protection reference**

Synopsis	CPU protection policy
Context	<b>configure service vpn string interface string cpu-protection reference</b>
Tree	<a href="#">cpu-protection</a>
Reference	<b>configure system security cpu-protection policy number</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure service vpn string interface string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**dynamic-tunnel-redundant-nexthop string**

Synopsis	Redundant next-hop address for the dynamic IPsec tunnel
Context	<b>configure service vpn string interface string dynamic-tunnel-redundant-nexthop string</b>
Tree	<a href="#">dynamic-tunnel-redundant-nexthop</a>

Description	This command specifies the redundant next-hop address on a public or private IPsec interface (with public or private tunnel SAP) for a dynamic IPsec tunnel. The next-hop address is used by a standby node to shunt traffic to a master if it receives the address. The next-hop address is resolved in the routing table of a corresponding service.
Notes	The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or <b>(dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop)</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## external-reference

Synopsis	Enter the <b>external-reference</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>external-reference</b>
Tree	<b>external-reference</b>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## openconfig

Synopsis	Enter the <b>openconfig</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>external-reference openconfig</b>
Tree	<b>openconfig</b>
Description	Commands in this context configure the OpenConfig reference key used to map a Nokia vendor-specific configuration and the OpenConfig state.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## subinterface *number*

Synopsis	Reference to the subinterface
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>external-reference openconfig subinterface</b> <i>number</i>
Tree	<b>subinterface</b>
Description	This command configures the subinterface used to map a Nokia vendor-specific configuration and the OpenConfig state.  This command configures the ability to query the OpenConfig state through NETCONF, gRPC, and the MD-CLI from any configuration mode, without having to add any Open

Config model configuration. As part of the configuration, a user must also add a port to the Layer 3 interface.

Range	0 to 4294967295
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## hold-time

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a>
Tree	<a href="#">down</a>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All

**init-only** *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <b>init-only</b> <i>boolean</i>
Tree	<a href="#">init-only</a>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

**up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <b>up</b>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">up</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>

Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv6</a> <a href="#">down</a>
Tree	<a href="#">down</a>
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv6</a> <a href="#">down</a> <a href="#">init-only</a> <i>boolean</i>
Tree	<a href="#">init-only</a>
Description	When configured to <b>true</b> , the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time ipv6 down</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

**up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

**if-attribute**

Synopsis	Enter the <b>if-attribute</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>if-attribute</b>
Tree	<a href="#">if-attribute</a>

Introduced	16.0.R1
Platforms	All

### **admin-group** *reference*

Synopsis	Administrative group name for the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <b>admin-group</b> <i>reference</i>
Tree	<a href="#">admin-group</a>
Description	This command specifies the administrative group membership to an interface. The configured administrative group membership is applied in all levels or areas the interface is participating in. The same interface cannot have different memberships in different levels or areas.
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <b>admin-group</b> <i>string</i>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **srlg-group** [[name](#)] *reference*

Synopsis	Add a list entry for <b>srlg-group</b>
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <b>srlg-group</b> <i>reference</i>
Tree	<a href="#">srlg-group</a>
Introduced	16.0.R1
Platforms	All

### **[name]** *reference*

Synopsis	SRLG name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">if-attribute</a> <b>srlg-group</b> <i>reference</i>
Tree	<a href="#">srlg-group</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">if-attribute</a> <b>srlg-group</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	19.7.R1
Platforms	All

**destination-class-lookup** *boolean*

Synopsis	Enable BGP destination class lookup
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ingress</a> <a href="#">destination-class-lookup</a> <i>boolean</i>
Tree	<a href="#">destination-class-lookup</a>
Description	When configured to <b>true</b> , the router performs a destination class lookup. This command is supported on FP3-based cards and later and is used in combination with the <b>destination-class</b> match criterion for an IP filter policy to filter egress traffic based on BGP destination classes.  When configured to <b>false</b> , destination class lookup is not enabled.
Default	false
Introduced	20.7.R1
Platforms	All

**policy-accounting** *reference*

Synopsis	Ingress policy accounting template name
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ingress</a> <a href="#">policy-accounting</a> <i>reference</i>
Tree	<a href="#">policy-accounting</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**ingress-stats** *boolean*

Synopsis	Collect ingress statistics
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ingress-stats</a> <i>boolean</i>
Tree	<a href="#">ingress-stats</a>



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Default	false
Introduced	16.0.R1
Platforms	All

### **ip-mtu** *number*

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ip-mtu</b> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	All

### **ipsec**

Synopsis	Enable the <b>ipsec</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ipsec</b>
Tree	<a href="#">ipsec</a>
Introduced	22.7.R1
Platforms	VSR

### **admin-state** *keyword*

Synopsis	Administrative state of IPsec secured interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ipsec</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

**ip-exception** *reference*

Synopsis	IP exception filter
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ip-exception</a> <i>reference</i>
Tree	<a href="#">ip-exception</a>
Description	This command configures the IP exception filter for the secured interface. All ingress traffic matching the specified filter bypasses IPsec processing.
Reference	<b>configure</b> <a href="#">filter ip-exception</a> <i>string</i>
Introduced	22.7.R1
Platforms	VSR

**ipsec-tunnel** [[name](#)] *string*

Synopsis	Enter the <b>ipsec-tunnel</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i>
Tree	<a href="#">ipsec-tunnel</a>
Description	Commands in this context configure IPsec tunnels used to secure traffic forwarded over the interface.
Introduced	22.7.R1
Platforms	VSR

**[name]** *string*

Synopsis	IPsec tunnel name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i>
Tree	<a href="#">ipsec-tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	VSR

**admin-state** *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	VSR

## bfd



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Introduced	22.7.R1
Platforms	VSR

## bfd-designate *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">bfd</a> <a href="#">bfd-designate boolean</a>
Tree	<a href="#">bfd-designate</a>
Default	false
Introduced	22.7.R1
Platforms	VSR

## bfd-liveness



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">bfd bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	22.7.R1
Platforms	VSR

### **dest-ip** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">bfd bfd-liveness</a> <a href="#">dest-ip string</a>
Tree	<a href="#">dest-ip</a>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **interface** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipsec ipsec-tunnel string</a> <a href="#">bfd bfd-liveness</a> <a href="#">interface string</a>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	22.7.R1

Platforms VSR

### **service-name** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <i>service vprn string interface string ipsec ipsec-tunnel string bfd bfd-liveness service-name string</i>
Tree	<i>service-name</i>
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **clear-df-bit** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	<b>configure</b> <i>service vprn string interface string ipsec ipsec-tunnel string clear-df-bit boolean</i>
Tree	<i>clear-df-bit</i>
Description	When configured to <b>true</b> , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false
Introduced	22.7.R1
Platforms	VSR

**copy-traffic-class-upon-decapsulation** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">copy-traffic-class-upon-decapsulation</a> <i>boolean</i>
Tree	<a href="#">copy-traffic-class-upon-decapsulation</a>
Description	When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	22.7.R1
Platforms	VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.7.R1
Platforms	VSR

**encapsulated-ip-mtu** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">encapsulated-ip-mtu</a> <i>number</i>
Tree	<a href="#">encapsulated-ip-mtu</a>
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If

the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.

Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

## icmp-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp-generation</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a>
Tree	<a href="#">icmp-generation</a>
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	22.7.R1
Platforms	VSR

## frag-required



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>frag-required</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation</a> <a href="#">frag-required</a>
Tree	<a href="#">frag-required</a>
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	22.7.R1
Platforms	VSR

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

**interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp-generation frag-required</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR



## message-count *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp-generation frag-required</a> <a href="#">message-count</a> <i>number</i>
Tree	<a href="#">message-count</a>
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

## icmp6-generation

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp6-generation</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a>
Tree	<a href="#">icmp6-generation</a>
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	22.7.R1
Platforms	VSR

## packet-too-big

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>packet-too-big</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp6-generation packet-too-big</b>
Tree	<b>packet-too-big</b>
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the <b>configure router interface ipsec ipsec-tunnel ip-mtu</b> command for the interface.</p>
Introduced	22.7.R1
Platforms	VSR

### **admin-state** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp6-generation packet-too-big admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	22.7.R1
Platforms	VSR

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>icmp6-generation packet-too-big interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 60

Units	seconds
Default	10
Introduced	22.7.R1
Platforms	VSR

### **message-count** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation packet-too-big message-count</a> <i>number</i>
Tree	<a href="#">message-count</a>
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	22.7.R1
Platforms	VSR

### **ip-mtu** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

## key-exchange



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>key-exchange</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b>
Tree	<b>key-exchange</b>
Introduced	22.7.R1
Platforms	VSR

## dynamic



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>dynamic</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b>
Tree	<b>dynamic</b>
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	22.7.R1
Platforms	VSR

## auto-establish *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Attempt to establish a phase 1 exchange automatically
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic auto-establish</b> <i>boolean</i>
Tree	<b>auto-establish</b>
Default	false
Introduced	22.7.R1

Platforms VSR

## cert



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **cert** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [key-exchange](#) [dynamic cert](#)

Tree [cert](#)

Description Commands in this context configure the attributes of the dynamic keying certificate.

Introduced 22.7.R1

Platforms VSR

## cert-profile *reference*

Synopsis Certificate profile name

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [key-exchange](#) [dynamic cert](#) [cert-profile](#) *reference*

Tree [cert-profile](#)

Reference **configure** [ipsec cert-profile](#) *string*

Introduced 22.7.R1

Platforms VSR

## status-verify



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **status-verify** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipsec ipsec-tunnel](#) *string* [key-exchange](#) [dynamic cert](#) [status-verify](#)

Tree [status-verify](#)

Description Commands in this context configure attributes of Certificate Status Verification (CSV).

Introduced	22.7.R1
Platforms	VSR

**default-result** *keyword*

Synopsis	Default result for Certificate Status Verification
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert status-verify</a> <b>default-result</b> <i>keyword</i>
Tree	<a href="#">default-result</a>
Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	22.7.R1
Platforms	VSR

**primary** *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert status-verify</a> <b>primary</b> <i>keyword</i>
Tree	<a href="#">primary</a>
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, oosp
Default	crl
Introduced	22.7.R1
Platforms	VSR

**secondary** *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic cert status-verify</a> <b>secondary</b> <i>keyword</i>
Tree	<a href="#">secondary</a>
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.

Options	none, crl, ocsp
Default	none
Introduced	22.7.R1
Platforms	VSR

### **trust-anchor-profile** *reference*

Synopsis	Trust anchor profile name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic cert trust-anchor-profile</a> <i>reference</i>
Tree	<a href="#">trust-anchor-profile</a>
Reference	<b>configure</b> <a href="#">ipsec trust-anchor-profile</a> <i>string</i>
Introduced	22.7.R1
Platforms	VSR

### **id**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>id</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic</a> <b>id</b>
Tree	<a href="#">id</a>
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> <li>• Psk: local tunnel IP address</li> <li>• Cert-auth: subject of the local certificate</li> </ul>
Introduced	22.7.R1
Platforms	VSR

## fqdn string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic id fqdn</a> <i>string</i>
Tree	<a href="#">fqdn</a>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

## ipv4 string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 as the local ID type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic id ipv4</a> <i>string</i>
Tree	<a href="#">ipv4</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

## ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 used as the local IKE ID type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic id ipv6</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ipv6</a>



Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	22.7.R1
Platforms	VSR

### ike-policy *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IKE policy ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">ike-policy</a> <i>reference</i>
Tree	<a href="#">ike-policy</a>
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ike-policy</a> <i>number</i>
Introduced	22.7.R1
Platforms	VSR

### ipsec-transform *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">dynamic</a> <a href="#">ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i>
Max. Instances	4
Introduced	22.7.R1
Platforms	VSR

## pre-shared-key *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange dynamic pre-shared-key</a> <i>string</i>
Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115
Introduced	22.7.R1
Platforms	VSR

## manual

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>manual</b> context
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual</a>
Tree	<a href="#">manual</a>
Description	Commands in this context configure settings for manually configured security associations for the IPsec tunnel.
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	22.7.R1
Platforms	VSR

## keys [[security-association](#)] *number direction keyword*

Synopsis	Enter the <b>keys</b> list instance
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual keys</a> <i>number direction keyword</i>
Tree	<a href="#">keys</a>
Description	Commands in this context configure the security association list for the tunnel.

Introduced 22.7.R1  
 Platforms VSR

### **[security-association] number**

Synopsis SA entry ID  
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange manual keys number direction keyword](#)  
 Tree [keys](#)  
 Range 1 to 16  
 Notes This element is part of a list key.  
 Introduced 22.7.R1  
 Platforms VSR

### **direction keyword**

Synopsis Direction of the IPsec tunnel  
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange manual keys number direction keyword](#)  
 Tree [keys](#)  
 Options inbound, outbound  
 Notes This element is part of a list key.  
 Introduced 22.7.R1  
 Platforms VSR

### **authentication-key string**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the authentication algorithm  
 Context **configure** [service vprn string](#) [interface string](#) [ipsec ipsec-tunnel string](#) [key-exchange manual keys number direction keyword authentication-key string](#)  
 Tree [authentication-key](#)  
 String Length 1 to 130  
 Introduced 22.7.R1

Platforms VSR

### encryption-key *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the encryption algorithm

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [ipsec](#) [ipsec-tunnel](#) *string* [key-exchange](#) [manual](#) [keys](#) *number* [direction](#) *keyword* [encryption-key](#) *string*

Tree [encryption-key](#)

String Length 1 to 66

Introduced 22.7.R1

Platforms VSR

### ipsec-transform *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Transform entry used by manual SAs

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [ipsec](#) [ipsec-tunnel](#) *string* [key-exchange](#) [manual](#) [keys](#) *number* [direction](#) *keyword* [ipsec-transform](#) *reference*

Tree [ipsec-transform](#)

Reference **configure** [ipsec](#) [ipsec-transform](#) *number*

Notes This element is mandatory.

Introduced 22.7.R1

Platforms VSR

### spi *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis SPI of inbound and outbound packets

Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange manual keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">spi</a> <i>number</i>
Tree	<a href="#">spi</a>
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.  The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **local-gateway-address-override** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IPsec tunnel endpoint address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">local-gateway-address-override</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-gateway-address-override</a>
Description	This command configures the local IPsec tunnel endpoint address. This overrides the default endpoint address, which is the interface address.
Introduced	22.7.R1
Platforms	VSR

### **max-history-key-records**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>max-history-key-records</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a>
Tree	<a href="#">max-history-key-records</a>

Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	22.7.R1
Platforms	VSR

### esp number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">esp</a> <i>number</i>
Tree	<a href="#">esp</a>
Range	1 to 48
Introduced	22.7.R1
Platforms	VSR

### ike number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">ike</a> <i>number</i>
Tree	<a href="#">ike</a>
Range	1 to 3
Introduced	22.7.R1
Platforms	VSR

### pmtu-discovery-aging number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>pmtu-discovery-aging</b> <i>number</i>
Tree	<a href="#">pmtu-discovery-aging</a>
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	22.7.R1
Platforms	VSR

### **private-sap** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private SAP ID
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec ipsec-tunnel</b> <i>string</i> <b>private-sap</b> <i>number</i>
Tree	<a href="#">private-sap</a>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	VSR

### **private-service** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Private service name
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>private-service</b> <i>string</i>
Tree	<b>private-service</b>
Description	This command configures the private service name. If unconfigured, the private service is the service where the secured interface resides.
String Length	1 to 64
Introduced	22.7.R1
Platforms	VSR

**private-tcp-mss-adjust** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipsec</b> <b>ipsec-tunnel</b> <i>string</i> <b>private-tcp-mss-adjust</b> <i>number</i>
Tree	<b>private-tcp-mss-adjust</b>
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	22.7.R1
Platforms	VSR

**propagate-pmtu-v4** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">propagate-pmtu-v4</a> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">propagate-pmtu-v6</a> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v6</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	22.7.R1
Platforms	VSR

### **public-tcp-mss-adjust** (*number | keyword*)



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">public-tcp-mss-adjust</a> ( <i>number   keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>

Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	22.7.R1
Platforms	VSR

### **remote-gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IPsec tunnel endpoint address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">remote-gateway-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">remote-gateway-address</a>
Introduced	22.7.R1
Platforms	VSR

### **replay-window** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec ipsec-tunnel</a> <i>string</i> <a href="#">replay-window</a> <i>number</i>
Tree	<a href="#">replay-window</a>
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32   64   128   256   512
Units	packets
Introduced	22.7.R1
Platforms	VSR

## security-policy



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>security-policy</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">security-policy</a>
Tree	<a href="#">security-policy</a>
Description	Commands in this context specify a security policy used by the tunnel.
Introduced	22.7.R1
Platforms	VSR

## id number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Security policy ID for use by the tunnel
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">security-policy id number</a>
Tree	<a href="#">id</a>
Max. Range	0 to 4294967295
Introduced	22.7.R1
Platforms	VSR

## strict-match *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipsec ipsec-tunnel string</a> <a href="#">security-policy strict-match boolean</a>
Tree	<a href="#">strict-match</a>
Description	When configured to <b>true</b> , this command enables strict match of the security policy entry.

When a CREATE\_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.

If there is no match, the setup fails, and TS\_UNACCEPTABLE is sent.

If there is a match, but there is an existing CHILD\_SA for the matched security policy, the setup fails, and NO\_PROPOSAL\_CHOSEN is sent.

If there is a match, and there is not a CHILD\_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD\_SA is created.

Default	false
Introduced	22.7.R1
Platforms	VSR

### ipv6-exception *reference*

Synopsis	IPv6 filter exception used to bypass encryption
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">ipv6-exception</a> <i>reference</i>
Tree	<a href="#">ipv6-exception</a>
Description	This command specifies the IPv6 filter exception for an IPsec-secured IPv6 interface. When an IPv6 filter exception is added, clear text packets that match the exception criteria in the IPv6 filter exception can ingress the interface, even when IPsec is enabled on the interface.
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ipv6-exception</a> <i>string</i>
Introduced	22.7.R1
Platforms	VSR

### public-sap *number*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Public SAP ID
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipsec</a> <a href="#">public-sap</a> <i>number</i>
Tree	<a href="#">public-sap</a>
Range	0 to 4094
Notes	This element is mandatory.
Introduced	22.7.R1

Platforms VSR

## tunnel-group *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Tunnel group ID

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipsec](#) [tunnel-group](#) *reference*

Tree [tunnel-group](#)

Reference **configure** [isa](#) [tunnel-group](#) *number*

Notes This element is mandatory.

Introduced 22.7.R1

Platforms VSR

## ipv4

Synopsis Enter the **ipv4** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#)

Tree [ipv4](#)

Introduced 16.0.R1

Platforms All

## addresses

Synopsis Enter the **addresses** context

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) [addresses](#)

Tree [addresses](#)

Introduced 16.0.R1

Platforms All

## address [[ipv4-address](#)] *string*

Synopsis Enter the **address** list instance

Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [ipv4](#) [addresses](#) [address](#) *string*

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Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**[ipv4-address]** *string*

Synopsis	IPv4 address for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">addresses</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">addresses</a> <a href="#">address</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**allow-directed-broadcasts** *boolean*

Synopsis	Forward directed broadcasts
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">allow-directed-broadcasts</a> <i>boolean</i>
Tree	<a href="#">allow-directed-broadcasts</a>
Default	false
Introduced	16.0.R1
Platforms	All

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>bfd</b>
Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>bfd</b> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>bfd</b> <a href="#">echo-receive</a> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>bfd</b> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.

Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

**receive number**

Synopsis	BFD receive interval over this interface
Context	<b>configure service vprn string interface string ipv4 bfd receive number</b>
Tree	<a href="#">receive</a>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**transmit-interval number**

Synopsis	BFD transmit interval over this interface
Context	<b>configure service vprn string interface string ipv4 bfd transmit-interval number</b>
Tree	<a href="#">transmit-interval</a>
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All



**type keyword**

Synopsis	Local termination point for the BFD session
Context	<b>configure service vprn string interface string ipv4 bfd type keyword</b>
Tree	<b>type</b>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dhcp**

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure service vprn string interface string ipv4 dhcp</b>
Tree	<b>dhcp</b>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of DHCP
Context	<b>configure service vprn string interface string ipv4 dhcp admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**gi-address** *string*

Synopsis	GI address for the DHCP relay
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">gi-address</a> <i>string</i>
Tree	<a href="#">gi-address</a>
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	All

**lease-populate**

Synopsis	Enter the <b>lease-populate</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">lease-populate</a>
Tree	<a href="#">lease-populate</a>
Introduced	16.0.R1
Platforms	All

**max-leases** *number*

Synopsis	Maximum number of DHCPv4 leases allowed
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">lease-populate</a> <a href="#">max-leases</a> <i>number</i>

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Tree	<a href="#">max-leases</a>
Range	0 to 511999
Introduced	16.0.R1
Platforms	All

## option-82

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a>
Tree	<a href="#">option-82</a>
Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	All

## action *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	All

## circuit-id

Synopsis	Enter the <b>circuit-id</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a>
Tree	<a href="#">circuit-id</a>
Introduced	16.0.R1
Platforms	All

## ascii-tuple

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">ascii-tuple</a>
Tree	<a href="#">ascii-tuple</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## ifindex

Synopsis	Use the interface index for the circuit ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">ifindex</a>
Tree	<a href="#">ifindex</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## none

Synopsis	Do not include the circuit ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">none</a>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## sap-id

Synopsis	Use the SAP ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">circuit-id</a> <a href="#">sap-id</a>
Tree	<a href="#">sap-id</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .

Introduced	16.0.R1
Platforms	All

## vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">vlan-ascii-tuple</a>
Tree	<a href="#">vlan-ascii-tuple</a>
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	All

## remote-id

Synopsis	Enter the <b>remote-id</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp option-82</a> <a href="#">remote-id</a>
Tree	<a href="#">remote-id</a>
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	All

## ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv4 dhcp option-82</a> <a href="#">remote-id</a> <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .

Introduced 16.0.R1  
 Platforms All

### mac

Synopsis Use the MAC address for the remote ID  
 Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 remote-id mac](#)  
 Tree [mac](#)  
 Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.  
 Introduced 16.0.R1  
 Platforms All

### none

Synopsis Do not include the remote ID  
 Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 remote-id none](#)  
 Tree [none](#)  
 Notes The following elements are part of a choice: **ascii-string**, **mac**, or **none**.  
 Introduced 16.0.R1  
 Platforms All

### vendor-specific-option

Synopsis Enter the **vendor-specific-option** context  
 Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 vendor-specific-option](#)  
 Tree [vendor-specific-option](#)  
 Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.  
 Introduced 16.0.R1  
 Platforms All

### client-mac-address *boolean*

Synopsis Send the MAC address in the VSO  
 Context **configure** [service vprn string](#) [interface string](#) [ipv4 dhcp option-82 vendor-specific-option client-mac-address boolean](#)

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Tree	<a href="#">client-mac-address</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **pool-name** *boolean*

Synopsis	Send the pool name in the VSO
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">pool-name</a> <i>boolean</i>
Tree	<a href="#">pool-name</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sap-id** *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">sap-id</a> <i>boolean</i>
Tree	<a href="#">sap-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **service-id** *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">service-id</a> <i>boolean</i>
Tree	<a href="#">service-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**string** *string*

Synopsis	User-defined ASCII string for the VSO
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <i>string</i> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**system-id** *boolean*

Synopsis	Send the system ID in the VSO
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <i>system-id</i> <i>boolean</i>
Tree	<a href="#">system-id</a>
Default	false
Introduced	16.0.R1
Platforms	All

**proxy-server**

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a>
Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a> <i>admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1



Platforms All

### **emulated-server** *string*

Synopsis IP address used as the DHCP server address for the SAP

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server](#) [emulated-server](#) *string*

Tree [emulated-server](#)

Description This command configures the IP address which will be used as the DHCP server address in the context of the SAP. Typically, the configured address should be in the context of the subnet represented by the service.

Introduced 16.0.R1

Platforms All

### **lease-time**

Synopsis Enter the **lease-time** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server](#) [lease-time](#)

Tree [lease-time](#)

Introduced 16.0.R1

Platforms All

### **radius-override** *boolean*

Synopsis Use lease time information provided by RADIUS server

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server](#) [lease-time](#) [radius-override](#) *boolean*

Tree [radius-override](#)

Default false

Introduced 16.0.R1

Platforms All

### **value** *number*

Synopsis DHCP lease time

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv4 dhcp proxy-server](#) [lease-time](#) [value](#) *number*

Tree	<a href="#">value</a>
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	All

### **python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **relay-plain-bootp** *boolean*

Synopsis	Enable relaying of plain BOOTP packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp relay-plain-bootp</a> <i>boolean</i>
Tree	<a href="#">relay-plain-bootp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **relay-proxy**

Synopsis	Enable the <b>relay-proxy</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp relay-proxy</a>
Tree	<a href="#">relay-proxy</a>
Introduced	16.0.R1
Platforms	All

### **release-update-src-ip** *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
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Context	<b>configure service vprn</b> <i>string interface string ipv4 dhcp relay-proxy release-update-src-ip</i> <i>boolean</i>
Tree	<a href="#">release-update-src-ip</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **siaddr-override** *string*

Synopsis	DHCP server IP address for address hiding function
Context	<b>configure service vprn</b> <i>string interface string ipv4 dhcp relay-proxy siaddr-override</i> <i>string</i>
Tree	<a href="#">siaddr-override</a>
Introduced	16.0.R1
Platforms	All

### **release-include-gi-address** *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	<b>configure service vprn</b> <i>string interface string ipv4 dhcp release-include-gi-address</i> <i>boolean</i>
Tree	<a href="#">release-include-gi-address</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *string*

Synopsis	IP addresses for DHCP server requests
Context	<b>configure service vprn</b> <i>string interface string ipv4 dhcp server</i> <i>string</i>
Tree	<a href="#">server</a>
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **src-ip-addr** *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <b>src-ip-addr</b> <i>keyword</i>
Tree	<a href="#">src-ip-addr</a>
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	All

### **trusted** *boolean*

Synopsis	Relay untrusted packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <b>trusted</b> <i>boolean</i>
Tree	<a href="#">trusted</a>
Description	<p>When configured to <b>true</b>, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **use-arp** *boolean*

Synopsis	Use ARP to determine the destination hardware address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <b>use-arp</b> <i>boolean</i>
Tree	<a href="#">use-arp</a>

Default	false
Introduced	16.0.R1
Platforms	All

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	All

## mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">mask-reply</a> <i>boolean</i>
Tree	<a href="#">mask-reply</a>
Default	true
Introduced	16.0.R1
Platforms	All

## param-problem

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a>
Tree	<a href="#">param-problem</a>
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp param-problem</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **redirects**

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp</a> <a href="#">redirects</a>
Tree	<a href="#">redirects</a>
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>

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Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**ttl-expired**

Synopsis	Enter the <b>ttl-expired</b> context
Context	<b>configure service vprn string interface string ipv4 icmp ttl-expired</b>
Tree	<b>ttl-expired</b>
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of sending TTL expired messages
Context	<b>configure service vprn string interface string ipv4 icmp ttl-expired admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number number**

Synopsis	Maximum number of TTL expired messages to send
Context	<b>configure service vprn string interface string ipv4 icmp ttl-expired number number</b>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds number**

Synopsis	Time used to limit the number of TTL expired messages
Context	<b>configure service vprn string interface string ipv4 icmp ttl-expired seconds number</b>
Tree	<b>seconds</b>
Range	1 to 60



Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

## unreachables

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a>
Tree	<a href="#">unreachables</a>
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## number *number*

Synopsis	Maximum number of unreachable messages to send
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**ip-helper-address** *string*

Synopsis	Gateway address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 ip-helper-address</a> <i>string</i>
Tree	<a href="#">ip-helper-address</a>
Introduced	16.0.R1
Platforms	All

**local-dhcp-server** *reference*

Synopsis	DHCP server for the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 local-dhcp-server</a> <i>reference</i>
Tree	<a href="#">local-dhcp-server</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">dhcp-server dhcpv4</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**neighbor-discovery**

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

**host-route**

Synopsis	Enter the <b>host-route</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a>
Tree	<a href="#">host-route</a>
Introduced	19.10.R1
Platforms	All

**populate** [[route-type](#)] *keyword*

Synopsis	Enter the <b>populate</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i>
Tree	<a href="#">populate</a>
Introduced	19.10.R1
Platforms	All

**[[route-type](#)]** *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i>
Tree	<a href="#">populate</a>
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**route-tag** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i> <a href="#">route-tag</a> <i>number</i>

Tree	<a href="#">route-tag</a>
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	19.10.R1
Platforms	All

### **learn-unsolicited** *boolean*

Synopsis	Learn new entries from any received NA message
Context	<b>configure</b> <a href="#">service vprn string interface string ipv4 neighbor-discovery learn-unsolicited boolean</a>
Tree	<a href="#">learn-unsolicited</a>
Description	<p>When configured to <b>true</b>, the router can learn neighbor entries from received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited (S) flag set. The command can be enabled for global addresses, link-local addresses, or for both.</p> <p>When configured to <b>false</b>, the router follows standard behavior for learning neighbor entries.</p> <ul style="list-style-type: none"> <li>• If an unsolicited NA (regardless of the S flag) is received from a neighbor that is not yet in the Neighbor Discovery (ND) cache, the NA is ignored.</li> <li>• If an NS, RS, RA, or Redirect message with a Link Layer Address (MAC) is received from a neighbor that is not yet in the ND cache, a new neighbor entry is created in the cache to store the received Link Layer MAC. The neighbor is put in the STALE state.</li> </ul>
Default	false
Introduced	16.0.R1
Platforms	All

### **limit**

Synopsis	Enter the <b>limit</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string ipv4 neighbor-discovery limit</a>
Tree	<a href="#">limit</a>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Generate log entries only if limit is reached
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">limit</a> <b>log-only</b> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-entries** *number*

Synopsis	Maximum number of entries learned on an IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">limit</a> <b>max-entries</b> <i>number</i>
Tree	<a href="#">max-entries</a>
Range	0 to 524288
Introduced	16.0.R1
Platforms	All

### **threshold** *number*

Synopsis	Threshold value that triggers a warning message
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">limit</a> <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 100
Units	percent
Default	90
Introduced	16.0.R1
Platforms	All

### **local-proxy-arp** *boolean*

Synopsis	Enable local proxy ARP on interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <b>local-proxy-arp</b> <i>boolean</i>

Tree	<a href="#">local-proxy-arp</a>
Description	When configured to <b>true</b> , the router enables local proxy ARP on the interface. When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	All

### **populate** *boolean*

Synopsis	Allow static and dynamic hosts to be populated in system ARP cache
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">populate</a> <i>boolean</i>
Tree	<a href="#">populate</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **proactive-refresh** *boolean*

Synopsis	Send a single refresh message before entry timeout
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery</a> <a href="#">proactive-refresh</a> <i>boolean</i>
Tree	<a href="#">proactive-refresh</a>
Description	When configured to <b>true</b> , the router always sends a refresh message 30 seconds before the timeout of the entry (a single refresh message with no retries). When configured to <b>false</b> , the router marks an entry as stale 30 seconds before age-out, and the router only sends an ARP request to refresh the entry if the IOM receives traffic that uses it. Then, the IOM asks the ARP application to send a refresh message. With ARP proactive refresh enabled, the ARP module sends a refresh message regardless of the IOM receiving traffic.
Default	false
Introduced	16.0.R1
Platforms	All

### **proxy-arp-policy** *reference*

Synopsis	Proxy ARP policy name
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Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery proxy-arp-policy</a> <i>reference</i>
Tree	<a href="#">proxy-arp-policy</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **remote-proxy-arp** *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery remote-proxy-arp</a> <i>boolean</i>
Tree	<a href="#">remote-proxy-arp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **retry-timer** *number*

Synopsis	ARP retry interval
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery retry-timer</a> <i>number</i>
Tree	<a href="#">retry-timer</a>
Range	1 to 300
Units	deciseconds
Default	50
Introduced	16.0.R1
Platforms	All

### **static-neighbor** [[ipv4-address](#)] *string*

Synopsis	Enter the <b>static-neighbor</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery static-neighbor</a> <i>string</i>

Tree	<a href="#">static-neighbor</a>
Introduced	16.0.R1
Platforms	All

**[ipv4-address] string**

Synopsis	IPv4 address that corresponds to the physical address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i>
Tree	<a href="#">static-neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**mac-address string**

Synopsis	MAC address for the static neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**static-neighbor-unnumbered**

Synopsis	Enable the <b>static-neighbor-unnumbered</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">static-neighbor-unnumbered</a>
Tree	<a href="#">static-neighbor-unnumbered</a>
Introduced	16.0.R1
Platforms	All

**mac-address string**

Synopsis	MAC address for the static neighbor
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery static-neighbor-unnumbered mac-address</b> <i>string</i>
Tree	<a href="#">mac-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 neighbor-discovery timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.
Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

### **primary**

Synopsis	Enable the <b>primary</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 primary</b>
Tree	<a href="#">primary</a>
Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 primary address</b> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.

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Introduced	16.0.R1
Platforms	All

### **broadcast** *keyword*

Synopsis	Broadcast address format
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <b>broadcast</b> <i>keyword</i>
Tree	<a href="#">broadcast</a>
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <b>prefix-length</b> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on the IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <b>track-srrp</b> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **qos-route-lookup** *keyword*

Synopsis	IP address for QoS route lookup for ingress IP packets
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 qos-route-lookup</b> <i>keyword</i>
Tree	<a href="#">qos-route-lookup</a>
Description	This command specifies the IP address type used for QPPB enabled per-packet QoS handling (in terms of FC and priority). When using QPPB, routes are associated with a QoS treatment (FC and optionally priority) through either explicit configuration or the route policy. If an IPv4 or IPv6 packet arrives on an interface where the configuration of this command applies to the packet, the QoS treatment of the packet is based on the route that matched the destination IP address or the route that matched the source IP address.  See "Enabling QPPB on an IP interface" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about QPPB.
Options	destination, source, source-and-dest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **secondary** [\[address\]](#) *string*

Synopsis	Enter the <b>secondary</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 secondary</b> <i>string</i>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

### [\[address\]](#) *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 secondary</b> <i>string</i>
Tree	<a href="#">secondary</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **broadcast** *keyword*

Synopsis	Broadcast address format
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 secondary</b> <i>string</i> <b>broadcast</b> <i>keyword</i>
Tree	<a href="#">broadcast</a>

Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All

### **igp-inhibit** *boolean*

Synopsis	Disable the running IGP from recognizing secondary IP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <b>igp-inhibit</b> <i>boolean</i>
Tree	<a href="#">igp-inhibit</a>
Description	When configured to <b>true</b> , the running IGP does not recognize the secondary IP address as a local interface.
Default	false
Introduced	16.0.R1
Platforms	All

### **prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <b>prefix-length</b> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on the IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <b>track-srrp</b> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **tcp-mss** *number*

Synopsis	TCP maximum segment size for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">tcp-mss</a> <i>number</i>
Tree	<a href="#">tcp-mss</a>
Range	384 to 9746
Introduced	16.0.R1
Platforms	All

### **unnumbered**

Synopsis	Enter the <b>unnumbered</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">unnumbered</a>
Tree	<a href="#">unnumbered</a>
Introduced	16.0.R1
Platforms	All

### **ip-address** *string*

Synopsis	IP address for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">unnumbered</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .
Introduced	16.0.R1
Platforms	All

### **ip-int-name** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">unnumbered</a> <a href="#">ip-int-name</a> <i>string</i>
Tree	<a href="#">ip-int-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .
Introduced	16.0.R1
Platforms	All

## urpf-check

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>urpf-check</b>
Tree	<a href="#">urpf-check</a>
Introduced	16.0.R1
Platforms	All

## ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> <b>ignore-default</b> <i>boolean</i>
Tree	<a href="#">ignore-default</a>
Default	false
Introduced	16.0.R1
Platforms	All

## mode *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

## vrrp [[virtual-router-id](#)] *number*

Synopsis	Enter the <b>vrrp</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <b>vrrp</b> <i>number</i>
Tree	<a href="#">vrrp</a>
Introduced	16.0.R1
Platforms	All

**[virtual-router-id]** *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i>
Tree	<a href="#">vrrp</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of VRRP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**authentication-key** *string*

Synopsis	Password for simple text authentication
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i> <a href="#">authentication-key</a> <i>string</i>

Tree	<a href="#">authentication-key</a>
Description	This command optionally assigns a simple text password authentication key to generate master VRRP advertisement messages and validate received VRRP advertisement messages.  If this command is re-executed with a different password key defined, the new key immediately replaces the old key. This command may be executed at any time.
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

### **backup string**

Synopsis	Virtual router IP addresses for the interface
Context	<b>configure</b> <a href="#">service vprn</a> <a href="#">string interface</a> <a href="#">string ipv4 vrrp number backup</a> <a href="#">string</a>
Tree	<a href="#">backup</a>
Description	This command associates virtual router IP addresses with those of the parental IP interface.  This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.  Non-owner virtual router instances create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.  For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is advertising to backup virtual routers receiving the messages. The specified <i>unicast-ipv4-address</i> must be equal to one of the existing IP addresses in the parental IP interface (primary or secondary) or this command fails.  See "Owner and non-owner VRRP" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide</i> for more information about owner and non-owner virtual router instances.
Max. Instances	16
Introduced	16.0.R1
Platforms	All

### **bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Introduced	16.0.R1
Platforms	All

**dest-ip** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IP address to use for BFD session
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i>
Tree	<b>dest-ip</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i>
Tree	<b>interface-name</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <i>service vprn string interface string ipv4 vrrp number bfd-liveness service-name string</i>
Tree	<i>service-name</i>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**init-delay** *number*

Synopsis	VRRP initialization delay timer
Context	<b>configure</b> <i>service vprn string interface string ipv4 vrrp number init-delay number</i>
Tree	<i>init-delay</i>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**mac** *string*

Synopsis	Virtual MAC address to use in ARP responses
Context	<b>configure</b> <i>service vprn string interface string ipv4 vrrp number mac string</i>
Tree	<i>mac</i>
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts</p>

results. All VRRP advertisement messages are transmitted with *unicast-mac-address* as the source MAC.

An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.

Introduced	16.0.R1
Platforms	All

### **master-int-inherit** *boolean*

Synopsis	Allow master instance to dictate the master down timer
Context	<b>configure</b> <i>service vprn string interface string ipv4 vrrp number master-int-inherit boolean</i>
Tree	<a href="#">master-int-inherit</a>
Description	When configured to <b>true</b> , the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.  When configured to <b>false</b> , the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.
Introduced	16.0.R1
Platforms	All

### **message-interval** *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	<b>configure</b> <i>service vprn string interface string ipv4 vrrp number message-interval number</i>
Tree	<a href="#">message-interval</a>
Description	This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.  The usage of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command: <ul style="list-style-type: none"> <li>When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as master.</li> </ul>

- When a non-owner is in the backup state with **master-int-inherit** disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.
- When a non-owner is in the backup state with **master-int-inherit** enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.

Range	1 to 2559
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	All

### monitor-oper-group *reference*



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i> <a href="#">monitor-oper-group</a> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Introduced	22.2.R1
Platforms	All

### ntp-reply *boolean*

Synopsis	Allow processing of NTP requests
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">vrrp</a> <i>number</i> <a href="#">ntp-reply</a> <i>boolean</i>
Tree	<a href="#">ntp-reply</a>

Description	When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to <b>false</b> , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group name associated with the VRRP
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>oper-group</b> <i>reference</i>
Tree	<b>oper-group</b>
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	<b>configure</b> <b>service</b> <b>oper-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **owner** *boolean*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>owner</b> <i>boolean</i>
Tree	<b>owner</b>
Description	When configured to <b>true</b> , the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router. When configured to <b>false</b> , this virtual router instance is designated as a non-owner.
Default	false
Introduced	16.0.R1
Platforms	All

**passive** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Description	<p>When configured to <b>true</b>, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to <b>false</b>, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**ping-reply** *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4</b> <b>vrrp</b> <i>number</i> <b>ping-reply</b> <i>boolean</i>
Tree	<b>ping-reply</b>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**policy reference**

Synopsis	VRRP priority control policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">policy reference</a>
Tree	<a href="#">policy</a>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**preempt boolean**

Synopsis	Allow the VRRP to override an existing non-owner master
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">preempt boolean</a>
Tree	<a href="#">preempt</a>
Description	<p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

**priority number**

Synopsis	Base priority for the VRRP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">priority number</a>
Tree	<a href="#">priority</a>

Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **ssh-reply** *boolean*

Synopsis	Allow the non-owner master to reply to SSH requests
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>ssh-reply</b> <i>boolean</i>
Tree	<b>ssh-reply</b>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to SSH requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the SSH request. SSH cannot be disabled at the management security level (either on the parental IP interface or on the SSH source host address).</p> <p>When configure to <b>false</b>, SSH requests to non-owner master virtual IP addresses are silently discarded.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **standby-forwarding** *boolean*

Synopsis	Allow standby router to forward traffic
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv4 vrrp</b> <i>number</i> <b>standby-forwarding</b> <i>boolean</i>
Tree	<b>standby-forwarding</b>
Description	<p>When configured to <b>true</b>, the standby router forwards all traffic.</p> <p>When configured to <b>false</b>, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false
Introduced	16.0.R1
Platforms	All



**telnet-reply** *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">telnet-reply</a> <i>boolean</i>
Tree	<a href="#">telnet-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to <b>false</b>, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**traceroute-reply** *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4 vrrp</a> <i>number</i> <a href="#">traceroute-reply</a> <i>boolean</i>
Tree	<a href="#">traceroute-reply</a>
Description	<p>When configured to <b>true</b>, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to <b>false</b>, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

**address** [ipv6-address] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**[ipv6-address]** *string*

Synopsis	IPv6 address assigned to the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**duplicate-address-detection** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable Duplicate Address Detection
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <a href="#">duplicate-address-detection</a> <i>boolean</i>
Tree	<a href="#">duplicate-address-detection</a>
Description	When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD). When configured to <b>false</b> , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

**eui-64** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Form IPv6 address from prefix and 64-bit interface ID
Context	<b>configure</b> <i>service vprn string interface string ipv6 address string eui-64 boolean</i>
Tree	<i>eui-64</i>
Description	When configured to <b>true</b> , the router forms a complete IPv6 address from the supplied prefix and 64-bit interface identifier. The 64-bit interface identifier is derived from the MAC address on Ethernet interfaces. For interfaces without a MAC address, for example POS interfaces, use the base MAC address of the chassis.
Default	false
Introduced	16.0.R1
Platforms	All

**prefix-length** *number*

Synopsis	IPv6 address prefix length
Context	<b>configure</b> <i>service vprn string interface string ipv6 address string prefix-length number</i>
Tree	<i>prefix-length</i>
Range	4 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**primary-preference** *number*

Synopsis	Index assigned to the IPv6 address of the interface
Context	<b>configure</b> <i>service vprn string interface string ipv6 address string primary-preference number</i>
Tree	<i>primary-preference</i>
Description	This command assigns a primary preference index to an IPv6 address of the interface to enforce the order in which the address is used by control plane protocols and applications that require a fixed address of the interface, such as LDP and Segment Routing. In cases where a fixed address is required when originating packets from the interface, the IPv6 address with the lowest primary preference index is selected. If the selected address is removed, the next IPv6 address with the next lowest primary preference index is selected.

If this index is not specified for the IPv6 address, the system assigns the next available index value to the address. The address index space is unique across all addresses of a given interface.

Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **track-srrp** *number*

Synopsis	SRRP ID whose state is tracked on this IP address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 address</a> <i>string</i> <b>track-srrp</b> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>bfd</b>
Tree	<a href="#">bfd</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <b>bfd</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd</a> <a href="#">echo-receive</a> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

**receive** *number*

Synopsis	BFD receive interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 bfd</a> <a href="#">receive</a> <i>number</i>
Tree	<a href="#">receive</a>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**transmit-interval** *number*

Synopsis	BFD transmit interval over this interface
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>transmit-interval</b> <i>number</i>
Tree	<b>transmit-interval</b>
Description	This command configures the transmit intervals.  On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Local termination point for the BFD session
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity.  The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dhcp6**

Synopsis	Enter the <b>dhcp6</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6</b>
Tree	<b>dhcp6</b>
Introduced	16.0.R1
Platforms	All

## relay

Synopsis	Enter the <b>relay</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay</b>
Tree	<b>relay</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## lease-populate

Synopsis	Enter the <b>lease-populate</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate</b>
Tree	<a href="#">lease-populate</a>
Introduced	16.0.R1
Platforms	All

### **max-nbr-of-leases** *number*

Synopsis	Maximum lease state entries allowed for the interface
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate max-nbr-of-leases</b> <i>number</i>
Tree	<a href="#">max-nbr-of-leases</a>
Range	0 to 32767
Default	0
Introduced	16.0.R1
Platforms	All

### **route-populate**

Synopsis	Enter the <b>route-populate</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate</b>
Tree	<a href="#">route-populate</a>
Introduced	16.0.R1
Platforms	All

### **na** *boolean*

Synopsis	Create route based on IA_NA prefix option in relay-reply message
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 dhcp6 relay lease-populate route-populate na</b> <i>boolean</i>
Tree	<a href="#">na</a>
Default	false
Introduced	16.0.R1
Platforms	All



**pd**

Synopsis	Enable the <b>pd</b> context
Context	<b>configure service vprn string interface string ipv6 dhcp6 relay lease-populate route-populate pd</b>
Tree	<b>pd</b>
Introduced	16.0.R1
Platforms	All

**exclude boolean**

Synopsis	Create back hole route based on prefix exclude option in relay-reply message
Context	<b>configure service vprn string interface string ipv6 dhcp6 relay lease-populate route-populate pd exclude boolean</b>
Tree	<b>exclude</b>
Default	false
Introduced	16.0.R1
Platforms	All

**ta boolean**

Synopsis	Create route based on IA_TA prefix option in relay-reply message
Context	<b>configure service vprn string interface string ipv6 dhcp6 relay lease-populate route-populate ta boolean</b>
Tree	<b>ta</b>
Default	false
Introduced	16.0.R1
Platforms	All

**link-address string**

Synopsis	Link address of the DHCPv6 relay messages
Context	<b>configure service vprn string interface string ipv6 dhcp6 relay link-address string</b>
Tree	<b>link-address</b>
Introduced	16.0.R1
Platforms	All

## neighbor-resolution *boolean*

Synopsis	Enable neighbor resolution via DHCPv6 relay
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay neighbor-resolution</a> <i>boolean</i>
Tree	<a href="#">neighbor-resolution</a>
Default	false
Introduced	16.0.R1
Platforms	All

## option

Synopsis	Enter the <b>option</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option</a>
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	All

## interface-id

Synopsis	Enter the <b>interface-id</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option interface-id</a>
Tree	<a href="#">interface-id</a>
Introduced	16.0.R1
Platforms	All

## ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option interface-id ascii-tuple</a>
Tree	<a href="#">ascii-tuple</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option</a> <a href="#">interface-id</a> <a href="#">if-index</a>
Tree	<a href="#">if-index</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## sap-id

Synopsis	Use SAP ID in interface ID option in relay packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option</a> <a href="#">interface-id</a> <a href="#">sap-id</a>
Tree	<a href="#">sap-id</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## string *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option</a> <a href="#">interface-id</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 80
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	All

## remote-id *boolean*

Synopsis	Send remote ID option in the DHCPv6 relay packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay option</a> <a href="#">remote-id</a> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Default	false

Introduced 16.0.R1  
 Platforms All

### **python-policy** *reference*

Synopsis Python policy name  
 Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [python-policy](#) *reference*  
 Tree [python-policy](#)  
 Reference **configure** [python](#) [python-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **server** *string*

Synopsis DHCPv6 servers to which the DHCPv6 requests are forwarded  
 Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [server](#) *string*  
 Tree [server](#)  
 Max. Instances 8  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **source-address** *string*

Synopsis Source IPv6 address of the DHCPv6 relay messages  
 Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [source-address](#) *string*  
 Tree [source-address](#)  
 Introduced 16.0.R1  
 Platforms All

### **user-db** *reference*

Synopsis Local user database for authentication  
 Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [ipv6](#) [dhcp6](#) [relay](#) [user-db](#) *reference*

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Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## server

Synopsis	Enter the <b>server</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a>
Tree	<a href="#">server</a>
Introduced	16.0.R1
Platforms	All

## max-nbr-of-leases *number*

Synopsis	DHCPv6 leases allowed
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">max-nbr-of-leases</a> <i>number</i>
Tree	<a href="#">max-nbr-of-leases</a>
Range	0 to 8000
Default	8000
Introduced	16.0.R1
Platforms	All

## prefix-delegation

Synopsis	Enter the <b>prefix-delegation</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a>
Tree	<a href="#">prefix-delegation</a>
Description	Commands in this context configure the options for delegating a long-lived prefix from a delegating router to a requesting router, where the delegating router does not require knowledge about the link topology in the network to which the prefixes are assigned.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the prefix delegation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 server prefix-delegation admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**prefix** [[ipv6-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 server prefix-delegation prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Description	Commands in this context configure the IPv6 prefix that is delegated by the system.
Introduced	16.0.R1
Platforms	All

**[ipv6-prefix]** *string*

Synopsis	IPv6 address and prefix
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 server prefix-delegation prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**client-id**

Synopsis	Enter the <b>client-id</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 server prefix-delegation prefix</a> <i>string</i> <b>client-id</b>
Tree	<a href="#">client-id</a>

Introduced	16.0.R1
Platforms	All

**duid string**

Synopsis	Requesting router ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <a href="#">client-id</a> <a href="#">duid</a> <i>string</i>
Tree	<a href="#">duid</a>
String Length	1 to 130
Introduced	16.0.R1
Platforms	All

**iaid number**

Synopsis	IAID from the requesting router to match
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <a href="#">client-id</a> <a href="#">iaid</a> <i>number</i>
Tree	<a href="#">iaid</a>
Description	This command configures the Identity Association ID (IAID) associated with a prefix delegation entry and must match the IAID sent by the requesting router for the prefix delegation to succeed.
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**preferred-lifetime (number | keyword)**

Synopsis	Preferred lifetime of the prefix
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">server</a> <a href="#">prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <a href="#">preferred-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Description	This command configures the preferred lifetime of the prefix. The value cannot be greater than the valid lifetime value.
Range	1 to 4294967294
Units	seconds
Options	infinite

Default	604800
Introduced	16.0.R1
Platforms	All

### **valid-lifetime** (*number* | *keyword*)

Synopsis	Valid lifetime of the prefix
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 dhcp6 server prefix-delegation</a> <a href="#">prefix</a> <i>string</i> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	1 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

### **duplicate-address-detection** *boolean*

Synopsis	Enable Duplicate Address Detection per interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 duplicate-address-detection</a> <i>boolean</i>
Tree	<a href="#">duplicate-address-detection</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **forward-ipv4-packets** *boolean*

Synopsis	Forward unencapsulated IPv4 packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 forward-ipv4-packets</a> <i>boolean</i>
Tree	<a href="#">forward-ipv4-packets</a>
Default	false
Introduced	19.5.R1
Platforms	All



## icmp6

Synopsis	Enter the <b>icmp6</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string ipv6 icmp6</a>
Tree	<a href="#">icmp6</a>
Introduced	16.0.R1
Platforms	All

## packet-too-big

Synopsis	Enter the <b>packet-too-big</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string ipv6 icmp6 packet-too-big</a>
Tree	<a href="#">packet-too-big</a>
Description	Commands in this context configure limiting the number of ICMPv6 Packet Too Big messages.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure</b> <a href="#">service vprn string interface string ipv6 icmp6 packet-too-big admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## number *number*

Synopsis	Number of Packet Too big Messages issued per time frame
Context	<b>configure</b> <a href="#">service vprn string interface string ipv6 icmp6 packet-too-big number number</a>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100

Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit Packet Too Big messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">packet-too-big</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

### **param-problem**

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <b>param-problem</b>
Tree	<a href="#">param-problem</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of Parameter Problem message sends
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">icmp6</a> <a href="#">param-problem</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Number used to limit ICMPv6 Parameter Problem messages
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit ICMPv6 Parameter Problem messages
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 param-problem</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

**redirects**

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6</b> <b>redirects</b>
Tree	<b>redirects</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Redirect message sends
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 icmp6 redirects</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

### **number** *number*

Synopsis Number to limit ICMPv6 Redirect messages per time frame

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6 redirects](#) *number* *number*

Tree [number](#)

Range 10 to 1000

Default 100

Introduced 16.0.R1

Platforms All

### **seconds** *number*

Synopsis Time used to limit ICMPv6 Redirect messages

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6 redirects](#) *seconds* *number*

Tree [seconds](#)

Range 1 to 60

Default 10

Introduced 16.0.R1

Platforms All

### **time-exceeded**

Synopsis Enter the **time-exceeded** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6](#) **time-exceeded**

Tree [time-exceeded](#)

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of Time Exceeded message sends

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 icmp6](#) **time-exceeded** **admin-state** *keyword*

Tree [admin-state](#)

Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Number to limit Time Exceeded messages per time frame
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 time-exceeded</a> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

### **seconds** *number*

Synopsis	Time used to limit ICMPv6 Time Exceeded messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 time-exceeded</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

### **unreachables**

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 unreachables</a>
Tree	<a href="#">unreachables</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of Unreachable message sends
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 unreachablees</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Number to limit Unreachable messages per time frame
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 unreachablees</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit ICMPv6 Unreachable messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 icmp6 unreachablees</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Default	10
Introduced	16.0.R1
Platforms	All

**link-local-address**

Synopsis	Enter the <b>link-local-address</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 link-local-address</a>
Tree	<a href="#">link-local-address</a>

Introduced	16.0.R1
Platforms	All

### **address** *string*

Synopsis	IPv6 link-local address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

### **duplicate-address-detection** *boolean*

Synopsis	Enable Duplicate Address Detection
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-local-address</a> <a href="#">duplicate-address-detection</a> <i>boolean</i>
Tree	<a href="#">duplicate-address-detection</a>
Description	When configured to <b>true</b> , the router enables Duplicate Address Detection (DAD) on the interface.  When configured to <b>false</b> , the router disables DAD and sets the address to preferred, even if there is a duplicated address.
Default	true
Introduced	16.0.R1
Platforms	All

### **local-dhcp-server** *reference*

Synopsis	DHCP server for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">local-dhcp-server</a> <i>reference</i>
Tree	<a href="#">local-dhcp-server</a>
Description	This command instantiates a local DHCP server. A local DHCP server can serve multiple interfaces but is limited to the routing context in which it was created.
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">dhcp-server</a> <a href="#">dhcpv6</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipv6</a> <a href="#">neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

## host-route

Synopsis	Enter the <b>host-route</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a>
Tree	<a href="#">host-route</a>
Introduced	20.2.R1
Platforms	All

## populate [[route-type](#)] *keyword*

Synopsis	Enter the <b>populate</b> list instance
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i>
Tree	<a href="#">populate</a>
Introduced	20.2.R1
Platforms	All

## [\[route-type\]](#) *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">host-route</a> <a href="#">populate</a> <i>keyword</i>
Tree	<a href="#">populate</a>
Options	static, dynamic, evpn
Notes	This element is part of a list key.
Introduced	20.2.R1
Platforms	All



**route-tag** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>host-route</b> <b>populate</b> <i>keyword</i> <b>route-tag</b> <i>number</i>
Tree	<b>route-tag</b>
Description	This command specifies the route tag that is added in the route table for ARP or ND host routes. This tag can be matched on BGP VRF export and BGP peer export policies.
Range	1 to 255
Introduced	20.2.R1
Platforms	All

**learn-unsolicited** *keyword*

Synopsis	Type of entries learned from unsolicited NA messages
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>learn-unsolicited</b> <i>keyword</i>
Tree	<b>learn-unsolicited</b>
Description	This command enables the ability to learn neighbor entries out of received unsolicited Neighbor Advertisement (NA) messages, with or without the solicited flag set.  When unconfigured, the router follows standard RFC 4861 behavior for learning of neighbor entries. The neighbor is put in the stale state. This is the standard RFC behavior.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

**limit**

Synopsis	Enter the <b>limit</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>limit</b>
Tree	<b>limit</b>
Introduced	16.0.R1

Platforms All

### **log-only** *boolean*

Synopsis Generate log entries when limit is reached

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 neighbor-discovery limit log-only](#) *boolean*

Tree [log-only](#)

Description When configured to **true**, the router sends the warning message at the specified threshold percentage or upon exceeding the specified limit. Entries that exceed the limit are learned.  
When configured to **false**, the router does not send the warning message.

Default false

Introduced 16.0.R1

Platforms All

### **max-entries** *number*

Synopsis Maximum number of entries learned on an IP interface

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 neighbor-discovery limit max-entries](#) *number*

Tree [max-entries](#)

Description This command configures the maximum number of entries that can be learned on an IP interface.  
When unconfigured, no maximum limit is imposed.

Range 0 to 102400

Introduced 16.0.R1

Platforms All

### **threshold** *number*

Synopsis Threshold percentage that triggers a warning message

Context **configure** [service vprn](#) *string* [interface](#) *string* [ipv6 neighbor-discovery limit threshold](#) *number*

Tree [threshold](#)

Range 1 to 100

Units percent

Default	90
Introduced	16.0.R1
Platforms	All

### **local-proxy-nd** *boolean*

Synopsis	Enable local proxy neighbor discovery on the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <b>local-proxy-nd</b> <i>boolean</i>
Tree	<a href="#">local-proxy-nd</a>
Description	<p>When configured to <b>true</b>, the router enables local proxy neighbor discovery on the interface and replies to neighbor solicitation requests when both the hosts are on the same subnet. In this case, ICMP redirects are disabled.</p> <p>When configured to <b>false</b>, the router disables local proxy neighbor discovery on the interface and does not reply to neighbor solicitation requests if both the hosts are on the same subnet.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### **proactive-refresh** *keyword*

Synopsis	Proactive refresh of neighbor entries
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <b>proactive-refresh</b> <i>keyword</i>
Tree	<a href="#">proactive-refresh</a>
Description	This command enables a proactive refresh of the neighbor entries. After the stale timer expires, the router sends an NUD message to the host (regardless of the existence of traffic to the IP address on the IOM), so the entry can be refreshed or removed.
Options	global, link-local, both
Introduced	16.0.R1
Platforms	All

### **proxy-nd-policy** *reference*

Synopsis	Proxy Neighbor Discovery policy name for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <b>proxy-nd-policy</b> <i>reference</i>

Tree	<a href="#">proxy-nd-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **reachable-time** *number*

Synopsis	Neighbor reachability detection timer
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">reachable-time</a> <i>number</i>
Tree	<a href="#">reachable-time</a>
Range	30 to 3600
Introduced	16.0.R1
Platforms	All

### **secure-nd**

Synopsis	Enter the <b>secure-nd</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a>
Tree	<a href="#">secure-nd</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of Secure Neighbor Discovery
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <a href="#">secure-nd</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**allow-unsecured-msgs** *boolean*

Synopsis	Accept unsecured messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>secure-nd</b> <b>allow-unsecured-msgs</b> <i>boolean</i>
Tree	<a href="#">allow-unsecured-msgs</a>
Description	When configured to <b>true</b> , the router accepts unsecured messages. When Secure Neighbor Discovery (SeND) is enabled, only secure messages are accepted. When configured to <b>false</b> , the router disables the acceptance of unsecured messages.
Default	true
Introduced	16.0.R1
Platforms	All

**public-key-min-bits** *number*

Synopsis	Minimum acceptable key length for public keys in CGA
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>secure-nd</b> <b>public-key-min-bits</b> <i>number</i>
Tree	<a href="#">public-key-min-bits</a>
Range	512 to 1024
Default	1024
Introduced	16.0.R1
Platforms	All

**security-parameter** *number*

Synopsis	Security parameter used in the generation of a CGA
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6</b> <b>neighbor-discovery</b> <b>secure-nd</b> <b>security-parameter</b> <i>number</i>
Tree	<a href="#">security-parameter</a>
Range	0 to 1
Default	1
Introduced	16.0.R1
Platforms	All

**stale-time** *number*

Synopsis	Time a Neighbor Discovery cache entry remains stale
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery</a> <a href="#">stale-time</a> <i>number</i>
Tree	<a href="#">stale-time</a>
Range	60 to 65535
Introduced	16.0.R1
Platforms	All

**static-neighbor** [[ipv6-address](#)] *string*

Synopsis	Enter the <b>static-neighbor</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i>
Tree	<a href="#">static-neighbor</a>
Introduced	16.0.R1
Platforms	All

**[ipv6-address]** *string*

Synopsis	IPv6 address corresponding to the physical address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i>
Tree	<a href="#">static-neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**mac-address** *string*

Synopsis	MAC address for the static neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery</a> <a href="#">static-neighbor</a> <i>string</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms All

### **qos-route-lookup** *keyword*

Synopsis IP address for QoS route lookup for ingress IP packets

Context **configure** *service vpn* *string interface string ipv6 qos-route-lookup keyword*

Tree [qos-route-lookup](#)

Description This command specifies the IP address type used for QPPB enabled per-packet QoS handling (in terms of FC and priority). When using QPPB, routes are associated with a QoS treatment (FC and optionally priority) through either explicit configuration or the route policy. If an IPv4 or IPv6 packet arrives on an interface where the configuration of this command applies to the packet, the QoS treatment of the packet is based on the route that matched the destination IP address or the route that matched the source IP address.

See "Enabling QPPB on an IP interface" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about QPPB.

Options destination, source, source-and-dest

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tcp-mss** *number*

Synopsis TCP maximum segment size for the interface

Context **configure** *service vpn* *string interface string ipv6 tcp-mss number*

Tree [tcp-mss](#)

Range 1220 to 9726

Introduced 16.0.R1

Platforms All

### **urpf-check**

Synopsis Enable the **urpf-check** context

Context **configure** *service vpn* *string interface string ipv6 urpf-check*

Tree [urpf-check](#)

Introduced 16.0.R1

Platforms All

**ignore-default** *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 urpf-check</a> <a href="#">ignore-default</a> <i>boolean</i>
Tree	<a href="#">ignore-default</a>
Default	false
Introduced	16.0.R1
Platforms	All

**mode** *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 urpf-check</a> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

**vrrp** [[virtual-router-id](#)] *number*

Synopsis	Enter the <b>vrrp</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i>
Tree	<a href="#">vrrp</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	All

**[virtual-router-id]** *number*

Synopsis	Virtual Router Identifier (VRID) for the IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i>
Tree	<a href="#">vrrp</a>
Range	1 to 255
Notes	This element is part of a list key.



Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of VRRP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">vrrp</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	<p>The command determines the administrative state of non-owner virtual router instances.</p> <p>Non-owner virtual router instances can be administratively disabled. This allows the termination of VRRP participation in the virtual router and stops all routing and other access capabilities with regards to the virtual router IP addresses. Disabling the virtual router instance provides a mechanism to maintain the virtual routers without causing false backup or master state changes.</p> <p>When <b>disabled</b>, no VRRP advertisement messages are generated and all received VRRP advertisement messages are silently discarded with no processing.</p> <p>Whenever the administrative or operational state of a virtual router instance transitions, a log message is generated.</p> <p>An owner virtual router context does not use this command. To administratively disable an owner virtual router instance, use the <b>admin-state</b> command within the parent IP interface node which administratively disables the IP interface.</p>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **backup** *string*

Synopsis	Virtual router IP addresses for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">vrrp</a> <i>number</i> <b>backup</b> <i>string</i>
Tree	<a href="#">backup</a>
Description	<p>This command associates router IPv6 virtual router IP addresses with those of the parental IP interface.</p> <p>This command has two different functions based on whether it is being executed on an owner or non-owner virtual router instance.</p> <p>Non-owner virtual router instance create a routable IP interface address that is operationally dependent on the virtual router instance mode (master or backup). This command, when executed on an owner virtual router instance, does not create a routable IP interface address; it simply defines the existing IP addresses of the parental IP interface that are advertised by the virtual router instance.</p>

For owner virtual router instances, this command defines the IP addresses that are advertised within VRRP advertisement messages. This communicates the IP addresses that the master is representing to backup virtual routers receiving the messages. The specified IPv6 address must be equal to one of the existing parental IP addresses in the parental IP interface (primary or secondary) or this command fails.

See "Owner and non-owner VRRP" in the *7450 ESS, 7750 SR, 7950 XRS, and VSR Router Configuration Guide* for more information about owner and non-owner virtual router instances.

Max. Instances	4
Introduced	16.0.R1
Platforms	All

## bfd-liveness

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

## dest-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination address for the BFD session
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">dest-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dest-ip</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**init-delay** *number*

Synopsis	VRRP initialization delay timer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">init-delay</a> <i>number</i>
Tree	<a href="#">init-delay</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**mac string**

Synopsis	Virtual MAC address to use in ARP responses
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv6 vrrp number</a> <a href="#">mac string</a>
Tree	<a href="#">mac</a>
Description	<p>This command sets an explicit MAC address for the virtual router instance that overrides the VRRP default derived from the VRID.</p> <p>Changing the default MAC address is useful when an existing HSRP or other non-VRRP default MAC is in use by the IP hosts that use the virtual router IP address. Many hosts do not monitor unessential ARPs and continue to use the cached non-VRRP MAC address after the virtual router becomes master of the host's gateway address.</p> <p>Additionally, this command sets the MAC address used in ARP responses when the virtual router instance is master. Routing of IP packets with <i>unicast-mac-address</i> as the destination MAC is also enabled. The MAC must be the same for all virtual routers participating as a virtual router or indeterminate connectivity by the attached IP hosts results. All VRRP advertisement messages are transmitted with <i>unicast-mac-address</i> as the source MAC.</p> <p>An operator can execute this command at any time and it takes effect immediately. When the virtual router MAC on a master virtual router instance changes, a gratuitous ARP is immediately sent with a VRRP advertisement message. If the virtual router instance is disabled or operating as a backup, the gratuitous ARP and VRRP advertisement messages are not sent.</p>
Introduced	16.0.R1
Platforms	All

**master-int-inherit boolean**

Synopsis	Allow master instance to dictate the master down timer
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv6 vrrp number</a> <a href="#">master-int-inherit boolean</a>
Tree	<a href="#">master-int-inherit</a>
Description	<p>When configured to <b>true</b>, the virtual router instance inherits the advertisement interval timer of the master VRRP router, which backup routers use to calculate the master down timer.</p> <p>When configured to <b>false</b>, the locally configured message interval must match the master's VRRP advertisement message advertisement interval field value or the message is discarded.</p>
Introduced	16.0.R1
Platforms	All

**message-interval** *number*

Synopsis	Interval for sending VRRP advertisement messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>message-interval</b> <i>number</i>
Tree	<b>message-interval</b>
Description	<p>This command configures the administrative advertisement message timer used by the master virtual router instance to send VRRP advertisement messages. The backup master down timer is derived from the value configured using this command.</p> <p>The use of this command varies for non-owner virtual router instances, depending on the state of the virtual router (master or backup) and the state of the <b>master-int-inherit</b> command:</p> <ul style="list-style-type: none"> <li>• When a non-owner is operating as master for the virtual router, the system uses the configured value of this command as the operational advertisement timer, similar to an owner virtual router instance. The <b>master-int-inherit</b> command has no effect when operating as the master.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> disabled, the system uses the configured value of this command to match the incoming advertisement interval field of the VRRP advertisement message. If the locally configured message interval does not match the advertisement interval field, the system discards the VRRP advertisement.</li> <li>• When a non-owner is in the backup state with <b>master-int-inherit</b> enabled, the configured value of this command is ignored. The master down timer is indirectly derived from the advertisement interval field value of the incoming VRRP advertisement message.</li> </ul>
Range	10 to 4095
Units	centiseconds
Default	100
Introduced	16.0.R1
Platforms	All

**monitor-oper-group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	VRRP instance to follow a specified operational group
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>monitor-oper-group</b> <i>reference</i>
Tree	<b>monitor-oper-group</b>
Description	This command configures VRRP to associate with an operational group. When associated, VRRP notifies the operational group of its state changes so that other

protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router, the operational group is up and the operational group is down for all other VRRP states.

Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **ntp-reply** *boolean*

Synopsis	Allow processing of NTP requests
Context	<b>configure service vprn</b> <i>string interface string ipv6 vrrp number ntp-reply boolean</i>
Tree	<a href="#">ntp-reply</a>
Description	When configured to <b>true</b> , the router redirects NTP requests to the VRRP virtual IP address. This behavior only applies to the router acting as the master VRRP router. When configured to <b>false</b> , the router does not process NTP requests.
Default	false
Introduced	20.2.R1
Platforms	All

### **oper-group** *reference*

Synopsis	Operational group name associated with the VRRP
Context	<b>configure service vprn</b> <i>string interface string ipv6 vrrp number oper-group reference</i>
Tree	<a href="#">oper-group</a>
Description	This command configures an operational group to associate with the VRRP. When associated, VRRP notifies the operational group of its state changes so that other protocols can monitor it to provide a redundancy mechanism. When VRRP is the master router (MR), the operational group is up. The operational group is down for all other VRRP states.
Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**owner boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Designate the virtual router instance as owner
Context	<b>configure</b> service vprn string interface string ipv6 vrrp number owner boolean
Tree	owner
Description	<p>When configured to <b>true</b>, the router designates this virtual router instance as the owner of the virtual router IP addresses. Therefore, this virtual router becomes responsible for forwarding packets sent to the virtual router IP addresses. The owner also assumes the role of master virtual router.</p> <p>When configured to <b>false</b>, this virtual router instance is designated as a non-owner.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**passive boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Suppress the processing of VRRP advertisement messages
Context	<b>configure</b> service vprn string interface string ipv6 vrrp number passive boolean
Tree	passive
Description	<p>When configured to <b>true</b>, the router identifies this virtual router instance as passive; and therefore the owner of the virtual router IP addresses. A passive virtual router instance does not transmit or receive VRRP advertisement messages and is always in either the master state (if the interface is operationally up) or the init state (if the interface is operationally down).</p> <p>When configured to <b>false</b>, this virtual router instance is not identified as passive, meaning that it transmits and receives VRRP advertisement messages.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## ping-reply *boolean*

Synopsis	Allow non-owner master to reply to ICMP echo requests
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">ping-reply</a> <i>boolean</i>
Tree	<a href="#">ping-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to ICMP echo requests directed at the IP addresses of the virtual router instance. Any routed interface can receive the ping request. Ping must not have been disabled at the management security level (either on the parental IP interface or on the Ping source host address).</p> <p>When configured to <b>false</b>, ICMP echo requests sent to non-owner master virtual IP addresses are silently discarded.</p> <p>Non-owner backup virtual routers never respond to ICMP echo requests, regardless of the configuration of this command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## policy *reference*

Synopsis	VRRP priority control policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6 vrrp</a> <i>number</i> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures a VRRP priority control policy to associate with the virtual router instance.</p> <p>VRRP priority control policies can override or adjust the base priority value of the virtual router instance, depending on events or conditions within the chassis.</p> <p>An operator can associate a policy with more than one virtual router instance. The priority events within the policy either override or diminish the base priority set with the <b>priority</b> command. As priority events clear in the policy, the in-use priority can eventually be restored to the base priority value.</p> <p>For non-owner virtual router instances, if this command is not executed, the base priority is used as the in-use priority.</p>
Reference	<b>configure</b> <a href="#">vrrp</a> <a href="#">policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

## preempt *boolean*

Synopsis	Allow the VRRP to override an existing non-owner master
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>preempt</b> <i>boolean</i>
Tree	<a href="#">preempt</a>
Description	<p>When configured to <b>true</b>, this virtual router instance overrides any non-owner master with an in-use message priority value less than the in-use priority value of this virtual router.</p> <p>When configured to <b>false</b>, this virtual router only becomes master if the master down timer expires before a VRRP advertisement message is received from another virtual router.</p>
Default	true
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Base priority for the VRRP
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Description	<p>This command configures the base router priority for the virtual router instance, which defines the selection order of the virtual router in the master election process.</p> <p>The in-use priority is derived from the base priority. However, the in-use priority is modified by optional VRRP priority control policies. An operator can use VRRP priority control policies to either override or adjust the base priority value depending on events or conditions within the chassis.</p>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **standby-forwarding** *boolean*

Synopsis	Allow standby router to forward traffic
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ipv6 vrrp</b> <i>number</i> <b>standby-forwarding</b> <i>boolean</i>
Tree	<a href="#">standby-forwarding</a>
Description	<p>When configured to <b>true</b>, the standby router forwards all traffic.</p> <p>When configured to <b>false</b>, the standby router cannot forward traffic sent to the MAC address of the virtual router. However, the standby router still forwards traffic sent to its own MAC address.</p>
Default	false

Introduced	16.0.R1
Platforms	All

### telnet-reply *boolean*

Synopsis	Allow non-owner master to reply to Telnet requests
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv6 vrrp number</a> <a href="#">telnet-reply boolean</a>
Tree	<a href="#">telnet-reply</a>
Description	<p>When configured to <b>true</b>, the router allows the non-owner master to reply to Telnet requests directed at the IP addresses of the virtual router instance. Any routed interface can receive Telnet requests. Telnet cannot be disabled at the management security level (either on the parental IP interface or on the Telnet source host address).</p> <p>When configured to <b>false</b>, the router silently discards Telnet requests sent to non-owner master virtual IP addresses.</p>
Default	false
Introduced	16.0.R1
Platforms	All

### traceroute-reply *boolean*

Synopsis	Allow non-owner master to reply to traceroute requests
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">ipv6 vrrp number</a> <a href="#">traceroute-reply boolean</a>
Tree	<a href="#">traceroute-reply</a>
Description	<p>When configured to <b>true</b>, the router allows a non-owner master to reply to traceroute requests directed to the IP addresses of the virtual router instance.</p> <p>When configured to <b>false</b>, the router silently discards traceroute requests sent to non-owner master virtual IP addresses.</p> <p>Traceroute must not have been disabled at the management security level (either on the parental IP interface or the source host address).</p>
Default	false
Introduced	16.0.R1
Platforms	All

### load-balancing

Synopsis	Enter the <b>load-balancing</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">load-balancing</a>

Tree	<a href="#">load-balancing</a>
Introduced	16.0.R1
Platforms	All

### **flow-label-load-balancing** *boolean*

Synopsis	Enable flow label load balancing
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">flow-label-load-balancing</a> <i>boolean</i>
Tree	<a href="#">flow-label-load-balancing</a>
Description	When configured to <b>true</b> , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface. When configured to <b>false</b> , the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

### **ip-load-balancing** *keyword*

Synopsis	IP load-balancing algorithm
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">ip-load-balancing</a> <i>keyword</i>
Tree	<a href="#">ip-load-balancing</a>
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the <b>l4-load-balancing</b> command is enabled, this command also includes the source or destination port in the hash inputs.
Options	both, destination, source, inner-ip
Default	both
Introduced	16.0.R3
Platforms	All

### **spi-load-balancing** *boolean*

Synopsis	Enable SPI use in hashing
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i>
Tree	<a href="#">spi-load-balancing</a>

Description	When configured to <b>true</b> , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

### **teid-load-balancing** *boolean*

Synopsis	Enable use of TEID in hashing
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing teid-load-balancing</a> <i>boolean</i>
Tree	<a href="#">teid-load-balancing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **loopback** *boolean*

Synopsis	Use interface as a loopback interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopback</a> <i>boolean</i>
Tree	<a href="#">loopback</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **mac** *string*

Synopsis	MAC address for the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	All

### **mac-accounting** *boolean*

Synopsis	Enable MAC accounting functionality
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>mac-accounting</b> <i>boolean</i>
Tree	<a href="#">mac-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group** *reference*

Synopsis	Operational group to monitor
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>monitor-oper-group</b> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure service oper-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **multi-chassis-shunting-profile** *reference*

Synopsis	Multi-chassis shunting profile name
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>multi-chassis-shunting-profile</b> <i>reference</i>
Tree	<a href="#">multi-chassis-shunting-profile</a>
Description	This command configures the name of a multi-chassis shunting profile to use on public or private tunnel interfaces.
Reference	<b>configure service vprn</b> <i>string</i> <b>ipsec multi-chassis-shunting-profile</b> <i>string</i>
Notes	The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or ( <b>dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop</b> ).
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ping-template**

Synopsis	Enable the <b>ping-template</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>ping-template</b>
Tree	<a href="#">ping-template</a>
Description	Commands in this context map a ping template to the service IP interface. The template is created in the <code>configure test-oam icmp ping-template</code> context.

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the ping template
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **destination-address** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Ping template destination address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a> <a href="#">destination-address</a> <i>string</i>
Tree	<a href="#">destination-address</a>
Description	This command configures the address to where the ICMP echo requests are directed to test connectivity. The source of the ICMP echo request is the primary IPv4 address of the interface under which the ping-template is configured. The destination address must be on the same subnet as the source IP address.  Unnumbered interfaces and loopback addresses are not supported.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **name** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Ping template name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">ping-template</a> <a href="#">name</a> <i>reference</i>

Tree	<a href="#">name</a>
Description	This command configures the name of the ping template to be assigned to the IP interface.
Reference	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i>
Notes	This element is mandatory.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ptp-hw-assist**

Synopsis	Enter the <b>ptp-hw-assist</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ptp-hw-assist</b>
Tree	<a href="#">ptp-hw-assist</a>
Description	<p>Commands in this context enable the port-based timestamping assist of PTP packets at the physical interface. This capability is supported on specific hardware. The command may be blocked if not all hardware has the required level of support.</p> <p>Only one interface per physical port can have port-based timestamping assist enabled. This feature cannot be enabled if the physical port supporting the interface is configured as a PTP port.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the PTP timestamping assist
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>ptp-hw-assist</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **radius-auth-policy** *reference*

Synopsis	Authentication policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>radius-auth-policy</b> <i>reference</i>

Tree	<a href="#">radius-auth-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap** [[sap-id](#)] *string*

Synopsis	Enter the <b>sap</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**aarp**

Synopsis	Enable the <b>aarp</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp</a>
Tree	<a href="#">aarp</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**id reference**

Synopsis	AARP instance ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp id reference</a>
Tree	<a href="#">id</a>
Reference	<b>configure</b> <a href="#">application-assurance aarp</a> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Role referenced by the AARP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">aarp type keyword</a>
Tree	<a href="#">type</a>
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy reference**

Synopsis	Accounting policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">accounting-policy reference</a>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

### **anti-spoof** *keyword*

Synopsis Anti-spoof filtering  
 Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* **anti-spoof** *keyword*  
 Tree [anti-spoof](#)  
 Options source-ip-addr, source-mac-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** *reference*

Synopsis Application profile name  
 Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* **app-profile** *reference*  
 Tree [app-profile](#)  
 Reference **configure** [application-assurance](#) [group](#) *number* [partition](#) *number* [policy](#) [app-profile](#) *string*  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth** *number*

Synopsis SAP bandwidth  
 Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* **bandwidth** *number*  
 Tree [bandwidth](#)  
 Range 1 to 6400000000  
 Units kilobps  
 Introduced 16.0.R1  
 Platforms All

### **calling-station-id** *string*

Synopsis Calling station ID  
 Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* **calling-station-id** *string*  
 Tree [calling-station-id](#)

String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis	Collect accounting statistics
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>cpu-protection</b>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **eth-cfm-monitoring**

Synopsis	Enable the <b>eth-cfm-monitoring</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <b>eth-cfm-monitoring</b>
Tree	<a href="#">eth-cfm-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **aggregate**

Synopsis	Apply rate limit to the sum of the per peer packet rates
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection eth-cfm-monitoring aggregate</b>
Tree	<b>aggregate</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection eth-cfm-monitoring car</b>
Tree	<b>car</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection ip-src-monitoring</b>
Tree	<b>ip-src-monitoring</b>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection mac-monitoring</b>
Tree	<b>mac-monitoring</b>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**policy-id** *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	16.0.R1
Platforms	All

**dist-cpu-protection** *reference*

Synopsis	Distributed CPU protection policy for SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

**agg-rate**

Synopsis	Enter the <b>agg-rate</b> context
Context	<b>configure service vprn string interface string sap string egress agg-rate</b>
Tree	<b>agg-rate</b>
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>percent-agg-rate</b> .
Introduced	16.0.R1
Platforms	All

**adaptation-rule keyword**

Synopsis	Adaptation rule to compute the operational PIR value when an aggregate shaper is used
Context	<b>configure service vprn string interface string sap string egress agg-rate adaptation-rule keyword</b>
Tree	<b>adaptation-rule</b>
Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**burst-limit (number | keyword)**

Synopsis	Shaping burst size when an aggregate shaper is used
Context	<b>configure service vprn string interface string sap string egress agg-rate burst-limit (number   keyword)</b>
Tree	<b>burst-limit</b>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

**limit-unused-bandwidth boolean**

Synopsis	Enable aggregate rate overrun protection
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>limit-unused-bandwidth</b> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **queue-frame-based-accounting** *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>queue-frame-based-accounting</b> <i>boolean</i>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **rate** *number*

Synopsis	Enforced aggregate rate for all queues
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>agg-rate</b> <b>rate</b> <i>number</i>
Tree	<a href="#">rate</a>
Range	1 to 6400000000
Units	kilobps
Introduced	16.0.R1
Platforms	All

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress</b> <b>filter</b>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

**ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ipv6 reference**

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress filter ipv6</a> <i>reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

**policer-control-policy**

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR



## overrides

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure service vprn string interface string sap string egress qos policer-control-policy overrides</b>
Tree	<b>overrides</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## root

Synopsis	Enter the <b>root</b> context
Context	<b>configure service vprn string interface string sap string egress qos policer-control-policy overrides root</b>
Tree	<b>root</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## max-rate (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure service vprn string interface string sap string egress qos policer-control-policy overrides root max-rate (<i>number</i>   <i>keyword</i>)</b>
Tree	<b>max-rate</b>
Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure service vprn string interface string sap string egress qos policer-control-policy overrides root priority-mbs-thresholds</b>
Tree	<b>priority-mbs-thresholds</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**min-thresh-separation** (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**priority** [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy overrides root priority-mbs-thresholds priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy</b> <i>policy-name</i> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos policer-control-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **qinq-mark-top-only** *boolean*

Synopsis	Mark top Q-tags
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos qinq-mark-top-only</b> <i>boolean</i>
Tree	<a href="#">qinq-mark-top-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress</b>
Tree	<a href="#">sap-egress</a>
Introduced	16.0.R1

Platforms All

## overrides

Synopsis Enter the **overrides** context

Context **configure service vprn string interface string sap string egress qos sap-egress overrides**

Tree [overrides](#)

Introduced 16.0.R1

Platforms All

## hs-secondary-shaper *string*

Synopsis HS Secondary Shaper

Context **configure service vprn string interface string sap string egress qos sap-egress overrides hs-secondary-shaper string**

Tree [hs-secondary-shaper](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## hs-wrr-group [[group-id](#)] *reference*

Synopsis Enter the **hs-wrr-group** list instance

Context **configure service vprn string interface string sap string egress qos sap-egress overrides hs-wrr-group reference**

Tree [hs-wrr-group](#)

Introduced 16.0.R1

Platforms 7750 SR-7/12/12e

## [\[group-id\]](#) *reference*

Synopsis HS WRR group identifier

Context **configure service vprn string interface string sap string egress qos sap-egress overrides hs-wrr-group reference**

Tree [hs-wrr-group](#)

Reference	<b>configure</b> qos sap-egress string hs-wrr-group number
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **hs-class-weight** *number*

Synopsis	Class weight override of the WRR group
Context	<b>configure</b> service vprn string interface string sap string egress qos sap-egress overrides hs-wrr-group reference hs-class-weight number
Tree	hs-class-weight
Range	1   2   4   8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **percent-rate** *decimal-number*

Synopsis	Percent rate override applied to the HS WRR group
Context	<b>configure</b> service vprn string interface string sap string egress qos sap-egress overrides hs-wrr-group reference percent-rate decimal-number
Tree	percent-rate
Range	0.01 to 100.00
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis	Scheduling rate override applied to the HS WRR group
Context	<b>configure</b> service vprn string interface string sap string egress qos sap-egress overrides hs-wrr-group reference rate ( <i>number</i>   <i>keyword</i> )
Tree	rate
Range	1 to 2000000000
Units	kilobps
Options	max

Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **policer** [**policer-id**] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress</b> <b>overrides policer</b> <i>reference</i>
Tree	<b>policer</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **[policer-id]** *reference*

Synopsis	Policer unique ID
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress</b> <b>overrides policer</b> <i>reference</i>
Tree	<b>policer</b>
Reference	<b>configure qos sap-egress</b> <i>string</i> <b>policer</b> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress</b> <b>overrides policer</b> <i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cbs</b>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** *decimal-number*

Synopsis	CIR percent rate
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b> <i>reference</i> <b>percent-rate cir</b> <i>decimal-number</i>
Tree	<b>cir</b>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b> <i>reference</i> <b>percent-rate pir</b> <i>decimal-number</i>
Tree	<b>pir</b>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b> <i>reference</i> <b>rate</b>
Tree	<b>rate</b>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides policer</b> <i>reference</i> <b>rate cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cir</b>
Range	0 to 6400000000
Units	kilobps
Options	max



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	All

**[queue-id] reference**

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string</a> <a href="#">egress qos sap-egress overrides queue reference</a>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos sap-egress string</a> <a href="#">queue number</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**adaptation-rule**

Synopsis	Enter the <b>adaptation-rule</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string</a> <a href="#">egress qos sap-egress overrides queue reference adaptation-rule</a>
Tree	<a href="#">adaptation-rule</a>
Introduced	16.0.R1
Platforms	All

**cir keyword**

Synopsis	Constraint used when deriving the operational CIR value
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string</a> <a href="#">egress qos sap-egress overrides queue reference adaptation-rule cir keyword</a>
Tree	<a href="#">cir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

**pir keyword**

Synopsis	Constraint used when deriving the operational PIR value
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string</a> <a href="#">egress qos sap-egress overrides queue reference adaptation-rule pir keyword</a>
Tree	<a href="#">pir</a>
Options	max, min, closest

Introduced 16.0.R1  
 Platforms All

### **avg-frame-overhead** *decimal-number*

Synopsis Average packet-to-frame encapsulation overhead  
 Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)  
[overrides queue reference avg-frame-overhead decimal-number](#)  
 Tree [avg-frame-overhead](#)  
 Range 0.00 to 100.00  
 Introduced 16.0.R1  
 Platforms All

### **burst-limit** (*number* | *keyword*)

Synopsis Explicit shaping burst size for the queue  
 Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)  
[overrides queue reference burst-limit \(number | keyword\)](#)  
 Tree [burst-limit](#)  
 Range 1 to 14000000  
 Units bytes  
 Options auto  
 Introduced 16.0.R1  
 Platforms All

### **cbs** (*number* | *keyword*)

Synopsis CBS  
 Context **configure** [service vprn string](#) [interface string sap string egress qos sap-egress](#)  
[overrides queue reference cbs \(number | keyword\)](#)  
 Tree [cbs](#)  
 Range 0 to 1048576  
 Units kilobytes  
 Options auto  
 Introduced 16.0.R1  
 Platforms All

**drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

**low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b> <b>low</b>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All

**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>drop-tail</b> <b>low</b> <b>percent-reduction-from-mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

**hs-class-weight** *number*

Synopsis	Class weight override for the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>hs-class-weight</b> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8

Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### hs-wred-queue

Synopsis Enter the **hs-wred-queue** context  
 Context **configure** [service vprn string](#) [interface string sap string](#) [egress qos sap-egress overrides queue reference](#) [hs-wred-queue](#)  
 Tree [hs-wred-queue](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### policy reference

Synopsis Slope policy applied to the HSQ queue group queue  
 Context **configure** [service vprn string](#) [interface string sap string](#) [egress qos sap-egress overrides queue reference](#) [hs-wred-queue](#) [policy reference](#)  
 Tree [policy](#)  
 Reference **configure** [qos slope-policy string](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### hs-wrr-weight *number*

Synopsis WRR weight to parent with the queue into the scheduler  
 Context **configure** [service vprn string](#) [interface string sap string](#) [egress qos sap-egress overrides queue reference](#) [hs-wrr-weight number](#)  
 Tree [hs-wrr-weight](#)  
 Range 1 to 127  
 Default 1  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### mbs (*number* | *keyword*)

Synopsis MBS

Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mbs</b>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference monitor-queue-depth</b>
Tree	<b>monitor-queue-depth</b>
Description	Commands in this context configure queue depth monitoring for the specified queue.
Introduced	20.10.R1
Platforms	All

### **fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference monitor-queue-depth fast-polling</b> <i>boolean</i>
Tree	<b>fast-polling</b>
Description	When configured to <b>true</b> , this command enables fast polling of the queue depth. Faster polling allows a more accurate view of the actual depth.
Default	false
Introduced	20.10.R1
Platforms	All

### **violation-threshold** *decimal-number*

Synopsis	Threshold for queue depth before violation is raised
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos sap-egress overrides queue reference monitor-queue-depth violation-threshold</b> <i>decimal-number</i>

Tree	<a href="#">violation-threshold</a>
Description	This command specifies the threshold for the queue MBS. When the queue depth exceeds the threshold value, a violation is registered.
Range	0.01 to 99.99
Introduced	20.10.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <a href="#">reference</a> <a href="#">parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress qos sap-egress overrides queue reference percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

## cir decimal-number

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress qos sap-egress overrides queue reference percent-rate cir decimal-number</a>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

## pir decimal-number

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress qos sap-egress overrides queue reference percent-rate pir decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string egress qos sap-egress overrides queue reference rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .



Introduced 16.0.R1  
 Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR rate  
 Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [egress qos sap-egress overrides queue reference rate](#) [cir \(number | keyword\)](#)  
 Tree [cir](#)  
 Range 0 to 6400000000  
 Units kilobps  
 Options max  
 Introduced 16.0.R1  
 Platforms All

### **pir** (*number* | *keyword*)

Synopsis PIR rate  
 Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [egress qos sap-egress overrides queue reference rate](#) [pir \(number | keyword\)](#)  
 Tree [pir](#)  
 Range 1 to 6400000000  
 Units kilobps  
 Options max  
 Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Policy ID to associate with SAP for mirrored service  
 Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [egress qos sap-egress policy-name reference](#)  
 Tree [policy-name](#)  
 Reference **configure** [qos sap-egress string](#)  
 Introduced 16.0.R1  
 Platforms All

## port-redirect-group

Synopsis	Enter the <b>port-redirect-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a>
Tree	<a href="#">port-redirect-group</a>
Introduced	16.0.R1
Platforms	All

## group-name *reference*

Synopsis	Name of the queue group redirect list policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## instance *number*

Synopsis	Instance of port queue group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">port-redirect-group</a> <a href="#">instance</a> <i>number</i>
Tree	<a href="#">instance</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## scheduler-policy

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

**scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Introduced	16.0.R1
Platforms	All

**[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>

**Description** This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (**#**, **\$**, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.

If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.

If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.

String Length	1 to 32
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## weight *number*

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">parent</a> <b>weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b>

Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	All

**cir** (*number* | *keyword*)

Synopsis	CIR at which the queue it to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <b>rate</b> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	16.0.R1

Platforms All

### **queue-group-redirect-list** *reference*

Synopsis Assign queue-group redirect list

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [queue-group-redirect-list](#) *reference*

Tree [queue-group-redirect-list](#)

Reference **configure** [qos](#) [queue-group-redirect-list](#) *string*

Introduced 16.0.R1

Platforms All

### **virtual-port**

Synopsis Enter the **virtual-port** context

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [virtual-port](#)

Tree [virtual-port](#)

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vport-name** *reference*

Synopsis Virtual port assigned to the SAP

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [egress](#) [virtual-port](#) [vport-name](#) *reference*

Tree [vport-name](#)

Reference **configure** [port](#) *string* [ethernet](#) [access](#) [egress](#) [virtual-port](#) *string*

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **eth-cfm**

Synopsis Enter the **eth-cfm** context

Context **configure** [service](#) [vpn](#) *string* [interface](#) *string* [sap](#) *string* [eth-cfm](#)

Tree [eth-cfm](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## collect-lmm-fc-stats

Synopsis Enter the **collect-lmm-fc-stats** context

Context **configure service vpn** *string* **interface** *string* **sap** *string* **eth-cfm collect-lmm-fc-stats**

Tree **collect-lmm-fc-stats**

Description Commands in this context configure per forwarding class (FC) LMM information collection.

The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.

This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fc keyword

Synopsis Forwarding class name for profile-unaware counter

Context **configure service vpn** *string* **interface** *string* **sap** *string* **eth-cfm collect-lmm-fc-stats fc** *keyword*

Tree **fc**

Description This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fc-in-profile** *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>
Tree	<b>fc-in-profile</b>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-stats</b> <i>boolean</i>
Tree	<b>collect-lmm-stats</b>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mep** **md-admin-name** *reference* **ma-admin-name** *reference* **mep-id** *number*

Synopsis	Enter the <b>mep</b> list instance
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<b>mep</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<b>mep</b>
Reference	<b>configure eth-cfm domain</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<b>mep</b>
Reference	<b>configure eth-cfm domain</b> <i>string</i> <b>association</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<b>mep</b>
Range	1 to 8191
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ais** *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ais</b> <i>boolean</i>
Tree	<a href="#">ais</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>alarm-notification</b>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm** *boolean*

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm</a> <i>boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
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Context	<b>configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-ltm-priority number</b>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size number**

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number ccm-padding-size number</b>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **csf**

Synopsis	Enable the <b>csf</b> context
Context	<b>configure service vprn string interface string sap string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number csf</b>
Tree	<a href="#">csf</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier decimal-number**

Synopsis	Multiplication factor used to clear the CSF condition
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>csf multiplier</b> <i>decimal-number</i>
Tree	<b>multiplier</b>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test</b>
Tree	<b>eth-test</b>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>eth-test bit-error-threshold</b> <i>number</i>
Tree	<b>bit-error-threshold</b>
Range	0 to 11840

Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## test-pattern

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">sap</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fault-propagation** *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>fault-propagation</b> <i>keyword</i>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>grace</b>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a> <b>eth-ed</b>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <a href="#">grace eth-ed max-rx-defect-window number</a>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <a href="#">grace eth-ed priority number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number</a> <a href="#">grace eth-ed rx-eth-ed boolean</a>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed tx-eth-ed</b> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-vsm-grace

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace</b>
Tree	<a href="#">eth-vsm-grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rx-eth-vsm-grace *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace rx-eth-vsm-grace</b> <i>boolean</i>
Tree	<a href="#">rx-eth-vsm-grace</a>
Description	When configured to <b>true</b> , the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.  When configured to <b>false</b> , the router disables the Nokia Grace function.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tx-eth-vsm-grace *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace tx-eth-vsm-grace</b> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm squelch-ingress-levels</a> <i>number</i>
Tree	<a href="#">squelch-ingress-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fwd-wholesale**

Synopsis	Enter the <b>fwd-wholesale</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fwd-wholesale</a>
Tree	<a href="#">fwd-wholesale</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe-service** *reference*

Synopsis	PPPoE service name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">fwd-wholesale pppoe-service</a> <i>reference</i>
Tree	<a href="#">pppoe-service</a>
Reference	<b>configure</b> <a href="#">service epipe</a> <i>string</i>

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-admin-state** *keyword*

Synopsis	Administrative state of the hosts
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>host-admin-state</b> <i>keyword</i>
Tree	<a href="#">host-admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-lockout-policy** *reference*

Synopsis	Host lockout policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>host-lockout-policy</b> <i>reference</i>
Tree	<a href="#">host-lockout-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <b>host-lockout-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <b>filter</b>
Tree	<a href="#">filter</a>

Introduced 16.0.R1  
 Platforms All

### **ip reference**

Synopsis IPv4 filter policy name  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ip](#) *reference*  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **ipv6 reference**

Synopsis IPv6 filter policy name  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [filter](#) [ipv6](#) *reference*  
 Tree [ipv6](#)  
 Reference **configure** [filter](#) [ipv6-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **qos**

Synopsis Enter the **qos** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#)  
 Tree [qos](#)  
 Introduced 16.0.R1  
 Platforms All

### **match-qinq-dot1p keyword**

Synopsis Ingress match QinQ Dot1p  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [sap](#) *string* [ingress](#) [qos](#) [match-qinq-dot1p](#) *keyword*  
 Tree [match-qinq-dot1p](#)

Options	top, bottom
Introduced	16.0.R1
Platforms	All

## **policer-control-policy**

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **overrides**

Synopsis	Enable the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **root**

Synopsis	Enter the <b>root</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a>
Tree	<a href="#">root</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

## **max-rate** (*number* | *keyword*)

Synopsis	Maximum frame-based bandwidth limit
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>

Range	1 to 6400000000
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <b>priority-mbs-thresholds</b>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum amount of separation buffer space
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>min-thresh-separation</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### priority [[priority-level](#)] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[priority-level]** *number*

Synopsis	Priority level
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**mbs-contribution** (*number* | *keyword*)

Synopsis	Minimum amount of cumulative buffer space allowed
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">priority</a> <i>number</i> <a href="#">mbs-contribution</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos</a> <a href="#">policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**sap-ingress**

Synopsis	Enter the <b>sap-ingress</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b>
Tree	<b>sap-ingress</b>
Introduced	16.0.R1
Platforms	All

## **fp-redirect-group**

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress fp-redirect-group</b>
Tree	<b>fp-redirect-group</b>
Introduced	16.0.R1
Platforms	All

## **group-name** *reference*

Synopsis	Queue group template name created on forwarding plane
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress fp-redirect-group group-name</b> <i>reference</i>
Tree	<b>group-name</b>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

## **instance** *number*

Synopsis	Queue group instance
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress fp-redirect-group instance</b> <i>number</i>
Tree	<b>instance</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string</a> <a href="#">ingress qos sap-ingress overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

## ip-criteria

Synopsis	Enter the <b>ip-criteria</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string</a> <a href="#">ingress qos sap-ingress overrides ip-criteria</a>
Tree	<a href="#">ip-criteria</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## activate-entry-tag *number*

Synopsis	Tag ID activated for IPv4 criteria
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string</a> <a href="#">ingress qos sap-ingress overrides ip-criteria activate-entry-tag number</a>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv6-criteria

Synopsis	Enter the <b>ipv6-criteria</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string</a> <a href="#">ingress qos sap-ingress overrides ipv6-criteria</a>
Tree	<a href="#">ipv6-criteria</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**activate-entry-tag** *number*

Synopsis	Tag ID activated for IPv6 criteria
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides ipv6-criteria activate-entry-tag</a> <i>number</i>
Tree	<a href="#">activate-entry-tag</a>
Range	1 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**policer** [[policer-id](#)] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**[[policer-id](#)]** *reference*

Synopsis	Policer unique ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress</a> <a href="#">overrides policer</a> <i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456

Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **packet-byte-offset** *number*

Synopsis	Packet size modification for policing information
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **percent-rate**

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>percent-rate</b>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** *decimal-number*

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress overrides policer reference percent-rate cir decimal-number</a>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**pir** *decimal-number*

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress overrides policer reference percent-rate pir decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress overrides policer reference rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR rate
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress overrides policer reference rate cir (number   keyword)</a>
Tree	<a href="#">cir</a>

Range	0 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **pir** (*number* | *keyword*)

Synopsis	PIR rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **stat-mode** *keyword*

Synopsis	Mode of statistics collected by the policer
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **queue** [[queue-id](#)] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1

Platforms All

### **[queue-id] reference**

Synopsis Policer unique ID

Context **configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference**

Tree [queue](#)

Reference **configure qos sap-ingress string queue number**

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **adaptation-rule**

Synopsis Enter the **adaptation-rule** context

Context **configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference adaptation-rule**

Tree [adaptation-rule](#)

Introduced 16.0.R1

Platforms All

### **cir keyword**

Synopsis Constraint used when deriving the operational CIR value

Context **configure service vprn string interface string sap string ingress qos sap-ingress overrides queue reference adaptation-rule cir keyword**

Tree [cir](#)

Options max, min, closest

Introduced 16.0.R1

Platforms All

### **pir keyword**

Synopsis Constraint used when deriving the operational PIR value

Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>adaptation-rule pir</b> <i>keyword</i>
Tree	<a href="#">pir</a>
Options	max, min, closest
Introduced	16.0.R1
Platforms	All

### **cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	All

### **drop-tail**

Synopsis	Enter the <b>drop-tail</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>drop-tail</b>
Tree	<a href="#">drop-tail</a>
Introduced	16.0.R1
Platforms	All

### **low**

Synopsis	Enter the <b>low</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>drop-tail low</b>
Tree	<a href="#">low</a>
Introduced	16.0.R1
Platforms	All



**percent-reduction-from-mbs** (*number* | *keyword*)

Synopsis	Percentage reduction from the MBS for a queue drop tail
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress</a> <a href="#">overrides queue reference drop-tail low percent-reduction-from-mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">percent-reduction-from-mbs</a>
Range	0 to 100
Options	auto
Introduced	16.0.R1
Platforms	All

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress</a> <a href="#">overrides queue reference mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	All

**monitor-queue-depth**

Synopsis	Enable the <b>monitor-queue-depth</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ingress qos sap-ingress</a> <a href="#">overrides queue reference monitor-queue-depth</a>
Tree	<a href="#">monitor-queue-depth</a>
Introduced	21.7.R1
Platforms	All

**fast-polling** *boolean*

Synopsis	Enable fast polling of the queue depth
----------	--

Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>monitor-queue-depth fast-polling</b> <i>boolean</i>
Tree	<a href="#">fast-polling</a>
Default	false
Introduced	21.7.R1
Platforms	All

## parent

Synopsis	Enter the <b>parent</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>parent</b>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

## cir-weight *number*

Synopsis	CIR parameter that overrides parent for queue group
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>parent cir-weight</b> <i>number</i>
Tree	<a href="#">cir-weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## weight *number*

Synopsis	PIR parameter that overrides parent for queue group
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>parent weight</b> <i>number</i>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

## percent-rate

Synopsis	Enter the <b>percent-rate</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate</a>
Tree	<a href="#">percent-rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .
Introduced	16.0.R1
Platforms	All

## cir decimal-number

Synopsis	CIR percent rate
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate cir decimal-number</a>
Tree	<a href="#">cir</a>
Range	0.00 to 100.00
Introduced	16.0.R1
Platforms	All

## pir decimal-number

Synopsis	PIR percent rate
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ingress qos sap-ingress overrides queue reference percent-rate pir decimal-number</a>
Tree	<a href="#">pir</a>
Range	0.01 to 100.00
Introduced	16.0.R1
Platforms	All

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ingress qos sap-ingress overrides queue reference rate</a>
Tree	<a href="#">rate</a>
Notes	The following elements are part of a choice: <b>percent-rate</b> or <b>rate</b> .

Introduced 16.0.R1  
 Platforms All

### **cir** (*number* | *keyword*)

Synopsis CIR rate  
 Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [ingress qos sap-ingress](#)  
[overrides queue reference rate](#) **cir** (*number* | *keyword*)  
 Tree [cir](#)  
 Range 0 to 6400000000  
 Units kilobps  
 Options max  
 Introduced 16.0.R1  
 Platforms All

### **pir** (*number* | *keyword*)

Synopsis PIR rate  
 Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [ingress qos sap-ingress](#)  
[overrides queue reference rate](#) **pir** (*number* | *keyword*)  
 Tree [pir](#)  
 Range 1 to 6400000000  
 Units kilobps  
 Options max  
 Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Policy ID  
 Context **configure** [service vprn string](#) [interface string](#) [sap string](#) [ingress qos sap-ingress](#) [policy-name](#) *reference*  
 Tree [policy-name](#)  
 Reference **configure** [qos sap-ingress](#) *string*  
 Introduced 16.0.R1  
 Platforms All

**queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos sap-ingress queuing-type</a> <i>keyword</i>
Tree	<a href="#">queuing-type</a>
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

**scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	All

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	All

**scheduler** [[scheduler-name](#)] *string*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy overrides scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Introduced	16.0.R1
Platforms	All

**[scheduler-name]** *string*

Synopsis	Scheduler name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy</a> <a href="#">overrides scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
Description	<p>This command specifies the scheduler name which is composed of printable 7-bit ASCII characters. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Each scheduler must have a unique name within the context of the scheduler policy. However, the same name can be reused in multiple scheduler policies. If the scheduler name already exists within the policy tier level, the context changes to that scheduler name for the purpose of editing the scheduler commands.</p> <p>If the scheduler name exists within the policy on a different tier, an error occurs and the current context does not change. If the scheduler name does not exist in this or another tier within the scheduler policy, it is assumed that an attempt is being made to create a scheduler of that name.</p> <p>If the provided scheduler name is invalid, a name syntax error occurs, the command does not execute, and the context is not change.</p>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**parent**

Synopsis	Enter the <b>parent</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy</a> <a href="#">overrides scheduler</a> <i>string</i> <a href="#">parent</a>
Tree	<a href="#">parent</a>
Introduced	16.0.R1
Platforms	All

**cir-weight** *number*

Synopsis	Weight used at the within-CIR port priority level
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress qos scheduler-policy</a> <a href="#">overrides scheduler</a> <i>string</i> <a href="#">parent</a> <a href="#">cir-weight</a> <i>number</i>
Tree	<a href="#">cir-weight</a>

Range	0 to 100
Introduced	16.0.R1
Platforms	All

**weight number**

Synopsis	Relative weight of the scheduler to feed the queue
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ingress qos scheduler-policy overrides scheduler string</a> <a href="#">parent weight number</a>
Tree	<a href="#">weight</a>
Range	0 to 100
Introduced	16.0.R1
Platforms	All

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ingress qos scheduler-policy overrides scheduler string</a> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	All

**cir (number | keyword)**

Synopsis	CIR at which the queue it to operate
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">sap string</a> <a href="#">ingress qos scheduler-policy overrides scheduler string</a> <a href="#">rate cir (number   keyword)</a>
Tree	<a href="#">cir</a>
Range	0 to 6400000000
Units	kilobps
Options	sum, max
Introduced	16.0.R1
Platforms	All

**pir** (*number* | *keyword*)

Synopsis	PIR at which the queue is to operate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>string</i> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 6400000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	All

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**queue-group-redirect-list** *reference*

Synopsis	Queue group redirect list
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ingress</a> <a href="#">queue-group-redirect-list</a> <i>reference</i>
Tree	<a href="#">queue-group-redirect-list</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-redirect-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**ip-tunnel** [[tunnel-name](#)] *string*

Synopsis	Enter the <b>ip-tunnel</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i>
Tree	<a href="#">ip-tunnel</a>



Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[tunnel-name]** *string*

Synopsis	IP tunnel name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i>
Tree	<a href="#">ip-tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the IP tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**backup-remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Backup remote IP address that is applied to this tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>backup-remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">backup-remote-ip-address</a>
Introduced	16.0.R1

Platforms All

### clear-df-bit *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Clear the Do-not-Fragment bit
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>clear-df-bit</b> <i>boolean</i>
Tree	<b>clear-df-bit</b>
Description	When configured to <b>true</b> , the DF bit is cleared (set to 0) in all payload IP packets associated with the GRE or IPsec tunnel, before any potential fragmentation resulting from the ip-mtu command. This requires a modification of the header checksum.  When configured to <b>false</b> , clearing of the DF bit is disabled.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### delivery-service *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service to originate and terminate GRE packets
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>delivery-service</b> <i>string</i>
Tree	<b>delivery-service</b>
Description	This command specifies the service used to originate and terminate the GRE encapsulated packets belonging to the GRE tunnel. The delivery service may be the same service that owns the private tunnel SAP associated with the GRE tunnel.  The GRE tunnel does not come up until a valid delivery service is configured.
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**description** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**dest-ip** [[dest-ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>dest-ip</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">dest-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dest-ip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[dest-ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote IP tunnel endpoint
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">dest-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dest-ip</a>
Description	This command configures the IP address of the remote IP tunnel endpoint. If the remote IP address is not within the subnet of the IP interface associated with the tunnel, the tunnel fails to come up.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dscp keyword

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Differentiated Services Code Point (DSCP) name
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>dscp</b> <i>keyword</i>
Tree	<b>dscp</b>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## encapsulated-ip-mtu number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>encapsulated-ip-mtu</b> <i>number</i>
Tree	<b>encapsulated-ip-mtu</b>
Description	This command specifies the maximum size of the encapsulated tunnel packet for the IP tunnel. If the packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gre-header

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>gre-header</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ip-tunnel string gre-header</a>
Tree	<a href="#">gre-header</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the GRE header in the tunnel
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ip-tunnel string gre-header admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **key**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>key</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ip-tunnel string gre-header key</a>
Tree	<a href="#">key</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the keys in the GRE header
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">gre-header</a> <a href="#">key</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### receive number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Receive key of the GRE header
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">gre-header</a> <a href="#">key</a> <a href="#">receive</a> <i>number</i>
Tree	<a href="#">receive</a>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

### send number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send key of the GRE header
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">gre-header</a> <a href="#">key</a> <a href="#">send</a> <i>number</i>
Tree	<a href="#">send</a>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1

Platforms All

## icmp-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **icmp-generation** context

Context **configure** [service vprn string](#) [interface string sap string ip-tunnel string icmp-generation](#)

Tree [icmp-generation](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## frag-required



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **frag-required** context

Context **configure** [service vprn string](#) [interface string sap string ip-tunnel string icmp-generation frag-required](#)

Tree [frag-required](#)

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Administrative state of sending ICMP messages

Context **configure** [service vprn string](#) [interface string sap string ip-tunnel string icmp-generation frag-required admin-state keyword](#)

Tree [admin-state](#)

Description This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to

	the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Options	enable, disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval that the ICMP messages can be sent
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **message-count** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages sent
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>message-count</b> <i>number</i>
Tree	<b>message-count</b>
Description	This command configures the maximum number of ICMP messages that can be sent during the period specified by the <b>interval</b> command.
Range	10 to 1000
Default	100



Introduced 21.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **icmp6-generation** context  
 Context **configure** *service vprn string interface string sap string ip-tunnel string icmp6-generation*  
 Tree *icmp6-generation*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **packet-too-big** context  
 Context **configure** *service vprn string interface string sap string ip-tunnel string icmp6-generation packet-too-big*  
 Tree *packet-too-big*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Administrative state of sending Packet Too Big messages  
 Context **configure** *service vprn string interface string sap string ip-tunnel string icmp6-generation packet-too-big admin-state keyword*  
 Tree *admin-state*

Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **number** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of PTB ICMPv6 messages that can be sent
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Description	This command configures the maximum number of ICMPv6 messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum interval when PTB messages can be sent
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-mtu** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP MTU for the interface
Context	<b>configure</b> <i>service vprn string interface string sap string ip-tunnel string ip-mtu number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command specifies the IP MTU for the interface. If the DF bit is not set in the packet, IP packet fragmentation is performed, if necessary, based on this configured value.  When unconfigured, all IP packets, regardless of the packet size or DF bit setting, are allowed into the tunnel without fragmentation.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipsec-transport-mode-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transport mode profile name
Context	<b>configure</b> <i>service vprn string interface string sap string ip-tunnel string ipsec-transport-mode-profile reference</i>
Tree	<a href="#">ipsec-transport-mode-profile</a>
Reference	<b>configure</b> <a href="#">ipsec ipsec-transport-mode-profile string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local IP address of this tunnel
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">local-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-ip-address</a>
Description	This command specifies the local IP address to use for the IP tunnel. This configuration applies to the outer IP header of the encapsulated packets. The address must belong to one of the IP subnets associated with the public SAP interface of the tunnel group. The source IP address, the remote IP address, and the backup remote IP address of a tunnel must all belong to the same address family (IPv4 or IPv6).  When this command specifies an IPv6 address, it must be a global unicast address.
Introduced	16.0.R1
Platforms	All

### **pmtu-discovery-aging** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time to age out the learned path MTU
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <a href="#">pmtu-discovery-aging</a> <i>number</i>
Tree	<a href="#">pmtu-discovery-aging</a>
Description	This command configures the temporary public MTU expiration time. The temporary public MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the private side
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Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>private-tcp-mss-adjust</b> <i>number</i>
Tree	<a href="#">private-tcp-mss-adjust</a>
Description	This command specifies the TCP MSS to adjust for tunnels on the private side. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>propagate-pmtu-v4</b> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of path MTU to IPv6 hosts
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>propagate-pmtu-v6</b> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**public-tcp-mss-adjust** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP Maximum Segment Size (MSS) on the public side
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>public-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>public-tcp-mss-adjust</b>
Description	This command specifies the TCP MSS for TCP traffic sent from the public network to the private network. The value is used to adjust the TCP MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**reassemble** (*number* | *keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum reassembly wait time
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ip-tunnel</b> <i>string</i> <b>reassemble</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>reassemble</b>
Description	This command configures the maximum time to wait to receive all fragments of a particular IPsec or GRE packet for reassembly.
Range	1 to 5000
Units	milliseconds
Options	use-tunnel-group-setting, none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of the tunnel
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ip-tunnel</a> <i>string</i> <b>remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">remote-ip-address</a>
Introduced	16.0.R1
Platforms	All

**ipsec-gateway** [[name](#)] *string*

Synopsis	Enter the <b>ipsec-gateway</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>ipsec-gateway</b> <i>string</i>
Tree	<a href="#">ipsec-gateway</a>
Max. Instances	1
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	IPsec gateway name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>ipsec-gateway</b> <i>string</i>
Tree	<a href="#">ipsec-gateway</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the IPsec gateway
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cert

Synopsis	Enter the <b>cert</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert</a>
Tree	<a href="#">cert</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cert-profile *reference*

Synopsis	Certificate profile name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert</a> <a href="#">cert-profile</a> <i>reference</i>
Tree	<a href="#">cert-profile</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">cert-profile</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## status-verify

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert</a> <a href="#">status-verify</a>
Tree	<a href="#">status-verify</a>
Description	Commands in this context configure certificate revocation status verification.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**default-result** *keyword*

Synopsis	Default result of Certificate Status Verification (CSV)
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert status-verify</b> <b>default-result</b> <i>keyword</i>
Tree	<b>default-result</b>
Description	This command specifies the default result when both the primary and secondary methods fail to provide an answer.
Options	revoked, good
Default	revoked
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**primary** *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert status-verify</b> <b>primary</b> <i>keyword</i>
Tree	<b>primary</b>
Options	crI, ocsp
Default	crI
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**secondary** *keyword*

Synopsis	Secondary method of CSV to verify the revocation status
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>cert status-verify</b> <b>secondary</b> <i>keyword</i>
Tree	<b>secondary</b>
Options	none, crI, ocsp
Default	none
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**trust-anchor-profile** *reference*

Synopsis	Trust anchor profile name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">cert trust-anchor-profile</a> <i>reference</i>
Tree	<a href="#">trust-anchor-profile</a>
Reference	<b>configure</b> <a href="#">ipsec trust-anchor-profile</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**client-db**

Synopsis	Enable the <b>client-db</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">client-db</a>
Tree	<a href="#">client-db</a>
Description	Commands in this context configure the IPsec client database. The client database is used to authenticate the IKEv2 dynamic LAN-to-LAN tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fallback** *boolean*

Synopsis	Fall back to the default authentication policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">client-db</a> <a href="#">fallback</a> <i>boolean</i>
Tree	<a href="#">fallback</a>
Description	When configured to <b>true</b> , this command specifies whether the IPsec gateway can fall back to the default authentication policy when the IPsec tunnel authentication request fails to match any clients in the IPsec database.  When configured to <b>false</b> and the client database lookup fails to return a matched result, the system fails the tunnel setup.
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name** *reference*

Synopsis	Client database name
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Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>client-db</b> <i>name</i> <i>reference</i>
Tree	<b>name</b>
Reference	<b>configure ipsec client-db</b> <i>string</i>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### default-secure-service

Synopsis	Enable the <b>default-secure-service</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>default-secure-service</b>
Tree	<b>default-secure-service</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### interface *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private IPsec tunnel interface name
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>default-secure-service interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### service-name *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

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Synopsis	Default security service name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-secure-service</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-tunnel-template** *reference*

Synopsis	Default tunnel policy template for the gateway
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">default-tunnel-template</a> <i>reference</i>
Tree	<a href="#">default-tunnel-template</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">tunnel-template</a> <i>number</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-address-assignment**

Synopsis	Enter the <b>dhcp-address-assignment</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a>
Tree	<a href="#">dhcp-address-assignment</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dhcpv4**

Synopsis	Enable the <b>dhcpv4</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv4</a>
Tree	<a href="#">dhcpv4</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the IPsec DHCPv4 server
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv4</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gi-address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Gateway IP address of DHCPv4 packets sent by the system
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv4</a> <b>gi-address</b> <i>string</i>
Tree	<a href="#">gi-address</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**send-release** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv4 release message when IPsec tunnel removed
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv4</a> <b>send-release</b> <i>boolean</i>
Tree	<a href="#">send-release</a>
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## server

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>server</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv4 server</b>
Tree	<b>server</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv4 server addresses
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv4 server address</b> <i>string</i>
Tree	<b>address</b>
Description	This command specifies DHCPv4 server addresses for the DHCPv4-based address assignment. If multiple server addresses are specified, the first advertised DHCPv4 address received is chosen.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router-instance *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance used to reach the DHCPv4 server
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment dhcpv4 server router-instance</b> <i>string</i>

Tree	<a href="#">router-instance</a>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcpv6

Synopsis	Enable the <b>dhcpv6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv6</a>
Tree	<a href="#">dhcpv6</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv6</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## link-address *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Link address of the relayed DHCPv6 packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment</a> <a href="#">dhcpv6</a> <a href="#">link-address</a> <i>string</i>
Tree	<a href="#">link-address</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**send-release** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Send DHCPv6 release message when IPsec tunnel removed
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv6</b> <b>send-release</b> <i>boolean</i>
Tree	<b>send-release</b>
Default	true
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>server</b> context
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv6</b> <b>server</b>
Tree	<b>server</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DHCPv6 server addresses
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>dhcp-address-assignment</b> <b>dhcpv6</b> <b>server</b> <b>address</b> <i>string</i>
Tree	<b>address</b>



Description	This command specifies DHCPv6 server addresses for the DHCPv6-based address assignment. If multiple server addresses are specified, the first advertised DHCPv6 address received is chosen.
Max. Instances	8
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### router-instance *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance to reach the DHCPv6 server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">dhcp-address-assignment dhcpv6</a> <a href="#">server router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
String Length	1 to 64
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ike-policy *reference*

Synopsis	IKE policy ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">ike-policy reference</a>
Tree	<a href="#">ike-policy</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ike-policy</a> <i>number</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### local

Synopsis	Enter the <b>local</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local</a>
Tree	<a href="#">local</a>

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address-assignment

Synopsis	Enable the <b>address-assignment</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment</a>
Tree	<a href="#">address-assignment</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of local address assignments
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv4 server name
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ipsec-gateway string local address-assignment ipv4 dhcp-server string</a>
Tree	<a href="#">dhcp-server</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the pool defined in the specified DHCPv4 server
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ipsec-gateway string local address-assignment ipv4 pool string</a>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router-instance *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID for the local DHCPv4 server
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ipsec-gateway string local address-assignment ipv4 router-instance string</a>

Tree	<a href="#">router-instance</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## secondary-pool *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the secondary pool defined in the DHCPv4 server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv4</a> <a href="#">secondary-pool</a> <i>string</i>
Tree	<a href="#">secondary-pool</a>
String Length	1 to 32
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local address-assignment ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp-server *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local DHCPv6 server name
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ipsec-gateway string local address-assignment ipv6 dhcp-server string</a>
Tree	<a href="#">dhcp-server</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pool *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Secondary pool name defined in the DHCPv6 server
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ipsec-gateway string local address-assignment ipv6 pool string</a>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## router-instance *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance ID hosting the DHCPv6 connection
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string sap string ipsec-gateway string local address-assignment ipv6 router-instance string</a>

Tree	<a href="#">router-instance</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gateway-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local gateway address of the IPsec gateway
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local gateway-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">gateway-address</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **id**

Synopsis	Enter the <b>id</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">local id</a>
Tree	<a href="#">id</a>
Description	Commands in this context specify the local ID used for the Identification Indicator (IDi) or Identification Responder (IDr) in the IKEv2 tunnel.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **auto**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Select ID based on authentication method in IKE policy
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Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local id</b> <b>auto</b>
Tree	<b>auto</b>
Notes	The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fqdn** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN as the local ID type
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local id</b> <b>fqdn</b> <i>string</i>
Tree	<b>fqdn</b>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv4 address as the local ID type
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local id</b> <b>ipv4</b> <i>string</i>
Tree	<b>ipv4</b>
Notes	The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address as the local ID type
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>local id</b> <b>ipv6</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>ipv6</b>
Notes	The following elements are part of a choice: <b>auto</b> , <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-history-key-records**

Synopsis	Enter the <b>max-history-key-records</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>max-history-key-records</b>
Tree	<b>max-history-key-records</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esp number**

Synopsis	Maximum number of recent records
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>max-history-key-records</b> <b>esp</b> <i>number</i>
Tree	<b>esp</b>
Range	1 to 48
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ike number**

Synopsis	Maximum number of historical IKE keys recorded
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>max-history-key-records</b> <b>ike</b> <i>number</i>



Tree	<a href="#">ike</a>
Range	1 to 3
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pre-shared-key** *string*

Synopsis	Pre-shared key for the IPsec gateway
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">pre-shared-key</a> <i>string</i>
Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius**

Synopsis	Enter the <b>radius</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">radius</a>
Tree	<a href="#">radius</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis	RADIUS accounting policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-gateway</a> <i>string</i> <a href="#">radius</a> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">radius</a> <a href="#">accounting-policy</a> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-policy** *reference*

Synopsis	RADIUS authentication policy
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Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>radius authentication-policy</b> <i>reference</i>
Tree	<b>authentication-policy</b>
Reference	<b>configure ipsec radius authentication-policy</b> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ts-list** *reference*

Synopsis	TS list used for IKEv2 TS negotiation
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-gateway</b> <i>string</i> <b>ts-list</b> <i>reference</i>
Tree	<b>ts-list</b>
Reference	<b>configure ipsec ts-list</b> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-tunnel** [*name*] *string*

Synopsis	Enter the <b>ipsec-tunnel</b> list instance
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i>
Tree	<b>ipsec-tunnel</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [*name*] *string*

Synopsis	IPsec tunnel name
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i>
Tree	<b>ipsec-tunnel</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the IPsec tunnel
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bfd****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>bfd</b>
Tree	<a href="#">bfd</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bfd-designate** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Designate IPsec tunnel to carry BFD traffic
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>bfd</b> <b>bfd-designate</b> <i>boolean</i>
Tree	<a href="#">bfd-designate</a>
Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## bfd-liveness

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>bfd</b> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Description	<p>Commands in this context configure a BFD session to provide a heart-beat mechanism for a specified IPsec tunnel. There can be only one BFD session assigned to any given IPsec tunnel, but there can be multiple IPsec tunnels using the same BFD session.</p> <p>BFD controls the state of the association tunnel. If the BFD session goes down, the system brings down the associated non-designated IPsec tunnel.</p>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dest-ip *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination address used for the BFD session
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>bfd</b> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i>
Tree	<b>dest-ip</b>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## interface *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface used by the BFD session
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Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>bfd bfd-liveness</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service-name** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>bfd bfd-liveness</b> <b>service-name</b> <i>string</i>
Tree	<b>service-name</b>
Description	This command configures the name of the service where BFD traffic is forwarded to.
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **clear-df-bit** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Reset the DF bit to 0 in all payload IP packets
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>clear-df-bit</b> <i>boolean</i>
Tree	<b>clear-df-bit</b>
Description	When configured to <b>true</b> , the DF bit is set to 0 in all payload IP packets associated with the IPsec tunnel, before any potential fragmentation occurs.
Default	false

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **copy-traffic-class-upon-decapsulation** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable traffic class copy upon decapsulation
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>copy-traffic-class-upon-decapsulation</b> <i>boolean</i>
Tree	<a href="#">copy-traffic-class-upon-decapsulation</a>
Description	When configured to <b>true</b> , the system copies the traffic class from the outer tunnel IP packet header to the payload IP packet header in the decapsulating direction (public to private).
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dest-ip** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>dest-ip</b>
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>dest-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">dest-ip</a>
Max. Instances	16

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Private IP address of the remote IP tunnel endpoint
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>dest-ip</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>dest-ip</b>
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### encapsulated-ip-mtu *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum size of the encapsulated tunnel packet
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>encapsulated-ip-mtu</b> <i>number</i>
Tree	<b>encapsulated-ip-mtu</b>
Description	This command specifies the maximum size of the encapsulated tunnel packet to the IPsec tunnel, the IP tunnel, or the dynamic tunnels terminated on the IPsec Gateway. If the encapsulated IPv4 or IPv6 tunnel packet exceeds this value, the system fragments the packet.
Range	512 to 9000
Units	bytes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### icmp-generation



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp-generation</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ipsec-tunnel string icmp-generation</a>
Tree	<a href="#">icmp-generation</a>
Description	Commands in this context configure settings for ICMPv4 message generation.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## frag-required



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>frag-required</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ipsec-tunnel string icmp-generation frag-required</a>
Tree	<a href="#">frag-required</a>
Description	Commands in this context configure the attributes for sending generated ICMP Destination Unreachable "fragmentation needed and DF set" messages (type 3, code 4) back to the source, if the received size of the IPv4 packet on the private side exceeds the private MTU size.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of sending ICMP messages
Context	<b>configure</b> <a href="#">service vprn string interface string sap string ipsec-tunnel string icmp-generation frag-required admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Description	This command configures the administrative state of sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) messages to the source if the received size of the IPv4 packet on the private side exceeds the private MTU size.



Options	enable, disable
Default	enable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending ICMP messages
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Description	This command configures the interval for sending ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4).
Range	1 to 60
Units	seconds
Default	10
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **message-count** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMP messages that can be sent
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp-generation</b> <b>frag-required</b> <b>message-count</b> <i>number</i>
Tree	<b>message-count</b>
Description	This command configures the maximum number of ICMP Destination Unreachable "fragmentation needed, DF set" messages (type 3, code 4) that can be sent during the configured interval.
Range	10 to 1000
Default	100

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## icmp6-generation



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>icmp6-generation</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a>
Tree	<a href="#">icmp6-generation</a>
Description	Commands in this context configure settings for ICMPv6 message generation.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## packet-too-big



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>packet-too-big</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">icmp6-generation</a> <a href="#">packet-too-big</a>
Tree	<a href="#">packet-too-big</a>
Description	<p>Commands in this context configure the parameters to send ICMPv6 PTB (Packet Too Big) messages on the private side.</p> <p>The system sends PTB messages if a received IPv6 packet on the private side is greater than 1280 bytes and it exceeds the private MTU of the tunnel.</p> <p>The private MTU for the tunnel is configured via the <b>configure router interface ipsec ipsec-tunnel ip-mtu</b> command for the interface.</p>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of Packet Too Big message sends
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interval** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval for sending Packet Too Big messages
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation</b> <b>packet-too-big</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**message-count** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of ICMPv6 PTB messages that can be sent
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Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>icmp6-generation packet-too-big message-count</b> <i>number</i>
Tree	<a href="#">message-count</a>
Description	This command configures the maximum number of PTB messages that can be sent during the configured interval.
Range	10 to 1000
Default	100
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-mtu** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Private MTU of the IPsec tunnel
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>ip-mtu</b> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command specifies the private MTU of the IPsec tunnel. The private MTU is used to determine the need for fragmentation before encapsulation of the payload packet.
Range	512 to 9000
Units	bytes
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **key-exchange**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>key-exchange</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b>
Tree	<a href="#">key-exchange</a>
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dynamic



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enable the **dynamic** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [key-exchange](#) **dynamic**

Tree [dynamic](#)

Notes The following elements are part of a choice: **dynamic** or **manual**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## auto-establish *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Attempt to establish a phase 1 exchange automatically

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [key-exchange](#) [dynamic](#) **auto-establish** *boolean*

Tree [auto-establish](#)

Default false

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cert



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **cert** context

Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic cert</b>
Tree	<b>cert</b>
Description	Commands in this context configure the attributes of the dynamic keying certificate.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cert-profile** *reference*

Synopsis	Certificate profile name
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic cert cert-profile</b> <i>reference</i>
Tree	<b>cert-profile</b>
Reference	<b>configure ipsec cert-profile</b> <i>string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **status-verify**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic cert status-verify</b>
Tree	<b>status-verify</b>
Description	Commands in this context configure attributes of Certificate Status Verification (CSV).
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-result** *keyword*

Synopsis	Default result for Certificate Status Verification
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic cert status-verify default-result</b> <i>keyword</i>
Tree	<b>default-result</b>

Description	This command specifies the default certificate revocation status result to use when all configured CSV methods fail to return a result.
Options	revoked, good
Default	revoked
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **primary** *keyword*

Synopsis	Primary method of CSV to verify the revocation status
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert</b> <b>status-verify</b> <b>primary</b> <i>keyword</i>
Tree	<b>primary</b>
Description	This command configures the primary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the certificate of the peer.
Options	crl, ocsp
Default	crl
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **secondary** *keyword*

Synopsis	Secondary method used to verify certificate revocation
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange</b> <b>dynamic</b> <b>cert</b> <b>status-verify</b> <b>secondary</b> <i>keyword</i>
Tree	<b>secondary</b>
Description	This command specifies the secondary method of Certificate Status Verification (CSV) that is used to verify the revocation status of the peer certificate.
Options	none, crl, ocsp
Default	none
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **trust-anchor-profile** *reference*

Synopsis	Trust anchor profile name
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Context	<b>configure</b> <i>service vpn string interface string sap string ipsec-tunnel string key-exchange dynamic cert trust-anchor-profile reference</i>
Tree	<i>trust-anchor-profile</i>
Reference	<b>configure</b> <i>ipsec trust-anchor-profile string</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**id****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>id</b> context
Context	<b>configure</b> <i>service vpn string interface string sap string ipsec-tunnel string key-exchange dynamic id</i>
Tree	<i>id</i>
Description	Commands in this context specify the local ID used for IDi or IDr for IKEv2 negotiation. The default behavior depends on the local authentication method as follows: <ul style="list-style-type: none"> <li>• Psk: local tunnel IP address</li> <li>• Cert-auth: subject of the local certificate</li> </ul>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fqdn string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN used as the local ID IKE type
Context	<b>configure</b> <i>service vpn string interface string sap string ipsec-tunnel string key-exchange dynamic id fqdn string</i>
Tree	<i>fqdn</i>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	19.7.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4 string



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv4 as the local ID type

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [key-exchange](#) *dynamic id* [ipv4](#) *string*

Tree [ipv4](#)

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6 (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IPv6 used as the local IKE ID type

Context **configure** [service vprn](#) *string* [interface](#) *string* [sap](#) *string* [ipsec-tunnel](#) *string* [key-exchange](#) *dynamic id* [ipv6](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [ipv6](#)

Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ike-policy reference



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis IKE policy ID

Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic ike-policy</b> <i>reference</i>
Tree	<a href="#">ike-policy</a>
Description	This command specifies the ID of the IKE policy used for IKE negotiation. The <b>ipsec-transport-mode-profile</b> configuration only supports IKEv2.
Reference	<b>configure ipsec ike-policy</b> <i>number</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-transform** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec transform IDs used by the dynamic key
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic ipsec-transform</b> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Description	This command specifies IPsec transform IDs used for CHILD_SA negotiation.
Reference	<b>configure ipsec ipsec-transform</b> <i>number</i>
Max. Instances	4
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pre-shared-key** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Pre-shared key for authentication
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>key-exchange dynamic pre-shared-key</b> <i>string</i>
Tree	<a href="#">pre-shared-key</a>
String Length	1 to 115

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## manual



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>manual</b> context
Context	<b>configure service vpn</b> <i>string interface string sap string ipsec-tunnel string key-exchange manual</i>
Tree	<a href="#">manual</a>
Notes	The following elements are part of a choice: <b>dynamic</b> or <b>manual</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## keys [[security-association](#)] *number direction keyword*

Synopsis	Enter the <b>keys</b> list instance
Context	<b>configure service vpn</b> <i>string interface string sap string ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	<a href="#">keys</a>
Description	Commands in this context configure the security association list for the tunnel.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[security-association](#)] *number*

Synopsis	SA entry ID
Context	<b>configure service vpn</b> <i>string interface string sap string ipsec-tunnel string key-exchange manual keys number direction keyword</i>
Tree	<a href="#">keys</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **direction** *keyword*

Synopsis Direction of the IPsec tunnel

Context **configure** **service** **vprn** *string* **interface** *string* **sap** *string* **ipsec-tunnel** *string* **key-exchange** **manual** **keys** *number* **direction** *keyword*

Tree **keys**

Options inbound, outbound

Notes This element is part of a list key.

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-key** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the authentication algorithm

Context **configure** **service** **vprn** *string* **interface** *string* **sap** *string* **ipsec-tunnel** *string* **key-exchange** **manual** **keys** *number* **direction** *keyword* **authentication-key** *string*

Tree **authentication-key**

String Length 1 to 130

Introduced 19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encryption-key** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Key used for the encryption algorithm

Context **configure** **service** **vprn** *string* **interface** *string* **sap** *string* **ipsec-tunnel** *string* **key-exchange** **manual** **keys** *number* **direction** *keyword* **encryption-key** *string*

Tree **encryption-key**

String Length 1 to 66

Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipsec-transform** *reference*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Transform entry used by manual SAs
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">ipsec-transform</a> <i>reference</i>
Tree	<a href="#">ipsec-transform</a>
Reference	<b>configure</b> <a href="#">ipsec</a> <a href="#">ipsec-transform</a> <i>number</i>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **spi** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	SPI of inbound and outbound packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">key-exchange</a> <a href="#">manual</a> <a href="#">keys</a> <i>number</i> <a href="#">direction</a> <i>keyword</i> <a href="#">spi</a> <i>number</i>
Tree	<a href="#">spi</a>
Description	This command specifies the Security Parameter Index (SPI) used to look up the instruction to verify and decrypt the incoming IPsec packets when the direction is inbound. When the direction is outbound, the SPI is used in the encoding of the outgoing packets.  The remote node can use the SPI to look up the instruction to verify and decrypt the packet.
Range	256 to 16383
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-history-key-records



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>max-history-key-records</b> context
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a>
Tree	<a href="#">max-history-key-records</a>
Description	Commands in this context configure the settings for recording historical IPsec keys.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esp number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of recent records
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">esp</a> <i>number</i>
Tree	<a href="#">esp</a>
Range	1 to 48
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ike number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of historical IKE key records
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">ipsec-tunnel</a> <i>string</i> <a href="#">max-history-key-records</a> <a href="#">ike</a> <i>number</i>
Tree	<a href="#">ike</a>

Range	1 to 3
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pmtu-discovery-aging** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Aging out time of the learned path MTU
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>pmtu-discovery-aging</b> <i>number</i>
Tree	<b>pmtu-discovery-aging</b>
Description	This command configures the temporary public and private MTU expiration time. The temporary MTU is used for MTU propagation.
Range	900 to 3600
Units	seconds
Default	900
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) adjustment
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>private-tcp-mss-adjust</b> <i>number</i>
Tree	<b>private-tcp-mss-adjust</b>
Description	This command specifies the TCP MSS to adjust for the tunnel on the private side. When configured, the system may use the value to update the MSS option in the received TCP SYN packet on the private side.
Range	512 to 9000
Units	bytes
Introduced	19.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **propagate-pmtu-v4** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv4 hosts
Context	<b>configure</b> <i>service vpn</i> <i>string</i> <i>interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>ipsec-tunnel</i> <i>string</i> <b>propagate-pmtu-v4</b> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v4</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv4 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **propagate-pmtu-v6** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable propagation of the path MTU to IPv6 hosts
Context	<b>configure</b> <i>service vpn</i> <i>string</i> <i>interface</i> <i>string</i> <i>sap</i> <i>string</i> <i>ipsec-tunnel</i> <i>string</i> <b>propagate-pmtu-v6</b> <i>boolean</i>
Tree	<a href="#">propagate-pmtu-v6</a>
Description	When configured to <b>true</b> , the system propagates the path MTU learned from the public side to the private side (IPv6 hosts).
Default	true
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**public-tcp-mss-adjust** (*number | keyword*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TCP maximum segment size (MSS) on the public network
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>public-tcp-mss-adjust</b> ( <i>number   keyword</i> )
Tree	<b>public-tcp-mss-adjust</b>
Description	This command configures the MSS for the TCP traffic in an IPsec tunnel that is sent from the public network to the private network. The system may use this value to adjust or insert the MSS option in the TCP SYN packet.
Range	512 to 9000
Units	bytes
Options	auto
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**replay-window** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Anti-replay window size
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>replay-window</b> <i>number</i>
Tree	<b>replay-window</b>
Description	This command specifies the size of an IPsec anti-replay window. If unconfigured, IPsec anti-replay is disabled.
Range	32   64   128   256   512
Units	packets
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## security-policy



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>security-policy</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>security-policy</b>
Tree	<b>security-policy</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## id reference



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPsec security policy ID
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>security-policy id reference</b>
Tree	<b>id</b>
Reference	<b>configure service vpn</b> <i>string</i> <b>ipsec security-policy</b> <i>number</i>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## strict-match *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable strict match of the security policy entry
Context	<b>configure service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>security-policy strict-match</b> <i>boolean</i>
Tree	<b>strict-match</b>
Description	When configured to <b>true</b> , this command enables strict match of the security policy entry. When a CREATE_CHILD exchange request is received for a static IPsec tunnel, and this request is not a rekey request, ISA matches the received TSi and TSr with the

configured security policy. This can be a match only when a received TS (in TSi or TSr) address range matches exactly with the subnet in a security policy entry.

If there is no match, the setup fails, and TS\_UNACCEPTABLE is sent.

If there is a match, but there is an existing CHILD\_SA for the matched security policy, the setup fails, and NO\_PROPOSAL\_CHOSEN is sent.

If there is a match, and there is not a CHILD\_SA for the matched entry, the subnet is sent in the matched security policy entry as TSi and TSr, and the CHILD\_SA is created.

Default	false
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tunnel-endpoint



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>tunnel-endpoint</b> context
Context	<b>configure</b> <b>service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>tunnel-endpoint</b>
Tree	<b>tunnel-endpoint</b>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## delivery-service *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Delivery service name
Context	<b>configure</b> <b>service vpn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>tunnel-endpoint</b> <b>delivery-service</b> <i>string</i>
Tree	<b>delivery-service</b>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local-gateway-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Address used for tunnel of the remote security gateway
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>tunnel-endpoint</b> <b>local-gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>local-gateway-address</b>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remote-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote IP address of this tunnel.
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ipsec-tunnel</b> <i>string</i> <b>tunnel-endpoint</b> <b>remote-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>remote-ip-address</b>
Notes	This element is mandatory.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lag**

Synopsis	Enter the <b>lag</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag</b>
Tree	<b>lag</b>
Introduced	16.0.R1
Platforms	All

**link-map-profile** *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag link-map-profile</a> <i>number</i>
Tree	<a href="#">link-map-profile</a>
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.  If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

**per-link-hash**

Synopsis	Enter the <b>per-link-hash</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag per-link-hash</a>
Tree	<a href="#">per-link-hash</a>
Introduced	16.0.R1
Platforms	All

**class** *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag per-link-hash class</a> <i>number</i>
Tree	<a href="#">class</a>
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">lag per-link-hash weight</a> <i>number</i>

Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

### **multi-service-site** *reference*

Synopsis	Multi service site name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">multi-service-site</a> <i>reference</i>
Tree	<a href="#">multi-service-site</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **static-host**

Synopsis	Enter the <b>static-host</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a>
Tree	<a href="#">static-host</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4** [[ip](#)] *string* [mac](#) *string*

Synopsis	Enter the <b>ipv4</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ip]** *string*

Synopsis	IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i>

Tree	<a href="#">ipv4</a>
MD-CLI	0.0.0.0
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac string**

Synopsis	MAC address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv4</a>
MD-CLI	00:00:00:00:00:00
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the static host
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ancp-string string**

Synopsis	ANCP string
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">ancp-string</a> <i>string</i>
Tree	<a href="#">ancp-string</a>
String Length	1 to 63

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## app-profile

Synopsis	Enter the <b>app-profile</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a>
Tree	<a href="#">app-profile</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## profile *reference*

Synopsis	Application profile used by the static host
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a> <a href="#">profile</a> <i>reference</i>
Tree	<a href="#">profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## int-dest-id *string*

Synopsis	Intermediate destination ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">int-dest-id</a> <i>string</i>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sla-profile *reference*

Synopsis	SLA profile name
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>sla-profile</b> <i>reference</i>
Tree	<b>sla-profile</b>
Reference	<b>configure subscriber-mgmt sla-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Sub-profile name
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>sub-profile</b> <i>reference</i>
Tree	<b>sub-profile</b>
Reference	<b>configure subscriber-mgmt sub-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id**

Synopsis	Enter the <b>subscriber-id</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b>
Tree	<b>subscriber-id</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis	Subscriber identification
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>subscriber-id</b> <i>string</i> <i>string</i>
Tree	<b>string</b>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-sap-id

Synopsis	Use the SAP id as subscriber ID
Context	<b>configure</b> <i>service vprn string interface string sap string static-host ipv4 string mac string subscriber-id use-sap-id</i>
Tree	<i>use-sap-id</i>
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## transit-policy

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure</b> <i>service vprn string interface string sap string transit-policy</i>
Tree	<i>transit-policy</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	<b>configure</b> <i>service vprn string interface string sap string transit-policy ip reference</i>
Tree	<i>ip</i>
Reference	<b>configure</b> <i>application-assurance group number partition number transit-ip-policy number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix</a> <i>reference</i>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## shcv-policy-ipv4 reference

Synopsis	Host connectivity IPv4 policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">shcv-policy-ipv4</a> <i>reference</i>
Tree	<a href="#">shcv-policy-ipv4</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## spoke-sdp [[sdp-bind-id](#)] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

## [[sdp-bind-id](#)] *string*

Synopsis	SDP binding ID
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## **aarp**

Synopsis	Enable the <b>aarp</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>aarp</b>
Tree	<b>aarp</b>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **id reference**

Synopsis	AARP instance ID
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>aarp id reference</b>
Tree	<b>id</b>
Reference	<b>configure application-assurance aarp</b> <i>number</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **type keyword**

Synopsis	Role referenced by the AARP
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>aarp type keyword</b>
Tree	<b>type</b>
Options	dual-homed, dual-homed-secondary
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy** *reference*

Synopsis	Policy to collect accounting statistics
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**app-profile** *reference*

Synopsis	Application profile name for this SDP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Introduced	21.2.R1
Platforms	All

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">bfd bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	21.2.R1
Platforms	All

**encap keyword**

Synopsis	BFD encapsulation used on the SDP binding
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">bfd bfd-liveness encap keyword</a>
Tree	<a href="#">encap</a>
Options	ipv4
Default	ipv4
Introduced	21.2.R1
Platforms	All

**bfd-template reference**

Synopsis	BFD template associated with the SDP binding
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">interface string</a> <a href="#">spoke-sdp string</a> <a href="#">bfd bfd-template reference</a>
Tree	<a href="#">bfd-template</a>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Reference	<b>configure</b> <a href="#">bfd bfd-template string</a>
Introduced	21.2.R1
Platforms	All

**failure-action keyword**

Synopsis	VCCV BFD action taken on the SDP binding
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>bfd failure-action</b> <i>keyword</i>
Tree	<b>failure-action</b>
Description	This command configures a named BFD template to be used by VCCV BFD on PWs belonging to the VLL service. The template specifies parameters, such as the minimum transmit and receive control packet timer intervals, used by the BFD session. Template parameters are configured under the <b>configure router bfd</b> context.
Options	none, down
Default	none
Introduced	21.2.R1
Platforms	All

### **wait-for-up-timer** *number*

Synopsis	Time waited for BFD up status
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>bfd wait-for-up-timer</b> <i>number</i>
Tree	<b>wait-for-up-timer</b>
Description	This command configures the time interval that is used to wait for a BFD session to come up.  This command is triggered when a spoke-SDP is first administratively enabled and a VCCV BFD session transitions from up to down. The command is required to allow time for BFD sessions to come up, and for BFD to settle before selecting the active spoke-SDP for use in a redundant set. In the case where a VCCV BFD session is bouncing, the timer prevents excessive flapping of the operational state of a spoke-SDP.
Range	1 to 60
Units	seconds
Introduced	21.2.R1
Platforms	All

### **collect-stats** *boolean*

Synopsis	Allow agent to collect accounting statistics
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<b>collect-stats</b>
Default	false
Introduced	16.0.R1
Platforms	All

## control-word *boolean*

Synopsis	Use the control word as preferred
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>control-word</b> <i>boolean</i>
Tree	<a href="#">control-word</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## cpu-protection

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>cpu-protection</b>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm-monitoring

Synopsis	Enable the <b>eth-cfm-monitoring</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <b>eth-cfm-monitoring</b>
Tree	<a href="#">eth-cfm-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <b>aggregate</b>
Tree	<a href="#">aggregate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS



## car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">eth-cfm-monitoring</a> <a href="#">car</a>
Tree	<a href="#">car</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a>
Tree	<a href="#">ip-src-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## policy-id *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <a href="#">reference</a>
Tree	<a href="#">policy-id</a>

Reference	<b>configure system security cpu-protection policy number</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure service vprn string interface string spoke-sdp string description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure service vprn string interface string spoke-sdp string egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	All

### **filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vprn string interface string spoke-sdp string egress filter</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	All

### **ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure service vprn string interface string spoke-sdp string egress filter ip reference</b>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter string</b>

Introduced 16.0.R1  
 Platforms All

### **ipv6** *reference*

Synopsis IPv6 filter policy name  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress filter ipv6](#) *reference*  
 Tree [ipv6](#)  
 Reference **configure** [filter ipv6-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **qos**

Synopsis Enter the **qos** context  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos](#)  
 Tree [qos](#)  
 Introduced 16.0.R1  
 Platforms All

### **network**

Synopsis Enter the **network** context  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network](#)  
 Tree [network](#)  
 Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Network policy ID  
 Context **configure** [service vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress qos network](#) [policy-name](#) *reference*  
 Tree [policy-name](#)  
 Reference **configure** [qos network](#) *string*

Introduced 16.0.R1  
 Platforms All

### port-redirect-group

Synopsis Enter the **port-redirect-group** context  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#)  
 Tree [port-redirect-group](#)  
 Introduced 16.0.R1  
 Platforms All

### group-name *reference*

Synopsis Name of the egress port queue group  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#) [group-name](#) *reference*  
 Tree [group-name](#)  
 Reference **configure** [qos](#) [queue-group-templates](#) [egress](#) [queue-group](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### instance *number*

Synopsis Queue-group instance ID  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [egress](#) [qos](#) [network](#) [port-redirect-group](#) [instance](#) *number*  
 Tree [instance](#)  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms All

**vc-label** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575
Introduced	16.0.R1
Platforms	All

**entropy-label**

Synopsis	Enable the use of entropy labels for spoke SDPs
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">entropy-label</a>
Tree	<a href="#">entropy-label</a>
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

**eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**collect-lmm-fc-stats**

Synopsis	Enter the <b>collect-lmm-fc-stats</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">collect-lmm-fc-stats</a>
Tree	<a href="#">collect-lmm-fc-stats</a>

Description	<p>Commands in this context configure per forwarding class (FC) LMM information collection.</p> <p>The commands <b>fc-in-profile</b> and <b>fc</b> in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.</p> <p>This command and the <b>collect-lmm-stats</b> command are mutually exclusive when there is entity resource contention.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc** keyword

Synopsis	Forwarding class name for profile-unaware counter
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-fc-stats</b> <b>fc</b> <i>keyword</i>
Tree	<b>fc</b>
Description	<p>This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the <b>fc-in-profile</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc-in-profile** keyword

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm</b> <b>collect-lmm-fc-stats</b> <b>fc-in-profile</b> <i>keyword</i>
Tree	<b>fc-in-profile</b>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p>

An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the **fc** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>collect-lmm-stats</b> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <b>mep</b> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure</b> <a href="#">eth-cfm domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
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Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ais** *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ais</a> <i>boolean</i>
Tree	<a href="#">ais</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a>
Tree	<a href="#">alarm-notification</a>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <i>number</i>

Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <b>fng-reset-time</b> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm** *boolean*

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm</b> <i>boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **csf**

Synopsis	Enable the <b>csf</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf</b>
Tree	<a href="#">csf</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **multiplier** *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf multiplier</b> <i>decimal-number</i>
Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">spoke-sdp</a> <a href="#">string</a> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <a href="#">reference</a> <a href="#">ma-admin-name</a> <a href="#">reference</a> <a href="#">mep-id</a> <a href="#">number</a> <a href="#">eth-test</a> <a href="#">bit-error-threshold</a> <a href="#">number</a>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## test-pattern

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## crc-tlv *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## pattern *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**fault-propagation** *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number fault-propagation keyword</a>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed</a>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">service vprn string interface string spoke-sdp string eth-cfm mep md-admin-name reference ma-admin-name reference mep-id number grace eth-ed max-rx-defect-window number</a>
Tree	<a href="#">max-rx-defect-window</a>

Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority number**

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rx-eth-ed boolean**

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed</a> <b>rx-eth-ed</b> <i>boolean</i>
Tree	<a href="#">rx-eth-ed</a>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tx-eth-ed boolean**

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-ed</a> <b>tx-eth-ed</b> <i>boolean</i>
Tree	<a href="#">tx-eth-ed</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eth-vsm-grace

Synopsis Enter the **eth-vsm-grace** context

Context **configure** [service vprn](#) [string interface](#) [string spoke-sdp](#) [string eth-cfm mep md-admin-name](#) [reference ma-admin-name](#) [reference mep-id](#) [number grace eth-vsm-grace](#)

Tree [eth-vsm-grace](#)

Description Commands in this context configure the Nokia ETH-CFM Grace function.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## rx-eth-vsm-grace *boolean*

Synopsis Receive and process Nokia ETH-CFM Grace PDU on the MEP

Context **configure** [service vprn](#) [string interface](#) [string spoke-sdp](#) [string eth-cfm mep md-admin-name](#) [reference ma-admin-name](#) [reference mep-id](#) [number grace eth-vsm-grace rx-eth-vsm-grace](#) *boolean*

Tree [rx-eth-vsm-grace](#)

Description When configured to **true**, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.

When configured to **false**, the router disables the Nokia Grace function.

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tx-eth-vsm-grace *boolean*

Synopsis Transmit ETH-ED PDUs from the MEP

Context **configure** [service vprn](#) [string interface](#) [string spoke-sdp](#) [string eth-cfm mep md-admin-name](#) [reference ma-admin-name](#) [reference mep-id](#) [number grace eth-vsm-grace tx-eth-vsm-grace](#) *boolean*

Tree [tx-eth-vsm-grace](#)

Description When configured to **true**, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.

The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.



The operator must configure the **configure system eth-cfm grace** command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).

When configured to **false**, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.

Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>low-priority-defect</b> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>eth-cfm squelch-ingress-levels</b> <i>number</i>
Tree	<a href="#">squelch-ingress-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## hash-label

Synopsis	Enable the <b>hash-label</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>hash-label</b>
Tree	<a href="#">hash-label</a>
Description	<p>Commands in this context configure the use of hash labels for egress datapaths.</p> <p>For information about hash-label handling, see the "Hash labels" section of the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR MPLS Guide</i>.</p>
Notes	The following elements are part of a choice: <b>entropy-label</b> or <b>hash-label</b> .
Introduced	16.0.R1
Platforms	All

## signal-capability

Synopsis	Signal hash label capability to the remote PE
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>hash-label signal-capability</b>
Tree	<a href="#">signal-capability</a>
Description	When configured, this command enables the signaling and negotiating of the hash label between the local and remote PE nodes.

The signaling process outcome determines whether the local PE inserts the hash label on the user packets. This outcome can override the local PE configuration.

Introduced 16.0.R1  
Platforms All

## ingress

Synopsis Enter the **ingress** context  
Context **configure** [service vprn string](#) [interface string](#) [spoke-sdp string](#) [ingress](#)  
Tree [ingress](#)  
Introduced 16.0.R1  
Platforms All

## filter

Synopsis Enter the **filter** context  
Context **configure** [service vprn string](#) [interface string](#) [spoke-sdp string](#) [ingress filter](#)  
Tree [filter](#)  
Introduced 16.0.R1  
Platforms All

## ip reference

Synopsis IPv4 filter policy name  
Context **configure** [service vprn string](#) [interface string](#) [spoke-sdp string](#) [ingress filter](#) [ip reference](#)  
Tree [ip](#)  
Reference **configure** [filter ip-filter string](#)  
Introduced 16.0.R1  
Platforms All

## ipv6 reference

Synopsis IPv6 filter policy name  
Context **configure** [service vprn string](#) [interface string](#) [spoke-sdp string](#) [ingress filter](#) [ipv6 reference](#)  
Tree [ipv6](#)

Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network</a>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	All

## fp-redirect-group

Synopsis	Enter the <b>fp-redirect-group</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group</a>
Tree	<a href="#">fp-redirect-group</a>
Introduced	16.0.R1
Platforms	All

## group-name *reference*

Synopsis	Name of the forwarding plane queue group template
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">ingress qos network fp-redirect-group group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">qos queue-group-templates</a> <a href="#">ingress queue-group</a> <i>string</i>

Introduced 16.0.R1  
 Platforms All

### **instance** *number*

Synopsis Instance of FP ingress queue group for the SDP binding  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [ingress qos network fp-redirect-group](#) [instance](#) *number*  
 Tree [instance](#)  
 Range 1 to 65535  
 Introduced 16.0.R1  
 Platforms All

### **policy-name** *reference*

Synopsis Network policy ID  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [ingress qos network policy-name](#) *reference*  
 Tree [policy-name](#)  
 Reference **configure** [qos network](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **vc-label** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end  
 Context **configure** [service](#) [vprn](#) *string* [interface](#) *string* [spoke-sdp](#) *string* [ingress vc-label](#) *number*  
 Tree [vc-label](#)  
 Range 1 to 1048575  
 Introduced 16.0.R1  
 Platforms All

## transit-policy

Synopsis	Enable the <b>transit-policy</b> context
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a>
Tree	<a href="#">transit-policy</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP transit policy ID
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-ip-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## prefix reference



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP prefix policy ID
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">transit-policy</a> <a href="#">prefix reference</a>
Tree	<a href="#">prefix</a>
Reference	<b>configure</b> <a href="#">application-assurance group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">transit-prefix-policy</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>ip</b> or <b>prefix</b> .
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vc-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Type of virtual circuit (VC) associated with the SDP binding
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>vc-type</b> <i>keyword</i>
Tree	<a href="#">vc-type</a>
Options	ether, ipipe
Default	ether
Introduced	16.0.R1
Platforms	All

**static-tunnel-redundant-nexthop** *string*

Synopsis	Address for the static ISA tunnel redundant next-hop
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>static-tunnel-redundant-nexthop</b> <i>string</i>
Tree	<a href="#">static-tunnel-redundant-nexthop</a>
Description	This command specifies the redundant next-hop address on public or private IPsec interfaces (with a public or private tunnel SAP) for the static IPsec tunnel. The next-hop address is resolved in the routing table of the corresponding service.
Notes	The following elements are part of a choice: <b>multi-chassis-shunting-profile</b> or <b>(dynamic-tunnel-redundant-nexthop</b> and <b>static-tunnel-redundant-nexthop)</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tos-marking-state** *keyword*

Synopsis	TOS marking state
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>tos-marking-state</b> <i>keyword</i>
Tree	<a href="#">tos-marking-state</a>
Options	trusted, untrusted
Default	trusted
Introduced	16.0.R1
Platforms	All

**tunnel** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Enable/disable tunnel interface
Context	<b>configure</b> <i>service vprn string interface string tunnel boolean</i>
Tree	<i>tunnel</i>
Default	false
Introduced	16.0.R1
Platforms	All

**vas-if-type** *keyword*

Synopsis	VAS interface type
Context	<b>configure</b> <i>service vprn string interface string vas-if-type keyword</i>
Tree	<i>vas-if-type</i>
Options	to-from-access, to-from-network, to-from-both
Introduced	16.0.R1
Platforms	All

**vpls** [*vpls-name*] *string*

Synopsis	Enter the <b>vpls</b> list instance
Context	<b>configure</b> <i>service vprn string interface string vpls string</i>
Tree	<i>vpls</i>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[vpls-name]** *string*

Synopsis	VPLS service
Context	<b>configure</b> <i>service vprn string interface string vpls string</i>



Tree	<a href="#">vpls</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	All

## reclassify-using-qos *reference*

Synopsis	Egress QoS policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">egress</a> <a href="#">reclassify-using-qos</a> <i>reference</i>
Tree	<a href="#">reclassify-using-qos</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## routed-override-filter

Synopsis	Enter the <b>routed-override-filter</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">egress</a> <a href="#">routed-override-filter</a>
Tree	<a href="#">routed-override-filter</a>
Introduced	16.0.R1
Platforms	All

## ip *reference*

Synopsis	IPv4 filter policy name
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>egress</b> <b>routed-override-filter ip</b> <i>reference</i>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>egress</b> <b>routed-override-filter ipv6</b> <i>reference</i>
Tree	<b>ipv6</b>
Reference	<b>configure filter ipv6-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### evpn

Synopsis	Enter the <b>evpn</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn</b>
Tree	<b>evpn</b>
Introduced	19.10.R1
Platforms	All

### arp

Synopsis	Enter the <b>arp</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn arp</b>
Tree	<b>arp</b>
Introduced	19.10.R1
Platforms	All

### advertise [*route-type*] *keyword*

Synopsis	Enter the <b>advertise</b> list instance
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Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn arp advertise</b> <i>keyword</i>
Tree	<b>advertise</b>
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The <b>learn-dynamic</b> command must be set to <b>false</b> when using this functionality.
Introduced	19.10.R1
Platforms	All

### **[route-type]** *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn arp advertise</b> <i>keyword</i>
Tree	<b>advertise</b>
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **route-tag** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn arp advertise</b> <i>keyword</i> <b>route-tag</b> <i>number</i>
Tree	<b>route-tag</b>
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	19.10.R1
Platforms	All

**flood-garp-and-unknown-req** *boolean*

Synopsis	Allow CPM originated ARP frames to flood R-VPLS service
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <a href="#">arp</a> <b>flood-garp-and-unknown-req</b> <i>boolean</i>
Tree	<a href="#">flood-garp-and-unknown-req</a>
Description	When configured to <b>true</b> , the system allows CPM-originated ARP frames to be flooded in the R-VPLS service. Any frames that are data path flooded such as the ARP messages received on a SAP, are flooded irrespective of this command. When configured to <b>false</b> , CPM-originated ARP flooding is suppressed.
Default	true
Introduced	19.10.R1
Platforms	All

**learn-dynamic** *boolean*

Synopsis	Process ARP or ND messages on EVPN tunnels
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <a href="#">arp</a> <b>learn-dynamic</b> <i>boolean</i>
Tree	<a href="#">learn-dynamic</a>
Description	When configured to <b>true</b> , the system processes ARP or ND messages that arrive on EVPN tunnels. When configured to <b>false</b> , learning is disabled and table entries are not created for these messages.
Default	true
Introduced	19.10.R1
Platforms	All

**nd**

Synopsis	Enter the <b>nd</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">vpls</a> <i>string</i> <a href="#">evpn</a> <b>nd</b>
Tree	<a href="#">nd</a>
Introduced	20.5.R1
Platforms	All

**advertise** [*route-type*] *keyword*

Synopsis	Enter the <b>advertise</b> list instance
Context	<b>configure</b> <i>service vprn string interface string vpls string evpn nd advertise keyword</i>
Tree	<i>advertise</i>
Description	Commands in this context specify the configuration to allow ARP or ND entries that are installed in the ARP or ND cache to be advertised in EVPN MAC/IP routes. The <b>learn-dynamic</b> command must be set to <b>false</b> when using this functionality.
Introduced	20.5.R1
Platforms	All

**[route-type]** *keyword*

Synopsis	Type of ARP or ND entries that generate host routes
Context	<b>configure</b> <i>service vprn string interface string vpls string evpn nd advertise keyword</i>
Tree	<i>advertise</i>
Description	This command specifies the type of ARP or ND entries that are installed in the ARP or ND cache into EVPN MAC/IP routes.
Options	static, dynamic
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**route-tag** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Tag value used with the host route from an ARP/ND entry
Context	<b>configure</b> <i>service vprn string interface string vpls string evpn nd advertise keyword route-tag number</i>
Tree	<i>route-tag</i>
Description	This command specifies the route tag that is added separately to dynamic or static ARP or ND entries that are advertised in EVPN MAC/IP routes. This tag can be matched on BGP vsi-export (in the R-VPLS) and BGP peer export policies.
Range	0 to 255
Introduced	20.5.R1

Platforms All

### **learn-dynamic** *boolean*

Synopsis Process ARP or ND messages on EVPN tunnels

Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [evpn nd](#) **learn-dynamic** *boolean*

Tree [learn-dynamic](#)

Description When configured to **true**, the system processes ARP or ND messages that arrive on EVPN tunnels.  
When configured to **false**, learning is disabled and table entries are not created for these messages.

Default true

Introduced 20.5.R1

Platforms All

### **evpn-tunnel**

Synopsis Enable the **evpn-tunnel** context

Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* **evpn-tunnel**

Tree [evpn-tunnel](#)

Introduced 16.0.R1

Platforms All

### **allow-bfd** *boolean*

Synopsis Allow BFD on the EVPN tunnel

Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [evpn-tunnel](#) **allow-bfd** *boolean*

Tree [allow-bfd](#)

Default false

Introduced 22.5.R1

Platforms All

### **ipv6-gateway-address** *keyword*

Synopsis Type of IPv6 gateway address

Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn-tunnel ipv6-gateway-address</b> <i>keyword</i>
Tree	<a href="#">ipv6-gateway-address</a>
Options	ip, mac
Default	ip
Introduced	16.0.R4
Platforms	All

### **supplementary-broadcast-domain** *boolean*

Synopsis	Use the EVPN tunnel as a Supplementary Broadcast Domain
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>evpn-tunnel supplementary-broadcast-domain</b> <i>boolean</i>
Tree	<a href="#">supplementary-broadcast-domain</a>
Description	<p>When configured to <b>true</b>, this command allows the EVPN tunnel to be used as a Supplementary Broadcast Domain (SBD). The SBD is used in EVPN OISM to advertise the SMET routes and to receive the multicast traffic on egress PEs that are not attached to the source R-VPLS service.</p> <p>When configured to <b>false</b>, this command disables EVPN tunnel use as an SBD.</p>
Default	false
Introduced	19.10.R1
Platforms	All

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

### **routed-override-filter**

Synopsis	Enter the <b>routed-override-filter</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>interface</b> <i>string</i> <b>vpls</b> <i>string</i> <b>ingress routed-override-filter</b>
Tree	<a href="#">routed-override-filter</a>
Introduced	16.0.R1

Platforms All

### **ip reference**

Synopsis IPv4 filter policy name

Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [ingress](#) [routed-override-filter ip reference](#)

Tree [ip](#)

Reference **configure** [filter ip-filter](#) *string*

Introduced 16.0.R1

Platforms All

### **ipv6 reference**

Synopsis IPv6 filter policy name

Context **configure** [service vprn](#) *string* [interface](#) *string* [vpls](#) *string* [ingress](#) [routed-override-filter ipv6 reference](#)

Tree [ipv6](#)

Reference **configure** [filter ipv6-filter](#) *string*

Introduced 16.0.R1

Platforms All

### **ip-mirror-interface** [[interface-name](#)] *string*

Synopsis Enter the **ip-mirror-interface** list instance

Context **configure** [service vprn](#) *string* [ip-mirror-interface](#) *string*

Tree [ip-mirror-interface](#)

Introduced 16.0.R1

Platforms All

### **[interface-name]** *string*

Synopsis Interface name

Context **configure** [service vprn](#) *string* [ip-mirror-interface](#) *string*

Tree [ip-mirror-interface](#)

String Length 1 to 32



Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>ip-mirror-interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>ip-mirror-interface</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

### **spoke-sdp** [**sdp-bind-id**] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>ip-mirror-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i>
Tree	<b>spoke-sdp</b>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[sdp-bind-id]** *string*

Synopsis	SDP binding ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ip-mirror-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <b>ingress</b>
Tree	<a href="#">ingress</a>

Introduced 16.0.R1  
 Platforms All

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service](#) [vprn](#) *string* [ip-mirror-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms All

## ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [service](#) [vprn](#) *string* [ip-mirror-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip](#) *reference*  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms All

## vc-label *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Spoke SDP ingress VC label  
 Context **configure** [service](#) [vprn](#) *string* [ip-mirror-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [vc-label](#) *number*  
 Tree [vc-label](#)  
 Range 1 to 1048575  
 Introduced 16.0.R1  
 Platforms All

## ipsec

Synopsis	Enter the <b>ipsec</b> context
Context	<b>configure service vprn string ipsec</b>
Tree	<a href="#">ipsec</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## allow-reverse-route-override-type *keyword*

Synopsis	System behavior for new reverse route
Context	<b>configure service vprn string ipsec allow-reverse-route-override-type <i>keyword</i></b>
Tree	<a href="#">allow-reverse-route-override-type</a>
Description	This command specifies the system behavior when a new reverse route overlaps with an existing reverse route.  When unconfigured, the system does not allow a new dynamic LAN-to-LAN tunnel that terminates in the private VPRN service to be created with an overlapping reverse route.
Options	same-idi, any-idi
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## multi-chassis-shunt-interface [*name*] *reference*

Synopsis	Enter the <b>multi-chassis-shunt-interface</b> list instance
Context	<b>configure service vprn string ipsec multi-chassis-shunt-interface <i>reference</i></b>
Tree	<a href="#">multi-chassis-shunt-interface</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [*name*] *reference*

Synopsis	Multi-chassis shunt interface name
Context	<b>configure service vprn string ipsec multi-chassis-shunt-interface <i>reference</i></b>
Tree	<a href="#">multi-chassis-shunt-interface</a>
Reference	<b>configure service vprn string interface <i>string</i></b>
Notes	This element is part of a list key.

Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## next-hop

Synopsis	Enter the <b>next-hop</b> context
Context	<b>configure service vprn string ipsec multi-chassis-shunt-interface reference next-hop</b>
Tree	<a href="#">next-hop</a>
Description	Commands in this context configure the next hop for shunting over the interface.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	Next hop address for the shunting interface
Context	<b>configure service vprn string ipsec multi-chassis-shunt-interface reference next-hop address (<i>ipv4-address-no-zone   ipv6-address-no-zone</i>)</b>
Tree	<a href="#">address</a>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## multi-chassis-shunting-profile [*name*] *string*

Synopsis	Enter the <b>multi-chassis-shunting-profile</b> list instance
Context	<b>configure service vprn string ipsec multi-chassis-shunting-profile string</b>
Tree	<a href="#">multi-chassis-shunting-profile</a>
Max. Instances	64
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [*name*] *string*

Synopsis	Multi-chassis shunting profile name
Context	<b>configure service vprn string ipsec multi-chassis-shunting-profile string</b>
Tree	<a href="#">multi-chassis-shunting-profile</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer** [[ip-address](#)] *reference*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipsec multi-chassis-shunting-profile</a> <i>string</i> <a href="#">peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Max. Instances	3
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-address]** *reference*

Synopsis	Peer address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipsec multi-chassis-shunting-profile</a> <i>string</i> <a href="#">peer</a> <i>reference</i>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is part of a list key.
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-chassis-shunt-interface** *reference*

Synopsis	Multi-chassis shunt interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipsec multi-chassis-shunting-profile</a> <i>string</i> <a href="#">peer</a> <i>reference</i> <a href="#">multi-chassis-shunt-interface</a> <i>reference</i>
Tree	<a href="#">multi-chassis-shunt-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipsec multi-chassis-shunt-interface</a> <i>reference</i>
Introduced	22.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**security-policy** [*id*] *number*

Synopsis	Enter the <b>security-policy</b> list instance
Context	<b>configure service vpn</b> <i>string ipsec security-policy number</i>
Tree	<a href="#">security-policy</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	IPsec security policy ID
Context	<b>configure service vpn</b> <i>string ipsec security-policy number</i>
Tree	<a href="#">security-policy</a>
Range	1 to 32768
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [*entry-id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure service vpn</b> <i>string ipsec security-policy number entry number</i>
Tree	<a href="#">entry</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[entry-id]** *number*

Synopsis	IPsec security policy entry ID
Context	<b>configure service vpn</b> <i>string ipsec security-policy number entry number</i>
Tree	<a href="#">entry</a>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## local-ip

Synopsis	Enter the <b>local-ip</b> context
Context	<b>configure service vpn string ipsec security-policy number entry number local-ip</b>
Tree	<b>local-ip</b>
Description	<p>Commands in this context configure the local (from the VPN) IPv4 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address string

Synopsis	Destination IPv4 address of the aggregate route
Context	<b>configure service vpn string ipsec security-policy number entry number local-ip address string</b>
Tree	<b>address</b>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## any boolean

Synopsis	Use any IP address
Context	<b>configure service vpn string ipsec security-policy number entry number local-ip any boolean</b>
Tree	<b>any</b>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## local-ipv6

Synopsis	Enter the <b>local-ipv6</b> context
Context	<b>configure service vpn string ipsec security-policy number entry number local-ipv6</b>
Tree	<b>local-ipv6</b>
Description	<p>Commands in this context configure the local (from the VPN) IPv6 prefix/mask for the policy entry.</p> <p>The system evaluates the local IP as the source IP when traffic is examined in the direction of the flows from private to public and as the destination IP when traffic flows from public to private.</p>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address *string*

Synopsis	Destination IPv6 address of the aggregate route
Context	<b>configure service vpn string ipsec security-policy number entry number local-ipv6 address string</b>
Tree	<b>address</b>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## any *boolean*

Synopsis	Use any IP address
Context	<b>configure service vpn string ipsec security-policy number entry number local-ipv6 any boolean</b>
Tree	<b>any</b>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## remote-ip

Synopsis	Enter the <b>remote-ip</b> context
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Context	<b>configure service vpn string ipsec security-policy number entry number remote-ip</b>
Tree	<b>remote-ip</b>
Description	Commands in this context configure the remote (from the tunnel) IP prefix/mask for the policy entry. The system evaluates the remote IP as the source IP when traffic flows public to private and as the destination IP when traffic flows from private to public.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address string**

Synopsis	Destination IPv4 address of the aggregate route
Context	<b>configure service vpn string ipsec security-policy number entry number remote-ip address string</b>
Tree	<b>address</b>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **any boolean**

Synopsis	Use any IP address
Context	<b>configure service vpn string ipsec security-policy number entry number remote-ip any boolean</b>
Tree	<b>any</b>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **remote-ipv6**

Synopsis	Enter the <b>remote-ipv6</b> context
Context	<b>configure service vpn string ipsec security-policy number entry number remote-ipv6</b>
Tree	<b>remote-ipv6</b>

Description	Commands in this context configure the remote (from the tunnel) IPv6 prefix/mask for the policy entry.  The system evaluates the remote IP as the source IP when traffic flows from public to private and as the destination IP when traffic flows from private to public.
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address string**

Synopsis	Destination IPv6 address of the aggregate route
Context	<b>configure service vprn string ipsec security-policy number entry number remote-ipv6 address string</b>
Tree	<b>address</b>
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **any boolean**

Synopsis	Use any IP address
Context	<b>configure service vprn string ipsec security-policy number entry number remote-ipv6 any boolean</b>
Tree	<b>any</b>
Default	false
Notes	The following elements are part of a choice: <b>address</b> or <b>any</b> .
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure service vprn string ipv6</b>
Tree	<b>ipv6</b>
Introduced	16.0.R1
Platforms	All

## neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure service vprn string ipv6 neighbor-discovery</b>
Tree	<a href="#">neighbor-discovery</a>
Introduced	16.0.R1
Platforms	All

## reachable-time *number*

Synopsis	Neighbor reachability detection timer
Context	<b>configure service vprn string ipv6 neighbor-discovery reachable-time number</b>
Tree	<a href="#">reachable-time</a>
Range	30 to 3600
Default	30
Introduced	16.0.R1
Platforms	All

## stale-time *number*

Synopsis	Neighbor discovery cache entry stale time
Context	<b>configure service vprn string ipv6 neighbor-discovery stale-time number</b>
Tree	<a href="#">stale-time</a>
Range	60 to 65535
Default	14400
Introduced	16.0.R1
Platforms	All

## router-advertisement

Synopsis	Enter the <b>router-advertisement</b> context
Context	<b>configure service vprn string ipv6 router-advertisement</b>
Tree	<a href="#">router-advertisement</a>
Introduced	16.0.R1
Platforms	All

## dns-options

Synopsis	Enable the <b>dns-options</b> context
Context	<b>configure service vprn string ipv6 router-advertisement dns-options</b>
Tree	<a href="#">dns-options</a>
Introduced	16.0.R1
Platforms	All

## rdnss-lifetime (*keyword | number*)

Synopsis	Maximum time over which the RDNSS address is valid
Context	<b>configure service vprn string ipv6 router-advertisement dns-options rdnss-lifetime (<i>keyword   number</i>)</b>
Tree	<a href="#">rdnss-lifetime</a>
Description	This command specifies the maximum time that the RDNSS address is used for name resolution by the client.
Range	0   4 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	All

## server *string*

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	<b>configure service vprn string ipv6 router-advertisement dns-options server <i>string</i></b>
Tree	<a href="#">server</a>
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**interface** [ip-int-name] *reference*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure service vprn string ipv6 router-advertisement interface reference</b>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[ip-int-name]** *reference*

Synopsis	VPRN interface name
Context	<b>configure service vprn string ipv6 router-advertisement interface reference</b>
Tree	<a href="#">interface</a>
Reference	<b>configure service vprn string interface string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of router advertisement
Context	<b>configure service vprn string ipv6 router-advertisement interface reference admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**current-hop-limit** *number*

Synopsis	Hop limit advertised in RA messages
Context	<b>configure service vprn string ipv6 router-advertisement interface reference current-hop-limit number</b>
Tree	<a href="#">current-hop-limit</a>
Range	0 to 255

Default	64
Introduced	16.0.R1
Platforms	All

## dns-options

Synopsis	Enable the <b>dns-options</b> context
Context	<b>configure service vprn string ipv6 router-advertisement interface reference dns-options</b>
Tree	<a href="#">dns-options</a>
Introduced	16.0.R1
Platforms	All

## include-rdnss *boolean*

Synopsis	Include the RDNSS option in the RA
Context	<b>configure service vprn string ipv6 router-advertisement interface reference dns-options include-rdnss boolean</b>
Tree	<a href="#">include-rdnss</a>
Default	true
Introduced	16.0.R1
Platforms	All

## rdnss-lifetime (*number | keyword*)

Synopsis	Maximum time over which the RDNSS address 25 is valid
Context	<b>configure service vprn string ipv6 router-advertisement interface reference dns-options rdnss-lifetime (number   keyword)</b>
Tree	<a href="#">rdnss-lifetime</a>
Range	0   4 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	All

**server string**

Synopsis	RAs that are forwarded to IPv6 DNS servers
Context	<b>configure service vprn string ipv6 router-advertisement interface reference dns-options server string</b>
Tree	<b>server</b>
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**managed-configuration boolean**

Synopsis	Set the managed address configuration flag
Context	<b>configure service vprn string ipv6 router-advertisement interface reference managed-configuration boolean</b>
Tree	<b>managed-configuration</b>
Default	false
Introduced	16.0.R1
Platforms	All

**max-advertisement-interval number**

Synopsis	Maximum time between sending advertisement messages
Context	<b>configure service vprn string ipv6 router-advertisement interface reference max-advertisement-interval number</b>
Tree	<b>max-advertisement-interval</b>
Range	4 to 1800
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

**min-advertisement-interval number**

Synopsis	Minimum interval between router advertisement messages
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Context	<b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>reference</i> <b>min-advertisement-interval</b> <i>number</i>
Tree	<b>min-advertisement-interval</b>
Range	3 to 1350
Units	seconds
Default	200
Introduced	16.0.R1
Platforms	All

### **mtu** *number*

Synopsis	MTU for sending packets to the router
Context	<b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>reference</i> <b>mtu</b> <i>number</i>
Tree	<b>mtu</b>
Range	1280 to 9800
Introduced	16.0.R1
Platforms	All

### **nd-router-preference** *keyword*

Synopsis	Default router preference for Router Advertisements
Context	<b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface</b> <i>reference</i> <b>nd-router-preference</b> <i>keyword</i>
Tree	<b>nd-router-preference</b>
Description	<p>This command configures the default router preference for Router Advertisements (RAs) and allows IPv6 hosts to discover and select a default gateway address by listening to RAs.</p> <p>This feature provides basic traffic engineering functionality for host devices. When this command is applied, the router advertises the respective router preference to the connected host to assist in its selection of the most appropriate default gateway on a link.</p> <p>This extension is backward compatible, both for routers (setting the router preference bits) and hosts (interpreting the router preference bits). These bits are ignored by hosts that do not implement the RFC 4191 functionality by configuring this command. Similarly, hosts that do not implement the RFC 4191 functionality interpret the values sent by devices that do not implement the RFC 4191 extension as a medium preference.</p>
Options	medium, high, low
Default	medium

Introduced	23.10.R1
Platforms	All

### **other-stateful-configuration** *boolean*

Synopsis	Set the other configuration flag
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>reference</i> <a href="#">other-stateful-configuration</a> <i>boolean</i>
Tree	<a href="#">other-stateful-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **prefix** [[ipv6-prefix](#)] *string*

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>reference</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Max. Instances	254
Introduced	16.0.R1
Platforms	All

### **[ipv6-prefix]** *string*

Synopsis	IPv6 address prefix
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement</a> <a href="#">interface</a> <i>reference</i> <a href="#">prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **autonomous** *boolean*

Synopsis	Set the autonomous flag value
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Context	<b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface reference prefix</b> <i>string</i> <b>autonomous</b> <i>boolean</i>
Tree	<b>autonomous</b>
Default	true
Introduced	16.0.R1
Platforms	All

**on-link** *boolean*

Synopsis	Use prefix for on-link determination
Context	<b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface reference prefix</b> <i>string</i> <b>on-link</b> <i>boolean</i>
Tree	<b>on-link</b>
Default	true
Introduced	16.0.R1
Platforms	All

**preferred-lifetime** (*keyword* | *number*)

Synopsis	Remaining time that the prefix remains preferred
Context	<b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface reference prefix</b> <i>string</i> <b>preferred-lifetime</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>preferred-lifetime</b>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	604800
Introduced	16.0.R1
Platforms	All

**valid-lifetime** (*keyword* | *number*)

Synopsis	Remaining time in which the prefix is still valid
Context	<b>configure service vprn</b> <i>string</i> <b>ipv6 router-advertisement interface reference prefix</b> <i>string</i> <b>valid-lifetime</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>valid-lifetime</b>

Range	0 to 4294967294
Units	seconds
Options	infinite
Default	2592000
Introduced	16.0.R1
Platforms	All

### **reachable-time** *number*

Synopsis	Time the router is reachable by other hosts or nodes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> <a href="#">reachable-time</a> <i>number</i>
Tree	<a href="#">reachable-time</a>
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All

### **retransmit-time** *number*

Synopsis	Time to advertise neighbor advertisement messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> <a href="#">retransmit-time</a> <i>number</i>
Tree	<a href="#">retransmit-time</a>
Range	0 to 1800000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	All

### **router-lifetime** *number*

Synopsis	Lifetime value in neighbor advertisement messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> <a href="#">router-lifetime</a> <i>number</i>

Tree	<a href="#">router-lifetime</a>
Range	0   4 to 9000
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	All

### **use-virtual-mac** *boolean*

Synopsis	Use VRRP virtual MAC address for advertisement message
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ipv6 router-advertisement interface</a> <i>reference</i> <a href="#">use-virtual-mac</a> <i>boolean</i>
Tree	<a href="#">use-virtual-mac</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **isis** [[isis-instance](#)] *number*

Synopsis	Enter the <b>isis</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i>
Tree	<a href="#">isis</a>
Introduced	16.0.R1
Platforms	All

### **[isis-instance]** *number*

Synopsis	Instance ID for the IS-IS instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i>
Tree	<a href="#">isis</a>
Range	0 to 127
MD-CLI	0
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the IS-IS instance  
 Context **configure service vprn** *string isis number admin-state keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

### **advertise-passive-only** *boolean*

Synopsis Advertise prefixes that belong to passive interfaces  
 Context **configure service vprn** *string isis number advertise-passive-only boolean*  
 Tree [advertise-passive-only](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **advertise-router-capability** *keyword*

Synopsis Router capabilities advertisement to neighbors  
 Context **configure service vprn** *string isis number advertise-router-capability keyword*  
 Tree [advertise-router-capability](#)  
 Options area, as  
 Introduced 16.0.R1  
 Platforms All

### **all-l1isis** *string*

Synopsis Destination MAC address for all L1 IS-IS routers  
 Context **configure service vprn** *string isis number all-l1isis string*  
 Tree [all-l1isis](#)

Default	01:80:C2:00:00:14
Introduced	16.0.R1
Platforms	All

**all-l2isis** *string*

Synopsis	Destination MAC address for all L2 IS-IS routers
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">all-l2isis</a> <i>string</i>
Tree	<a href="#">all-l2isis</a>
Default	01:80:C2:00:00:15
Introduced	16.0.R1
Platforms	All

**area-address** *string*

Synopsis	Area address portion of the NSAP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">area-address</a> <i>string</i>
Tree	<a href="#">area-address</a>
String Length	2 to 38
Max. Instances	3
Introduced	16.0.R1
Platforms	All

**authentication-check** *boolean*

Synopsis	Perform authentication check to reject mismatch PDUs
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">authentication-check</a> <i>boolean</i>
Tree	<a href="#">authentication-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

**authentication-key** *string*

Synopsis	Authentication key to verify PDUs sent from neighbors
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Context	<b>configure service vprn</b> <i>string isis number authentication-key string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	Keychain used to sign and authenticate
Context	<b>configure service vprn</b> <i>string isis number authentication-keychain reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure system security keychains keychain</b> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type
Context	<b>configure service vprn</b> <i>string isis number authentication-type keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

### **csnp-authentication** *boolean*

Synopsis	Authenticate individual IS-IS packets of the CSNP type
Context	<b>configure service vprn</b> <i>string isis number csnp-authentication boolean</i>
Tree	<a href="#">csnp-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All



### **default-route-tag** *number*

Synopsis	Route tag for the default route
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number default-route-tag number</i>
Tree	<a href="#">default-route-tag</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number export-limit</i>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R1
Platforms	All

### **log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number export-limit log-percent number</i>
Tree	<a href="#">log-percent</a>
Range	1 to 100
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number export-limit number number</i>
Tree	<a href="#">number</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**export-policy** *reference*

Synopsis	Export policies that determine exported routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the <b>aggregate</b> command is also configured in the <b>configure router</b> context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the <b>configure router policy-options</b> context.</p>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

**helper-mode** *boolean*

Synopsis	Enable the Graceful Restart helper for IS-IS
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">helper-mode</a> <i>boolean</i>
Tree	<a href="#">helper-mode</a>
Default	true
Introduced	16.0.R1

Platforms All

### **hello-authentication** *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets  
Context **configure service vpn** *string isis number hello-authentication boolean*  
Tree [hello-authentication](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **hello-padding** *keyword*

Synopsis IS-IS Hello message padding  
Context **configure service vpn** *string isis number hello-padding keyword*  
Tree [hello-padding](#)  
Options adaptive, loose, strict, none  
Introduced 16.0.R1  
Platforms All

### **ignore-attached-bit** *boolean*

Synopsis Ignore attached bit on received Layer 1 LSPs  
Context **configure service vpn** *string isis number ignore-attached-bit boolean*  
Tree [ignore-attached-bit](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ignore-lsp-errors** *boolean*

Synopsis Ignore LSP packets with errors  
Context **configure service vpn** *string isis number ignore-lsp-errors boolean*  
Tree [ignore-lsp-errors](#)  
Default false

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Introduced	16.0.R1
Platforms	All

### **ignore-narrow-metric** *boolean*

Synopsis	Ignore links with narrow metrics
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <b>ignore-narrow-metric</b> <i>boolean</i>
Tree	<a href="#">ignore-narrow-metric</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **iid-tlv** *boolean*

Synopsis	Use IID TLVs with IS-IS multi-instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <b>iid-tlv</b> <i>boolean</i>
Tree	<a href="#">iid-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis number</a> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**interface** [*interface-name*] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure service vprn string isis number interface string</b>
Tree	<b>interface</b>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure service vprn string isis number interface string</b>
Tree	<b>interface</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the IS-IS interface
Context	<b>configure service vprn string isis number interface string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**bfd-liveness**

Synopsis	Enter the <b>bfd-liveness</b> context
Context	<b>configure service vprn string isis number interface string bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Description	Commands in this context enable the use of bidirectional forwarding (BFD) to control IPv4 and IPv6 adjacencies. Enabling BFD on an IPv4 or IPv6 protocol interface ties the protocol interface state to the BFD session state between the local and remote nodes. BFD must be enabled on the applicable IP interface.

Introduced	16.0.R1
Platforms	All

## ipv4

Synopsis	Enable the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv4</a> <a href="#">include-bfd-tlv</a> <i>boolean</i>
Tree	<a href="#">include-bfd-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

## include-bfd-tlv *boolean*

Synopsis	Enable IS-IS BFD TLVs on the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">ipv6</a> <a href="#">include-bfd-tlv</a> <i>boolean</i>
Tree	<a href="#">include-bfd-tlv</a>
Default	false

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Introduced	16.0.R1
Platforms	All

### **csnp-interval** *number*

Synopsis	Time interval between successive CSN PDUs sent
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>csnp-interval</b> <i>number</i>
Tree	<a href="#">csnp-interval</a>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **default-instance** *boolean*

Synopsis	Allow non-MI capable router to establish an adjacency
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>default-instance</b> <i>boolean</i>
Tree	<a href="#">default-instance</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **hello-authentication** *boolean*

Synopsis	Authenticate Hello type IS-IS protocol packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>hello-authentication</b> <i>boolean</i>
Tree	<a href="#">hello-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **hello-authentication-key** *string*

Synopsis	Authentication key or hash string for Hello PDUs
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Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">hello-authentication-key</a> <i>string</i>
Tree	<a href="#">hello-authentication-key</a>
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

### **hello-authentication-keychain** *reference*

Synopsis	Authentication keychain to use for the session
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">hello-authentication-keychain</a> <i>reference</i>
Tree	<a href="#">hello-authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **hello-authentication-type** *keyword*

Synopsis	Hello authentication type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">hello-authentication-type</a> <i>keyword</i>
Tree	<a href="#">hello-authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

### **hello-padding** *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">hello-padding</a> <i>keyword</i>
Tree	<a href="#">hello-padding</a>
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All



**interface-type** *keyword*

Synopsis	Interface type to broadcast, point-to-point, or to be default
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">interface-type</a> <i>keyword</i>
Tree	<a href="#">interface-type</a>
Options	point-to-point, broadcast
Introduced	16.0.R1
Platforms	All

**ipv4-multicast** *boolean*

Synopsis	Enable IPv4 multicast routing for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv4-multicast</a> <i>boolean</i>
Tree	<a href="#">ipv4-multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

**ipv6-unicast** *boolean*

Synopsis	Enable IPv6 unicast routing for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">ipv6-unicast</a> <i>boolean</i>
Tree	<a href="#">ipv6-unicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

**level** [[level-number](#)] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

**[level-number] keyword**

Synopsis	ISIS protocol level number
Context	<b>configure service vprn string isis number interface string level keyword</b>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**hello-authentication-key string**

Synopsis	Authentication key for Hello PDUs
Context	<b>configure service vprn string isis number interface string level keyword hello-authentication-key string</b>
Tree	<a href="#">hello-authentication-key</a>
Description	<p>This command configures the authentication key (password) for Hello PDUs. Both the Hello authentication key and the Hello authentication type on a segment must match.</p> <p>If both IS-IS and Hello authentication are configured, Hello messages are validated using Hello authentication. If only IS-IS authentication is configured, it is used to authenticate all IS-IS (including Hello) protocol PDUs.</p>
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

**hello-authentication-keychain reference**

Synopsis	Authentication keychain to use for the session
Context	<b>configure service vprn string isis number interface string level keyword hello-authentication-keychain reference</b>
Tree	<a href="#">hello-authentication-keychain</a>
Reference	<b>configure system security keychains keychain string</b>
Introduced	16.0.R3
Platforms	All

**hello-authentication-type** *keyword*

Synopsis	Hello authentication enabled on the context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <b>hello-authentication-type</b> <i>keyword</i>
Tree	<a href="#">hello-authentication-type</a>
Description	This command enables Hello authentication at the level context. Both the Hello authentication key and the Hello authentication type on a segment must match. The Hello <b>authentication-key</b> statement must also be included.
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

**hello-interval** *number*

Synopsis	Interval between Hello messages sent on this level
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <b>hello-interval</b> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	1 to 20000
Units	seconds
Default	9
Introduced	16.0.R1
Platforms	All

**hello-multiplier** *number*

Synopsis	Hello messages missed from neighbor before router declares adjacency down
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <b>hello-multiplier</b> <i>number</i>
Tree	<a href="#">hello-multiplier</a>
Range	2 to 100
Default	3
Introduced	16.0.R1
Platforms	All

### hello-padding *keyword*

Synopsis	Padding on IS-IS Hello packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <b>hello-padding</b> <i>keyword</i>
Tree	<a href="#">hello-padding</a>
Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

### ipv4-multicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv4 multicast
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <b>ipv4-multicast-metric</b> <i>number</i>
Tree	<a href="#">ipv4-multicast-metric</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### ipv6-unicast-metric *number*

Synopsis	IS-IS interface metric applied for IPv6 unicast
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <b>ipv6-unicast-metric</b> <i>number</i>
Tree	<a href="#">ipv6-unicast-metric</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### metric *number*

Synopsis	IS-IS interface metric applied for IPv4 unicast
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <b>metric</b> <i>number</i>
Tree	<a href="#">metric</a>
Range	1 to 16777215
Introduced	16.0.R1

Platforms All

### **passive** *boolean*

Synopsis Passive interface  
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [passive](#) *boolean*  
 Tree [passive](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **priority** *number*

Synopsis Router to become the designated router on a multi-access network  
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [priority](#) *number*  
 Tree [priority](#)  
 Range 0 to 127  
 Default 64  
 Introduced 16.0.R1  
 Platforms All

### **sd-offset** *number*

Synopsis Value of the signal degrade offset  
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [sd-offset](#) *number*  
 Tree [sd-offset](#)  
 Range 1 to 16777215  
 Introduced 16.0.R1  
 Platforms All

### **sf-offset** *number*

Synopsis Value of the signal fail offset  
 Context **configure** [service](#) [vprn](#) *string* [isis](#) *number* [interface](#) *string* [level](#) *keyword* [sf-offset](#) *number*  
 Tree [sf-offset](#)

Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **level-capability** *keyword*

Synopsis	IS-IS levels for this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>level-capability</b> <i>keyword</i>
Tree	<a href="#">level-capability</a>
Options	1, 2, 1/2
Default	1/2
Introduced	16.0.R1
Platforms	All

### **load-balancing-weight** *number*

Synopsis	Load balancing weight
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>load-balancing-weight</b> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>
Max. Range	0 to 4294967295
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate**

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R3
Platforms	All

### **exclude** *boolean*

Synopsis	Enable/disable Loopfree Alternative at interface level.
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>loopfree-alternate</b> <b>exclude</b> <i>boolean</i>

Tree	<a href="#">exclude</a>
Default	false
Introduced	16.0.R3
Platforms	All

## policy-map

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a>
Tree	<a href="#">policy-map</a>
Introduced	16.0.R3
Platforms	All

## route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a> <a href="#">route-nh-template</a> <i>reference</i>
Tree	<a href="#">route-nh-template</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <i>template</i> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

## lsp-pacing-interval *number*

Synopsis	Interval for sending LSPs from interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <a href="#">lsp-pacing-interval</a> <i>number</i>
Tree	<a href="#">lsp-pacing-interval</a>
Range	0 to 65535
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

## mesh-group

Synopsis	Enable the <b>mesh-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>mesh-group</b>
Tree	<a href="#">mesh-group</a>
Introduced	16.0.R1
Platforms	All

## blocked

Synopsis	Prevent the interface from flooding LSPs
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>mesh-group</b> <b>blocked</b>
Tree	<a href="#">blocked</a>
Notes	The following elements are part of a choice: <b>blocked</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

## value *number*

Synopsis	Mesh group for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>mesh-group</b> <b>value</b> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 2000000000
Notes	The following elements are part of a choice: <b>blocked</b> or <b>value</b> .
Introduced	16.0.R1
Platforms	All

## passive *boolean*

Synopsis	Passive interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>passive</b> <i>boolean</i>
Tree	<a href="#">passive</a>
Default	false
Introduced	16.0.R1
Platforms	All



**retransmit-interval** *number*

Synopsis	Minimum time between LSP PDU retransmissions on point-to-point interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>retransmit-interval</b> <i>number</i>
Tree	<a href="#">retransmit-interval</a>
Range	1 to 65535
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

**tag** *number*

Synopsis	Route tag for IP address of interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i> <b>tag</b> <i>number</i>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**ipv4-multicast-routing** *keyword*

Synopsis	IS-IS topology for IPv4 multicast routing
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>ipv4-multicast-routing</b> <i>keyword</i>
Tree	<a href="#">ipv4-multicast-routing</a>
Options	false, native, mt
Default	native
Introduced	16.0.R1
Platforms	All

**ipv4-routing** *boolean*

Synopsis	Support IPv4 routing for IS-IS instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>ipv4-routing</b> <i>boolean</i>
Tree	<a href="#">ipv4-routing</a>

---

Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6-routing** *keyword*

Synopsis	Routing topology for IPv6
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>ipv6-routing</b> <i>keyword</i>
Tree	<a href="#">ipv6-routing</a>
Options	false, native, mt
Default	false
Introduced	16.0.R1
Platforms	All

### **level** [[level-number](#)] *keyword*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>level</b> <i>keyword</i>
Tree	<a href="#">level</a>
Max. Instances	2
Introduced	16.0.R1
Platforms	All

### **[level-number]** *keyword*

Synopsis	ISIS protocol level number
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>level</b> <i>keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number level</i> <i>keyword</i> <a href="#">advertise-router-capability</a> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

**authentication-key** *string*

Synopsis	Authentication key to verify PDUs sent on the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number level</i> <i>keyword</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command sets the authentication key used to verify PDUs sent by neighboring routers on the interface.  Neighboring routers use passwords to authenticate PDUs sent from an interface. For authentication to work, both the authentication key and the authentication type on a segment must match. The <b>authentication-type</b> command must also be included.
String Length	1 to 366
Introduced	16.0.R1
Platforms	All

**authentication-keychain** *reference*

Synopsis	Keychain used to sign and authenticate
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number level</i> <i>keyword</i> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system security keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

**authentication-type** *keyword*

Synopsis	Authentication type to be used
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Context	<b>configure service vprn</b> <i>string isis number level keyword authentication-type keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

### **csnp-authentication** *boolean*

Synopsis	Enable authentication of CSNP IS-IS protocol packets
Context	<b>configure service vprn</b> <i>string isis number level keyword csnp-authentication boolean</i>
Tree	<a href="#">csnp-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **default-ipv4-multicast-metric** *number*

Synopsis	Default metric for IPv4 unicast
Context	<b>configure service vprn</b> <i>string isis number level keyword default-ipv4-multicast-metric number</i>
Tree	<a href="#">default-ipv4-multicast-metric</a>
Range	1 to 16777215
Default	10
Introduced	16.0.R1
Platforms	All

### **default-ipv6-unicast-metric** *number*

Synopsis	Default metric for IPv6 unicast
Context	<b>configure service vprn</b> <i>string isis number level keyword default-ipv6-unicast-metric number</i>
Tree	<a href="#">default-ipv6-unicast-metric</a>
Range	1 to 16777215
Default	10
Introduced	16.0.R1

Platforms All

### **default-metric** *number*

Synopsis Default metric  
 Context **configure** [service vprn](#) *string* [isis](#) *number* [level](#) *keyword* [default-metric](#) *number*  
 Tree [default-metric](#)  
 Range 1 to 16777215  
 Default 10  
 Introduced 16.0.R1  
 Platforms All

### **external-preference** *number*

Synopsis External route preference for IS-IS level  
 Context **configure** [service vprn](#) *string* [isis](#) *number* [level](#) *keyword* [external-preference](#) *number*  
 Tree [external-preference](#)  
 Range 1 to 255  
 Introduced 16.0.R1  
 Platforms All

### **hello-authentication** *boolean*

Synopsis Authenticate Hello type IS-IS protocol packets  
 Context **configure** [service vprn](#) *string* [isis](#) *number* [level](#) *keyword* [hello-authentication](#) *boolean*  
 Tree [hello-authentication](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **hello-padding** *keyword*

Synopsis Padding on IS-IS Hello packets  
 Context **configure** [service vprn](#) *string* [isis](#) *number* [level](#) *keyword* [hello-padding](#) *keyword*  
 Tree [hello-padding](#)

Options	adaptive, loose, strict, none
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interface participating in specific IS-IS level in SPF LFA computation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">loopfree-alternate-exclude</a> <i>boolean</i>
Tree	<a href="#">loopfree-alternate-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **lsp-mtu-size** *number*



**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">lsp-mtu-size</a> <i>number</i>
Tree	<a href="#">lsp-mtu-size</a>
Range	490 to 9778
Units	bytes
Default	1492
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	External route preference at level
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">level</a> <i>keyword</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R1

Platforms All

### **psnp-authentication** *boolean*

Synopsis Enable authentication on PSNP IS-IS protocol packets  
Context **configure service vprn** *string isis number level* keyword **psnp-authentication** *boolean*  
Tree [psnp-authentication](#)  
Default true  
Introduced 16.0.R1  
Platforms All

### **wide-metrics-only** *boolean*

Synopsis Use wide metrics advertisements in the LSPs  
Context **configure service vprn** *string isis number level* keyword **wide-metrics-only** *boolean*  
Tree [wide-metrics-only](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **level-capability** *keyword*

Synopsis Routing level for instance  
Context **configure service vprn** *string isis number* **level-capability** *keyword*  
Tree [level-capability](#)  
Options 1, 2, 1/2  
Default 1/2  
Introduced 16.0.R1  
Platforms All

### **link-group** [[link-group-name](#)] *string*

Synopsis Enter the **link-group** list instance  
Context **configure service vprn** *string isis number* **link-group** *string*  
Tree [link-group](#)

Introduced 16.0.R1  
 Platforms All

### **[link-group-name]** *string*

Synopsis Link group name for the IS-IS protocol  
 Context **configure service vprn** *string isis number link-group string*  
 Tree [link-group](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure service vprn** *string isis number link-group string description string*  
 Tree [description](#)  
 String Length 1 to 255  
 Introduced 16.0.R1  
 Platforms All

### **level** [[level-number](#)] *keyword*

Synopsis Enter the **level** list instance  
 Context **configure service vprn** *string isis number link-group string level keyword*  
 Tree [level](#)  
 Max. Instances 2  
 Introduced 16.0.R1  
 Platforms All

### **[level-number]** *keyword*

Synopsis ISIS protocol level number



Context	<b>configure service vprn</b> <i>string isis number link-group string level keyword</i>
Tree	<a href="#">level</a>
Options	1, 2
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **ipv4-multicast-metric-offset** *number*

Synopsis	Offset value for the IPv4 multicast address family
Context	<b>configure service vprn</b> <i>string isis number link-group string level keyword ipv4-multicast-metric-offset number</i>
Tree	<a href="#">ipv4-multicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **ipv4-unicast-metric-offset** *number*

Synopsis	Offset value for the IPv4 unicast address family
Context	<b>configure service vprn</b> <i>string isis number link-group string level keyword ipv4-unicast-metric-offset number</i>
Tree	<a href="#">ipv4-unicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

### **ipv6-unicast-metric-offset** *number*

Synopsis	Offset value for the IPv6 unicast address family
Context	<b>configure service vprn</b> <i>string isis number link-group string level keyword ipv6-unicast-metric-offset number</i>
Tree	<a href="#">ipv6-unicast-metric-offset</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	All

**member** [[interface-name](#)] *reference*

Synopsis	Add a list entry for <b>member</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">member</a> <i>reference</i>
Tree	<a href="#">member</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

**[interface-name]** *reference*

Synopsis	Interface name for the associated link group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">member</a> <i>reference</i>
Tree	<a href="#">member</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**oper-members** *number*

Synopsis	Minimum number of operational links
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">link-group</a> <i>string</i> <a href="#">level</a> <i>keyword</i> <a href="#">oper-members</a> <i>number</i>
Tree	<a href="#">oper-members</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

**revert-members** *number*

Synopsis	Minimum number of operational links to return link group to normal state and remove offsets
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Context	<b>configure service vprn</b> <i>string isis number link-group string level keyword revert-members number</i>
Tree	<a href="#">revert-members</a>
Range	1 to 8
Introduced	16.0.R1
Platforms	All

## loopfree-alternate

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure service vprn</b> <i>string isis number loopfree-alternate</i>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R1
Platforms	All

## exclude

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure service vprn</b> <i>string isis number loopfree-alternate exclude</i>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3
Platforms	All

## prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure service vprn</b> <i>string isis number loopfree-alternate exclude prefix-policy reference</i>
Tree	<a href="#">prefix-policy</a>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

### **Isp-lifetime** *number*



**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	Amount of time during which an LSP is considered valid
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>Isp-lifetime</b> <i>number</i>
Tree	<a href="#">Isp-lifetime</a>
Range	350 to 65535
Units	seconds
Default	1200
Introduced	16.0.R1
Platforms	All

### **Isp-minimum-remaining-lifetime** *number*

Synopsis	Minimum value for the Remaining Lifetime of an LSP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>Isp-minimum-remaining-lifetime</b> <i>number</i>
Tree	<a href="#">Isp-minimum-remaining-lifetime</a>
Range	350 to 65535
Units	seconds
Introduced	19.7.R1
Platforms	All

### **Isp-mtu-size** *number*



**WARNING:**

Modifying this element requires the **admin-state** of the parent element to be toggled manually for the new value to take effect.

Synopsis	LSP MTU size
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>Isp-mtu-size</b> <i>number</i>

Tree	<a href="#">lsp-mtu-size</a>
Range	490 to 9778
Units	bytes
Default	1492
Introduced	16.0.R1
Platforms	All

## **lsp-refresh**

Synopsis	Enter the <b>lsp-refresh</b> context
Context	<b>configure</b> <a href="#">service vprn string isis number lsp-refresh</a>
Tree	<a href="#">lsp-refresh</a>
Introduced	16.0.R1
Platforms	All

## **half-lifetime** *boolean*

Synopsis	Set the refresh interval to always be half the LSP lifetime
Context	<b>configure</b> <a href="#">service vprn string isis number lsp-refresh half-lifetime boolean</a>
Tree	<a href="#">half-lifetime</a>
Default	true
Introduced	16.0.R1
Platforms	All

## **interval** *number*

Synopsis	Refresh timer interval
Context	<b>configure</b> <a href="#">service vprn string isis number lsp-refresh interval number</a>
Tree	<a href="#">interval</a>
Range	150 to 65535
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

**mru-mismatch-detection** *boolean*

Synopsis	Enable detection of MRU mismatch
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">mru-mismatch-detection</a> <i>boolean</i>
Tree	<a href="#">mru-mismatch-detection</a>
Description	<p>When configured to <b>true</b>, this command verifies that the received IS-IS Hello (IIH) packet size does not exceed the configured maximum port MTU size. The received IIH packet is dropped when its size exceeds the maximum port MTU size.</p> <p>When configured to <b>false</b>, the IS-IS router instance will not drop oversized IIH packets.</p> <p>By default, FP-based hardware can receive oversized packets but it will not originate them.</p>
Default	false
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**multi-topology**

Synopsis	Enable the <b>multi-topology</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">multi-topology</a>
Tree	<a href="#">multi-topology</a>
Introduced	16.0.R1
Platforms	All

**ipv4-multicast** *boolean*

Synopsis	Support IPv4 topology (MT3)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">multi-topology</a> <a href="#">ipv4-multicast</a> <i>boolean</i>
Tree	<a href="#">ipv4-multicast</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6-unicast** *boolean*

Synopsis	Support multi-topology TLVs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">multi-topology</a> <a href="#">ipv6-unicast</a> <i>boolean</i>

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Tree	<a href="#">ipv6-unicast</a>
Default	false
Introduced	16.0.R1
Platforms	All

## multicast-import

Synopsis	Enter the <b>multicast-import</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number</i> <a href="#">multicast-import</a>
Tree	<a href="#">multicast-import</a>
Introduced	16.0.R1
Platforms	All

## ipv4 boolean

Synopsis	Submit IPv4 routes into the multicast RPF of the RTM
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number</i> <a href="#">multicast-import</a> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

## overload

Synopsis	Enable the <b>overload</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number</i> <a href="#">overload</a>
Tree	<a href="#">overload</a>
Introduced	16.0.R1
Platforms	All

## max-metric boolean

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	<b>configure</b> <a href="#">service vprn</a> <i>string isis number</i> <a href="#">overload</a> <a href="#">max-metric</a> <i>boolean</i>
Tree	<a href="#">max-metric</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **overload-export-external** *boolean*

Synopsis	Advertise the external routes when router is in overloaded
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>overload-export-external</b> <i>boolean</i>
Tree	<a href="#">overload-export-external</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-export-interlevel** *boolean*

Synopsis	Advertise the inter-level routes when router is overloaded
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>overload-export-interlevel</b> <i>boolean</i>
Tree	<a href="#">overload-export-interlevel</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-fib-error-notify-only**

Synopsis	Enable the <b>overload-fib-error-notify-only</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <b>overload-fib-error-notify-only</b>
Tree	<a href="#">overload-fib-error-notify-only</a>
Description	<p>Commands in this context configure the IS-IS router to send a notification when an overload condition occurs while programming the FIB, instead of advertising the overload condition of the router in the IS-IS LSP.</p> <p><b>Note:</b> Nokia recommends being careful using this command. When you configure the router not to advertise the IS-IS overload state in the IS-IS LSP, other routers are not instructed to take the overloaded router out of the IS-IS forwarding topology and this will cause suboptimal forwarding and non-deterministic behavior on the overloaded router. To avoid changing the default IS-IS overflow behavior, leave this command disabled.</p> <p>When this command is configured, the IS-IS router enters a suboptimal state where it sends only a notification trap; transit traffic can still use the router in this state.</p>



The IS-IS router tracks the segment routing prefix SIDs where FIB programming failed. With the **retry** command configured, the router retries programming the segment routing prefix SIDs in the FIB using this tracked information.

When this command is not configured, during normal operation, the system may force the router to enter an overload state because of a lack of FIB resources. In this state, the router is used to terminate traffic and is not used to transit traffic.

Introduced	23.7.R1
Platforms	All

### **retry** *number*

Synopsis	Time to retry programming failed entries in the FIB
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">overload-fib-error-notify-only</a> <b>retry</b> <i>number</i>
Tree	<a href="#">retry</a>
Description	This command configures the time the router uses to retry programming the failed entries in the FIB.  The <b>overload-fib-error-notify-only</b> command must be configured to use the retry timer. The removal of the <b>overload-fib-error-notify-only</b> configuration causes the system to program the failed entries in the FIB by triggering an immediate SPF.
Range	10 to 1800
Units	seconds
Default	10
Introduced	23.7.R1
Platforms	All

### **overload-on-boot**

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">overload-on-boot</a>
Tree	<a href="#">overload-on-boot</a>
Introduced	16.0.R1
Platforms	All

### **max-metric** *boolean*

Synopsis	Advertise transit links with maximum metric instead of setting overload bit
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">overload-on-boot</a> <b>max-metric</b> <i>boolean</i>

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Tree	<a href="#">max-metric</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Time during which the router operates in overload state after reboot
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">overload-on-boot</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

### **poi-tlv** *boolean*

Synopsis	Purge Originator Identification TLV
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">poi-tlv</a> <i>boolean</i>
Tree	<a href="#">poi-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **prefix-attributes-tlv** *boolean*

Synopsis	Use IS-IS Prefix Attributes TLV to exchange extended IPv4 and IPv6 reachability information
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">prefix-attributes-tlv</a> <i>boolean</i>
Tree	<a href="#">prefix-attributes-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	All

**prefix-limit**

Synopsis	Enable the <b>prefix-limit</b> context
Context	<b>configure service vprn string isis number prefix-limit</b>
Tree	<a href="#">prefix-limit</a>
Introduced	16.0.R1
Platforms	All

**limit number**

Synopsis	Maximum number of prefixes for IS-IS instance
Context	<b>configure service vprn string isis number prefix-limit limit number</b>
Tree	<a href="#">limit</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**log-only boolean**

Synopsis	Send warning message when the prefix limit is reached
Context	<b>configure service vprn string isis number prefix-limit log-only boolean</b>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-timeout (number | keyword)**

Synopsis	Time in overload state when prefix limit is reached
Context	<b>configure service vprn string isis number prefix-limit overload-timeout (number   keyword)</b>
Tree	<a href="#">overload-timeout</a>
Range	1 to 1800
Units	seconds
Options	forever

Default	forever
Introduced	16.0.R1
Platforms	All

### **warning-threshold** *number*

Synopsis	Threshold value to trigger a warning message to be sent
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">prefix-limit</a> <a href="#">warning-threshold</a> <i>number</i>
Tree	<a href="#">warning-threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **psnp-authentication** *boolean*

Synopsis	Authenticate individual IS-IS protocol packets of partial sequence number PDU (PSNP) type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">psnp-authentication</a> <i>boolean</i>
Tree	<a href="#">psnp-authentication</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **reference-bandwidth** *number*

Synopsis	Reference bandwidth for bandwidth relative costing
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">reference-bandwidth</a> <i>number</i>
Tree	<a href="#">reference-bandwidth</a>
Range	1 to 18446744073709551615
Units	kilobps
Introduced	16.0.R1
Platforms	All

## rib-priority

Synopsis	Enter the <b>rib-priority</b> context
Context	<b>configure</b> <a href="#">service vprn string isis number rib-priority</a>
Tree	<a href="#">rib-priority</a>
Introduced	16.0.R1
Platforms	All

## high

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> <a href="#">service vprn string isis number rib-priority high</a>
Tree	<a href="#">high</a>
Introduced	16.0.R1
Platforms	All

## prefix-list *reference*

Synopsis	List used to select routes processed at higher priority through OSPF route calculation process
Context	<b>configure</b> <a href="#">service vprn string isis number rib-priority high prefix-list reference</a>
Tree	<a href="#">prefix-list</a>
Reference	<b>configure</b> <a href="#">policy-options prefix-list string</a>
Notes	The following elements are part of a choice: <b>prefix-list</b> or <b>tag</b> .
Introduced	16.0.R1
Platforms	All

## tag *number*

Synopsis	Tag value that is used to match IS-IS routes
Context	<b>configure</b> <a href="#">service vprn string isis number rib-priority high tag number</a>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>prefix-list</b> or <b>tag</b> .
Introduced	16.0.R1
Platforms	All

**router-id** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the ISIS instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">router-id</a> <i>string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

**standard-multi-instance** *boolean*

Synopsis	Enable RFC standards compliant multi-instance behavior
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">standard-multi-instance</a> <i>boolean</i>
Tree	<a href="#">standard-multi-instance</a>
Default	false
Introduced	16.0.R1
Platforms	All

**strict-adjacency-check** *boolean*

Synopsis	Enable strict checking of address families for IS-IS adjacencies
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">strict-adjacency-check</a> <i>boolean</i>
Tree	<a href="#">strict-adjacency-check</a>
Default	false
Introduced	16.0.R1
Platforms	All

**summary-address** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>summary-address</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">summary-address</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">summary-address</a>
Introduced	16.0.R1

Platforms All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix for the summary address

Context **configure service vprn** *string isis number summary-address* (*ipv4-prefix* | *ipv6-prefix*)

Tree [summary-address](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **level-capability** *keyword*

Synopsis IS-IS level for the summary address

Context **configure service vprn** *string isis number summary-address* (*ipv4-prefix* | *ipv6-prefix*)  
[level-capability](#) *keyword*

Tree [level-capability](#)

Options 1, 2, 1/2

Default 1/2

Introduced 16.0.R1

Platforms All

### **route-tag** *number*

Synopsis Route tag assigned to the summary address

Context **configure service vprn** *string isis number summary-address* (*ipv4-prefix* | *ipv6-prefix*)  
[route-tag](#) *number*

Tree [route-tag](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **suppress-attached-bit** *boolean*

Synopsis Allow IS-IS to suppress setting attached bit on LSPs

Context **configure service vprn** *string isis number suppress-attached-bit* *boolean*

Tree	<a href="#">suppress-attached-bit</a>
Default	false
Introduced	16.0.R1
Platforms	All

## system-id *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">system-id</a> <i>string</i>
Tree	<a href="#">system-id</a>
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

## timers

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

## lsp-wait

Synopsis	Enter the <b>lsp-wait</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a>
Tree	<a href="#">lsp-wait</a>
Introduced	16.0.R1
Platforms	All



**lsp-initial-wait** *number*

Synopsis	Initial LSP generation delay
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-initial-wait</a> <i>number</i>
Tree	<a href="#">lsp-initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	10
Introduced	16.0.R1
Platforms	All

**lsp-max-wait** *number*

Synopsis	Maximum time between two consecutive LSP occurrences
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-max-wait</a> <i>number</i>
Tree	<a href="#">lsp-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

**lsp-second-wait** *number*

Synopsis	Delay between first and second LSP generation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">isis</a> <i>number</i> <a href="#">timers</a> <a href="#">lsp-wait</a> <a href="#">lsp-second-wait</a> <i>number</i>
Tree	<a href="#">lsp-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
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Context	<b>configure service vprn string isis number timers spf-wait</b>
Tree	<b>spf-wait</b>
Introduced	16.0.R1
Platforms	All

### **spf-initial-wait** *number*

Synopsis	Initial SPF calculation delay after topology change
Context	<b>configure service vprn string isis number timers spf-wait spf-initial-wait number</b>
Tree	<b>spf-initial-wait</b>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-max-wait** *number*

Synopsis	Maximum interval amid two consecutive SPF calculations
Context	<b>configure service vprn string isis number timers spf-wait spf-max-wait number</b>
Tree	<b>spf-max-wait</b>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

### **spf-second-wait** *number*

Synopsis	Hold time between first and second SPF calculations
Context	<b>configure service vprn string isis number timers spf-wait spf-second-wait number</b>
Tree	<b>spf-second-wait</b>
Range	10 to 100000
Units	milliseconds
Default	1000

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Introduced	16.0.R1
Platforms	All

### **unicast-import**

Synopsis	Enter the <b>unicast-import</b> context
Context	<b>configure service vprn string isis number unicast-import</b>
Tree	<a href="#">unicast-import</a>
Introduced	16.0.R1
Platforms	All

### **ipv4 boolean**

Synopsis	Submit IPv4 routes into unicast RTM
Context	<b>configure service vprn string isis number unicast-import ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6 boolean**

Synopsis	Submit IPv6 routes into unicast RTM
Context	<b>configure service vprn string isis number unicast-import ipv6 boolean</b>
Tree	<a href="#">ipv6</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **l2tp**

Synopsis	Enable the <b>l2tp</b> context
Context	<b>configure service vprn string l2tp</b>
Tree	<a href="#">l2tp</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of L2TP  
Context **configure service vprn** *string l2tp admin-state keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **avp-hiding** *keyword*

Synopsis Attribute of the Value Pair (AVP) hiding algorithm  
Context **configure service vprn** *string l2tp avp-hiding keyword*  
Tree [avp-hiding](#)  
Options sensitive, always  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **challenge** *boolean*

Synopsis Use challenge-response authentication  
Context **configure service vprn** *string l2tp challenge boolean*  
Tree [challenge](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destruct-timeout** *number*

Synopsis Destruction timeout  
Context **configure service vprn** *string l2tp destruct-timeout number*  
Tree [destruct-timeout](#)

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Range	60 to 86400
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ethernet-tunnel

Synopsis	Enter the <b>ethernet-tunnel</b> context
Context	<b>configure service vprn string l2tp ethernet-tunnel</b>
Tree	<a href="#">ethernet-tunnel</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## reconnect-timeout (*number* | *keyword*)

Synopsis	Timeout for a session setup retry
Context	<b>configure service vprn string l2tp ethernet-tunnel reconnect-timeout (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">reconnect-timeout</a>
Range	10 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## exclude-avps

Synopsis	Enter the <b>exclude-avps</b> context
Context	<b>configure service vprn string l2tp exclude-avps</b>
Tree	<a href="#">exclude-avps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**calling-number** *boolean*

Synopsis	Calling Number AVP to exclude
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">exclude-avps</a> <a href="#">calling-number</a> <i>boolean</i>
Tree	<a href="#">calling-number</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**initial-rx-lcp-conf-req** *boolean*

Synopsis	Exclude the Initial Received LCP CONFREQ AVP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">exclude-avps</a> <a href="#">initial-rx-lcp-conf-req</a> <i>boolean</i>
Tree	<a href="#">initial-rx-lcp-conf-req</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">failover</a>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recovery-max-session-lifetime** *number*

Synopsis	Subset of sessions that this system attempts to synchronize in the Session State Synchronization phase
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">failover</a> <a href="#">recovery-max-session-lifetime</a> <i>number</i>
Tree	<a href="#">recovery-max-session-lifetime</a>
Range	2 to 4294967295
Units	centiseconds
Default	2
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **recovery-method** *keyword*

Synopsis Recovery method of the sequence numbers after failover  
 Context **configure service vprn string l2tp failover recovery-method keyword**  
 Tree [recovery-method](#)  
 Options mcs, recovery-tunnel  
 Default mcs  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **recovery-time** *number*

Synopsis Time requested from the L2TP peer before assuming failover as failed  
 Context **configure service vprn string l2tp failover recovery-time number**  
 Tree [recovery-time](#)  
 Range 0 to 900  
 Units seconds  
 Default 0  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-srrp** [*id*] *reference*

Synopsis Enter the **track-srrp** list instance  
 Context **configure service vprn string l2tp failover track-srrp reference**  
 Tree [track-srrp](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *reference*

Synopsis SRRP instance ID for multi-chassis redundancy failover  
 Context **configure service vprn string l2tp failover track-srrp reference**

Tree	<a href="#">track-srrp</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> ) <a href="#">sync track-srrp number</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer reference**

Synopsis	Multi-chassis peer address
Context	<b>configure</b> <a href="#">service vprn string l2tp failover track-srrp reference peer reference</a>
Tree	<a href="#">peer</a>
Reference	<b>configure</b> <a href="#">redundancy multi-chassis peer</a> ( <a href="#">ipv4-address-no-zone</a>   <a href="#">ipv6-address-no-zone</a> )
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sync-tag string**

Synopsis	Synchronization tag on the multi-chassis peer
Context	<b>configure</b> <a href="#">service vprn string l2tp failover track-srrp reference sync-tag string</a>
Tree	<a href="#">sync-tag</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group [tunnel-group-name] string**

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service vprn string l2tp group string</a>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**[tunnel-group-name]** *string*

Synopsis	Tunnel group name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the L2TP tunnel group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**avp-hiding** *keyword*

Synopsis	The AVP hiding algorithm
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>avp-hiding</b> <i>keyword</i>
Tree	<a href="#">avp-hiding</a>
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**challenge** *keyword*

Synopsis	Enable use of challenge-response authentication
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <b>challenge</b> <i>keyword</i>
Tree	<a href="#">challenge</a>
Options	false, true

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
Context **configure** [service](#) [vpn](#) *string* [l2tp](#) [group](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destruct-timeout** *number*

Synopsis Destruction timeout  
Context **configure** [service](#) [vpn](#) *string* [l2tp](#) [group](#) *string* [destruct-timeout](#) *number*  
Tree [destruct-timeout](#)  
Range 60 to 86400  
Units seconds  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ethernet-tunnel**

Synopsis Enter the **ethernet-tunnel** context  
Context **configure** [service](#) [vpn](#) *string* [l2tp](#) [group](#) *string* [ethernet-tunnel](#)  
Tree [ethernet-tunnel](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reconnect-timeout** (*number* | *keyword*)

Synopsis Timeout for a session setup retry at group level  
Context **configure** [service](#) [vpn](#) *string* [l2tp](#) [group](#) *string* [ethernet-tunnel](#) [reconnect-timeout](#) (*number* | *keyword*)  
Tree [reconnect-timeout](#)

Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>failover</b>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-method *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>failover</b> <a href="#">recovery-method</a> <i>keyword</i>
Tree	<a href="#">recovery-method</a>
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## recovery-time *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>failover</b> <a href="#">recovery-time</a> <i>number</i>
Tree	<a href="#">recovery-time</a>
Range	0 to 900
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hello-interval** (*number* | *keyword*)

Synopsis	Hello interval
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">hello-interval</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hello-interval</a>
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**idle-timeout** (*number* | *keyword*)

Synopsis	Idle timeout
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">idle-timeout</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">idle-timeout</a>
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**l2tpv3**

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a>
Tree	<a href="#">l2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cookie-length** (*number* | *keyword*)

Synopsis	Cookie field length
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a> <a href="#">cookie-length</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cookie-length</a>
Range	4   8

Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**digest-type** *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a> <b>digest-type</b> <i>keyword</i>
Tree	<a href="#">digest-type</a>
Options	none, md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nonce-length** *number*

Synopsis	Length for the local L2TPv3 nonce (random number)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a> <b>nonce-length</b> <i>number</i>
Tree	<a href="#">nonce-length</a>
Range	0   16 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**password** *string*

Synopsis	L2TPv3 password
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a> <b>password</b> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**private-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on private network
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a> <b>private-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">private-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	TCP Maximum Segment Size (MSS) on public network
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a> <a href="#">public-tcp-mss-adjust</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pw-cap-list**

Synopsis	Enter the <b>pw-cap-list</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a> <a href="#">pw-cap-list</a>
Tree	<a href="#">pw-cap-list</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ethernet** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet pseudowire type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3</a> <a href="#">pw-cap-list</a> <a href="#">ethernet</a> <i>boolean</i>
Tree	<a href="#">ethernet</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ethernet-vlan *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Advertise Ethernet VLAN pseudowire type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3 pw-cap-list ethernet-vlan</a> <i>boolean</i>
Tree	<a href="#">ethernet-vlan</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### rem-router-id *string*

Synopsis	Filter on remote router ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3 rem-router-id</a> <i>string</i>
Tree	<a href="#">rem-router-id</a>
Default	0.0.0.0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### track-password-change *boolean*

Synopsis	Enable tracking of password changes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">l2tpv3 track-password-change</a> <i>boolean</i>
Tree	<a href="#">track-password-change</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lac

Synopsis	Enter the <b>lac</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>lac</b>
Tree	<a href="#">lac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## df-bit *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>lac</b> <i>df-bit keyword</i>
Tree	<a href="#">df-bit</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lns

Synopsis	Enter the <b>lns</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>lns</b>
Tree	<a href="#">lns</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lns-group *reference*

Synopsis	ISA LNS group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>lns</b> <i>lns-group reference</i>
Tree	<a href="#">lns-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <i>lns-group number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



### **load-balance-method** *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns load-balance-method</a> <i>keyword</i>
Tree	<a href="#">load-balance-method</a>
Options	per-session, per-tunnel
Default	per-session
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mlppp**

Synopsis	Enter the <b>mlppp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns mlppp</a>
Tree	<a href="#">mlppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **admin-state** *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns mlppp admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns mlppp endpoint</a>
Tree	<a href="#">endpoint</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**ip** (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">endpoint</a> <a href="#">ip</a> ( <i>ipv4-address</i>   <i>keyword</i> )
Tree	<a href="#">ip</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**mac** (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">endpoint</a> <a href="#">mac</a> ( <i>mac-address</i>   <i>keyword</i> )
Tree	<a href="#">mac</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**interleave** *boolean*

Synopsis	Enable link fragmentation and interleaving
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">interleave</a> <i>boolean</i>
Tree	<a href="#">interleave</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**max-fragment-delay** (*number* | *keyword*)

Synopsis	Maximum fragment delay caused by transmission on a link
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">mlppp</a> <a href="#">max-fragment-delay</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">max-fragment-delay</a>
Range	5 to 1000
Units	milliseconds
Options	no-fragmentation
Default	no-fragmentation
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **max-links** *number*

Synopsis	Maximum MLPPP links
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns mlppp max-links</a> <i>number</i>
Tree	<a href="#">max-links</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **reassemble-timeout** *number*

Synopsis	Reassembly timeout
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns mlppp reassemble-timeout</a> <i>number</i>
Tree	<a href="#">reassemble-timeout</a>
Range	100   1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **short-sequence-numbers** *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns mlppp short-sequence-numbers</a> <i>boolean</i>
Tree	<a href="#">short-sequence-numbers</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

## ppp

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> <a href="#">service vprn string l2tp group string lns ppp</a>
Tree	<a href="#">ppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	<b>configure</b> <a href="#">service vprn string l2tp group string lns ppp authentication keyword</a>
Tree	<a href="#">authentication</a>
Options	pap, chap, pref-chap, pref-pap
Default	pref-chap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## authentication-policy *string*

Synopsis	Authentication policy when a DHCP message is received
Context	<b>configure</b> <a href="#">service vprn string l2tp group string lns ppp authentication-policy string</a>
Tree	<a href="#">authentication-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## chap-challenge-length

Synopsis	Enter the <b>chap-challenge-length</b> context
Context	<b>configure</b> <a href="#">service vprn string l2tp group string lns ppp chap-challenge-length</a>

Tree	<a href="#">chap-challenge-length</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the PPP CHAP challenge length
Context	<b>configure</b> <a href="#">service vprn string l2tp group string lns ppp chap-challenge-length end number</a>
Tree	<a href="#">end</a>
Range	8 to 64
Units	octets
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the PPP CHAP challenge length
Context	<b>configure</b> <a href="#">service vprn string l2tp group string lns ppp chap-challenge-length start number</a>
Tree	<a href="#">start</a>
Range	8 to 64
Units	octets
Default	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-group-interface**

Synopsis	Enter the <b>default-group-interface</b> context
Context	<b>configure</b> <a href="#">service vprn string l2tp group string lns ppp default-group-interface</a>
Tree	<a href="#">default-group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface** *string*

Synopsis	Group interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">default-group-interface</a> <a href="#">interface</a> <a href="#">string</a>
Tree	<a href="#">interface</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**service-name** *string*

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">default-group-interface</a> <a href="#">service-name</a> <a href="#">string</a>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipcp-subnet-negotiation** *boolean*

Synopsis	Allow IPCP subnet negotiation for PPPoE hosts
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">ipcp-subnet-negotiation</a> <a href="#">boolean</a>
Tree	<a href="#">ipcp-subnet-negotiation</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">l2tp</a> <a href="#">group</a> <a href="#">string</a> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interval** *number*

Synopsis	PPP keepalive interval
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">keepalive</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**multiplier** *number*

Synopsis	PPP keepalive multiplier
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">keepalive</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lcp-force-ack-accm** *boolean*

Synopsis	Force acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">lcp-force-ack-accm</a> <i>boolean</i>
Tree	<a href="#">lcp-force-ack-accm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lcp-ignore-magic-numbers** *boolean*

Synopsis	Check magic number in echo request and reply messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">lns</a> <a href="#">ppp</a> <a href="#">lcp-ignore-magic-numbers</a> <i>boolean</i>

Tree	<a href="#">lcp-ignore-magic-numbers</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mtu number**

Synopsis	Maximum PPP MTU size
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">l2tp group string</a> <a href="#">lns ppp mtu number</a>
Tree	<a href="#">mtu</a>
Range	512 to 9212
Units	octets
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-authentication boolean**

Synopsis	Use authentication AVPs that are received from LAC
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">l2tp group string</a> <a href="#">lns ppp proxy-authentication boolean</a>
Tree	<a href="#">proxy-authentication</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-lcp boolean**

Synopsis	Proxy LCP AVPs that are received from LAC
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">l2tp group string</a> <a href="#">lns ppp proxy-lcp boolean</a>
Tree	<a href="#">proxy-lcp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**reject-disabled-ncp** *boolean*

Synopsis	Force LCP Protocol Reject for IPv6CP Configure Request
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns ppp reject-disabled-ncp</a> <i>boolean</i>
Tree	<a href="#">reject-disabled-ncp</a>
Default	false
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**user-db** *string*

Synopsis	Local user database for PPP PAP and CHAP authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">lns ppp user-db</a> <i>string</i>
Tree	<a href="#">user-db</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local-address** *string*

Synopsis	Local address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">local-address</a> <i>string</i>
Tree	<a href="#">local-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-name** *string*

Synopsis	Local host name used to distinguish tunnels
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">local-name</a> <i>string</i>
Tree	<a href="#">local-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-retries-estab** *number*

Synopsis	Maximum retries for established tunnels
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>max-retries-estab</b> <i>number</i>
Tree	<a href="#">max-retries-estab</a>
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-retries-not-estab** *number*

Synopsis	Maximum retries for unestablished tunnels
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>max-retries-not-estab</b> <i>number</i>
Tree	<a href="#">max-retries-not-estab</a>
Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**password** *string*

Synopsis	Password between L2TP LAC and LNS
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>password</b> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**protocol** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Protocol version
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>protocol</b> <i>keyword</i>
Tree	<a href="#">protocol</a>
Options	v2, v3, v3draft

Default	v2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy** *reference*

Synopsis	RADIUS accounting policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">radius-accounting-policy</a> <i>reference</i>
Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive-window-size** *number*

Synopsis	L2TP receive window size
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">receive-window-size</a> <i>number</i>
Tree	<a href="#">receive-window-size</a>
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-assign-method** *keyword*

Synopsis	Session assignment method
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">session-assign-method</a> <i>keyword</i>
Tree	<a href="#">session-assign-method</a>
Options	existing-first, weighted, weighted-random
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** (*number* | *keyword*)

Synopsis	Session limit
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">session-limit</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">session-limit</a>
Range	1 to 250000
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tunnel** [[tunnel-name](#)] *string*

Synopsis	Enter the <b>tunnel</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>tunnel</b> <i>string</i>
Tree	<a href="#">tunnel</a>
Max. Instances	31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[tunnel-name]** *string*

Synopsis	Tunnel name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>tunnel</b> <i>string</i>
Tree	<a href="#">tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the L2TP tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <b>tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**auto-establish** *boolean*

Synopsis	Allow the tunnel to be automatically set up by the system
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>auto-establish</b> <i>boolean</i>
Tree	<a href="#">auto-establish</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**avp-hiding** *keyword*

Synopsis	The AVP hiding algorithm
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>avp-hiding</b> <i>keyword</i>
Tree	<a href="#">avp-hiding</a>
Options	never, sensitive, always
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**challenge** *keyword*

Synopsis	Enable use of challenge-response authentication
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>challenge</b> <i>keyword</i>
Tree	<a href="#">challenge</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destruct-timeout** *number*

Synopsis	Destruction timeout
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>destruct-timeout</b> <i>number</i>
Tree	<a href="#">destruct-timeout</a>
Range	60 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover**

Synopsis	Enter the <b>failover</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>failover</b>
Tree	<a href="#">failover</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recovery-method** *keyword*

Synopsis	Recovery method of the sequence numbers after failover
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>failover</b> <a href="#">recovery-method</a> <i>keyword</i>
Tree	<a href="#">recovery-method</a>
Options	mcs, recovery-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**recovery-time** *number*

Synopsis	Time requested from the L2TP peer before assuming failover as failed
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>failover</b> <a href="#">recovery-time</a> <i>number</i>
Tree	<a href="#">recovery-time</a>
Range	0 to 900
Units	seconds

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hello-interval** (*number* | *keyword*)

Synopsis	Hello interval
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>hello-interval</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hello-interval</a>
Range	10 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **idle-timeout** (*number* | *keyword*)

Synopsis	Idle timeout
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>idle-timeout</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">idle-timeout</a>
Range	0 to 3600
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **l2tpv3**

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>l2tpv3</b>
Tree	<a href="#">l2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**private-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on private network
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">l2tpv3</a> <b>private-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">private-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**public-tcp-mss-adjust** (*number* | *keyword*)

Synopsis	TCP maximum segment size (MSS) on public network
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">l2tpv3</a> <b>public-tcp-mss-adjust</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Options	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lac**

Synopsis	Enter the <b>lac</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>lac</b>
Tree	<a href="#">lac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**df-bit** *keyword*

Synopsis	DF (do not fragment) bit in data traffic transmitted as LAC
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>lac</b> <b>df-bit</b> <i>keyword</i>



Tree	<a href="#">df-bit</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## Ins

Synopsis	Enter the <b>Ins</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>Ins</b>
Tree	<a href="#">Ins</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## Ins-group *reference*

Synopsis	ISA LNS group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>Ins</b> <a href="#">Ins-group</a> <i>reference</i>
Tree	<a href="#">Ins-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">Ins-group</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## load-balance-method *keyword*

Synopsis	New sessions for L2TP ISA MDA
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <b>Ins</b> <a href="#">load-balance-method</a> <i>keyword</i>
Tree	<a href="#">load-balance-method</a>
Options	per-session, per-tunnel
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mlppp

Synopsis	Enter the <b>mlppp</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns mlppp</b>
Tree	<b>mlppp</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **admin-state** *keyword*

Synopsis	Administrative state of MLPPP in the L2TP tunnel
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns mlppp admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **endpoint**

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns mlppp endpoint</b>
Tree	<b>endpoint</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **ip** (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns mlppp endpoint ip</b> ( <i>ipv4-address</i>   <i>keyword</i> )
Tree	<b>ip</b>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**mac** (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lms</a> <a href="#">mlppp</a> <a href="#">endpoint</a> <a href="#">mac</a> ( <i>mac-address</i>   <i>keyword</i> )
Tree	<a href="#">mac</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**interleave** *keyword*

Synopsis	Use of Link fragmentation and interleaving
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lms</a> <a href="#">mlppp</a> <a href="#">interleave</a> <i>keyword</i>
Tree	<a href="#">interleave</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**max-fragment-delay** *number*

Synopsis	Maximum fragment delay caused by transmission on a link
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lms</a> <a href="#">mlppp</a> <a href="#">max-fragment-delay</a> <i>number</i>
Tree	<a href="#">max-fragment-delay</a>
Range	5 to 1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

**max-links** *number*

Synopsis	Maximum MLPPP links
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">lms</a> <a href="#">mlppp</a> <a href="#">max-links</a> <i>number</i>
Tree	<a href="#">max-links</a>

Range	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **reassemble-timeout** *number*

Synopsis	Reassembly timeout
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b> <b>reassemble-timeout</b> <i>number</i>
Tree	<a href="#">reassemble-timeout</a>
Range	100   1000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **short-sequence-numbers** *keyword*

Synopsis	Request a peer to send short sequence numbers
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>mlppp</b> <b>short-sequence-numbers</b> <i>keyword</i>
Tree	<a href="#">short-sequence-numbers</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s

### **ppp**

Synopsis	Enter the <b>ppp</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>l2tp</b> <b>group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns</b> <b>ppp</b>
Tree	<a href="#">ppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication** *keyword*

Synopsis	PPP authentication protocol to negotiate
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Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp authentication</b> <i>keyword</i>
Tree	<a href="#">authentication</a>
Options	pap, chap, pref-chap, pref-pap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authentication-policy** *string*

Synopsis	Authentication policy when a DHCP message is received
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp authentication-policy</b> <i>string</i>
Tree	<a href="#">authentication-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **chap-challenge-length**

Synopsis	Enter the <b>chap-challenge-length</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp chap-challenge-length</b>
Tree	<a href="#">chap-challenge-length</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis	Upper bound of the PPP CHAP challenge length
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp chap-challenge-length</b> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the PPP CHAP challenge length
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp chap-challenge-length</b> <i>start number</i>
Tree	<b>start</b>
Range	8 to 64
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-group-interface**

Synopsis	Enter the <b>default-group-interface</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp default-group-interface</b>
Tree	<b>default-group-interface</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface string**

Synopsis	Group interface
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp default-group-interface</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**service-name string**

Synopsis	Administrative service name
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp default-group-interface</b> <b>service-name</b> <i>string</i>
Tree	<b>service-name</b>

String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipcp-subnet-negotiation** *keyword*

Synopsis	Use of IPCP subnet negotiation for PPPoE hosts
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp ipcp-subnet-negotiation</b> <i>keyword</i>
Tree	<a href="#">ipcp-subnet-negotiation</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp keepalive</b>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	PPP keepalive interval
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp keepalive interval</b> <i>number</i>
Tree	<a href="#">interval</a>
Range	10 to 300
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multiplier** *number*

Synopsis	PPP keepalive multiplier
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Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp</b> <b>keepalive multiplier</b> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-force-ack-accm** *keyword*

Synopsis	Forced acknowledgement of the LCP Asynchronous Control Character Map (ACCM) option
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp</b> <b>lcp-force-ack-accm</b> <i>keyword</i>
Tree	<a href="#">lcp-force-ack-accm</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lcp-ignore-magic-numbers** *keyword*

Synopsis	Magic-Number field in LCP Echo-Request and LCP Echo-Reply messages that are checked
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp</b> <b>lcp-ignore-magic-numbers</b> <i>keyword</i>
Tree	<a href="#">lcp-ignore-magic-numbers</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mtu** *number*

Synopsis	Maximum PPP MTU size
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group</b> <i>string</i> <b>tunnel</b> <i>string</i> <b>lns ppp</b> <b>mtu</b> <i>number</i>
Tree	<a href="#">mtu</a>
Range	512 to 9212
Units	octets
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **proxy-authentication** *keyword*

Synopsis Authentication AVPs that are received from LAC

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp proxy-authentication** *keyword*

Tree [proxy-authentication](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **proxy-lcp** *keyword*

Synopsis Use the Proxy LCP AVPs that are received from the LAC

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp proxy-lcp** *keyword*

Tree [proxy-lcp](#)

Options false, true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reject-disabled-ncp** *keyword*

Synopsis Force LCP Project Reject for IPv6CP Configure Request

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp reject-disabled-ncp** *keyword*

Tree [reject-disabled-ncp](#)

Options false, true

Introduced 16.0.R6

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *string*

Synopsis Local user database for PPP PAP and CHAP authentication

Context **configure service vpn** *string* **l2tp group** *string* **tunnel** *string* **lns ppp user-db** *string*

Tree [user-db](#)

String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local-address** *string*

Synopsis Local address  
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* **local-address** *string*  
Tree [local-address](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-name** *string*

Synopsis Local host name used to distinguish tunnels  
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* **local-name** *string*  
Tree [local-name](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-estab** *number*

Synopsis Maximum retries for established tunnels  
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* **max-retries-estab** *number*  
Tree [max-retries-estab](#)  
Range 2 to 7  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-retries-not-estab** *number*

Synopsis Maximum retries for unestablished tunnels  
Context **configure** [service vprn](#) *string* [l2tp group](#) *string* [tunnel](#) *string* **max-retries-not-estab** *number*  
Tree [max-retries-not-estab](#)

Range	2 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password string**

Synopsis	Password between L2TP LAC and LNS
Context	<b>configure service vpn string l2tp group string tunnel string password string</b>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer string**

Synopsis	Peer address
Context	<b>configure service vpn string l2tp group string tunnel string peer string</b>
Tree	<a href="#">peer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference number**

Synopsis	Tunnel preference number with its group
Context	<b>configure service vpn string l2tp group string tunnel string preference number</b>
Tree	<a href="#">preference</a>
Range	0 to 16777215
Default	50
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy reference**

Synopsis	RADIUS accounting policy
Context	<b>configure service vpn string l2tp group string tunnel string radius-accounting-policy reference</b>

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Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">l2tp-accounting-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive-window-size** *number*

Synopsis	L2TP receive window size
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">receive-window-size</a> <i>number</i>
Tree	<a href="#">receive-window-size</a>
Range	4 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-name** *string*

Synopsis	Remote tunnel host name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">remote-name</a> <i>string</i>
Tree	<a href="#">remote-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** (*number* | *keyword*)

Synopsis	L2TP session limit for each tunnel of this router
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">group</a> <i>string</i> <a href="#">tunnel</a> <i>string</i> <a href="#">session-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">session-limit</a>
Range	1 to 65534
Options	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-session-limit** *number*

Synopsis	L2TP session limit for each group of this router
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp group-session-limit</b> <i>number</i>
Tree	<b>group-session-limit</b>
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hello-interval** (*number* | *keyword*)

Synopsis	Hello interval
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp hello-interval</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>hello-interval</b>
Range	10 to 3600
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **idle-timeout** (*number* | *keyword*)

Synopsis	Idle timeout
Context	<b>configure service vprn</b> <i>string</i> <b>l2tp idle-timeout</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>idle-timeout</b>
Range	0 to 3600
Units	seconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-avps**

Synopsis	Enter the <b>ignore-avps</b> context
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Context	<b>configure service vprn string l2tp ignore-avps</b>
Tree	<a href="#">ignore-avps</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sequencing-required** *boolean*

Synopsis	Ignore Sequencing Required AVP
Context	<b>configure service vprn string l2tp ignore-avps sequencing-required boolean</b>
Tree	<a href="#">sequencing-required</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **l2tpv3**

Synopsis	Enter the <b>l2tpv3</b> context
Context	<b>configure service vprn string l2tp l2tpv3</b>
Tree	<a href="#">l2tpv3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cookie-length** *number*

Synopsis	Cookie field length
Context	<b>configure service vprn string l2tp l2tpv3 cookie-length number</b>
Tree	<a href="#">cookie-length</a>
Range	4   8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **digest-type** *keyword*

Synopsis	Hashing algorithm that calculates the message digest
Context	<b>configure service vprn string l2tp l2tpv3 digest-type keyword</b>

Tree	<a href="#">digest-type</a>
Options	md5, sha1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nonce-length** *number*

Synopsis	Length of the local L2TPv3 nonce (random number)
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">nonce-length</a> <i>number</i>
Tree	<a href="#">nonce-length</a>
Range	0   16 to 64
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis	L2TPv3 password
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **private-tcp-mss-adjust** *number*

Synopsis	TCP maximum segment size (MSS) on private network
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <a href="#">private-tcp-mss-adjust</a> <i>number</i>
Tree	<a href="#">private-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **public-tcp-mss-adjust** *number*

Synopsis	TCP maximum segment size (MSS) on public network
Context	<b>configure service vprn</b> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <b>public-tcp-mss-adjust</b> <i>number</i>
Tree	<a href="#">public-tcp-mss-adjust</a>
Range	512 to 9000
Units	octets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **transport-type**

Synopsis	Enter the <b>transport-type</b> context
Context	<b>configure service vprn</b> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <b>transport-type</b>
Tree	<a href="#">transport-type</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip** *boolean*

Synopsis	Use IP as the transport type for the L2TPv3 tunnel
Context	<b>configure service vprn</b> <i>string</i> <a href="#">l2tp</a> <a href="#">l2tpv3</a> <b>transport-type ip</b> <i>boolean</i>
Tree	<a href="#">ip</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lac**

Synopsis	Enter the <b>lac</b> context
Context	<b>configure service vprn</b> <i>string</i> <a href="#">l2tp</a> <b>lac</b>
Tree	<a href="#">lac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



### **calling-number-format** *string*

Synopsis	Calling Number AVP for L2TP control messages
Context	<b>configure service vprn string l2tp lac calling-number-format string</b>
Tree	<a href="#">calling-number-format</a>
String Length	1 to 255
Default	%S %s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cisco-nas-port**

Synopsis	Enter the <b>cisco-nas-port</b> context
Context	<b>configure service vprn string l2tp lac cisco-nas-port</b>
Tree	<a href="#">cisco-nas-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ethernet** *string*

Synopsis	L2TP Cisco NAS port AVP with binary patterns for Ethernet
Context	<b>configure service vprn string l2tp lac cisco-nas-port ethernet string</b>
Tree	<a href="#">ethernet</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **df-bit** *boolean*

Synopsis	Send all L2TP packets with DF bit set to 1
Context	<b>configure service vprn string l2tp lac df-bit boolean</b>
Tree	<a href="#">df-bit</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-address** *string*

Synopsis	Local address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">local-address</a> <i>string</i>
Tree	<a href="#">local-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local-name** *string*

Synopsis	Local host name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">local-name</a> <i>string</i>
Tree	<a href="#">local-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-retries-estab** *number*

Synopsis	Maximum retries for established tunnels
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">max-retries-estab</a> <i>number</i>
Tree	<a href="#">max-retries-estab</a>
Range	2 to 7
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-retries-not-estab** *number*

Synopsis	Maximum retries for unestablished tunnels
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp</a> <a href="#">max-retries-not-estab</a> <i>number</i>
Tree	<a href="#">max-retries-not-estab</a>
Range	2 to 7
Default	5
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **next-attempt** *keyword*

Synopsis Tunnel that is selected when previous session setup failed  
 Context **configure service vpn** *string* **l2tp next-attempt** *keyword*  
 Tree [next-attempt](#)  
 Options same-preference-level, next-preference-level  
 Default next-preference-level  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis L2TP password  
 Context **configure service vpn** *string* **l2tp password** *string*  
 Tree [password](#)  
 String Length 1 to 115  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **peer-address-change-policy** *keyword*

Synopsis Reaction for L2TP response from a different address  
 Context **configure service vpn** *string* **l2tp peer-address-change-policy** *keyword*  
 Tree [peer-address-change-policy](#)  
 Options accept, ignore, reject  
 Default reject  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting-policy** *reference*

Synopsis RADIUS accounting policy  
 Context **configure service vpn** *string* **l2tp radius-accounting-policy** *reference*

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Tree	<a href="#">radius-accounting-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius l2tp-accounting-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive-window-size** *number*

Synopsis	L2TP receive window size
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp receive-window-size</a> <i>number</i>
Tree	<a href="#">receive-window-size</a>
Range	4 to 1024
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **replace-result-code**

Synopsis	Enter the <b>replace-result-code</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp replace-result-code</a>
Tree	<a href="#">replace-result-code</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-invalid-dst** *boolean*

Synopsis	Replace result code with general error code
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp replace-result-code</a> <a href="#">cdn-invalid-dst</a> <i>boolean</i>
Tree	<a href="#">cdn-invalid-dst</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-permanent-no-facilities** *boolean*

Synopsis	Replace result code with general error
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Context	<b>configure service vprn string l2tp replace-result-code cdn-permanent-no-facilities boolean</b>
Tree	<a href="#">cdn-permanent-no-facilities</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-temporary-no-facilities boolean**

Synopsis	Replace result code with general error
Context	<b>configure service vprn string l2tp replace-result-code cdn-temporary-no-facilities boolean</b>
Tree	<a href="#">cdn-temporary-no-facilities</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rtm-debounce-time (number | keyword)**

Synopsis	Debounce timer that declares L2TP action for route table management events
Context	<b>configure service vprn string l2tp rtm-debounce-time (number   keyword)</b>
Tree	<a href="#">rtm-debounce-time</a>
Range	0 to 5000
Units	milliseconds
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-assign-method keyword**

Synopsis	Session assignment method
Context	<b>configure service vprn string l2tp session-assign-method keyword</b>
Tree	<a href="#">session-assign-method</a>
Options	existing-first, weighted, weighted-random
Default	existing-first

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** *number*

Synopsis	L2TP session limit of this router
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp session-limit</a> <i>number</i>
Tree	<a href="#">session-limit</a>
Range	1 to 250000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-selection-blacklist**

Synopsis	Enter the <b>tunnel-selection-blacklist</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist</a>
Tree	<a href="#">tunnel-selection-blacklist</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **add-tunnel-on**

Synopsis	Enter the <b>add-tunnel-on</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on</a>
Tree	<a href="#">add-tunnel-on</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address-change-timeout** *boolean*

Synopsis	Enable a timed-out tunnel to be forced to the denylist
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on address-change-timeout</a> <i>boolean</i>
Tree	<a href="#">address-change-timeout</a>
Default	false
Introduced	16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-err-code** *boolean*

Synopsis Add to deny if CDN is received with code: General error

Context **configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-err-code boolean**

Tree [cdn-err-code](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-invalid-dst** *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 6

Context **configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-invalid-dst boolean**

Tree [cdn-invalid-dst](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-permanent-no-facilities** *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 5

Context **configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-permanent-no-facilities boolean**

Tree [cdn-permanent-no-facilities](#)

Default false

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cdn-temporary-no-facilities** *boolean*

Synopsis Force tunnel to the denylist in case of Result Codes 4

Context **configure service vprn string l2tp tunnel-selection-blacklist add-tunnel-on cdn-temporary-no-facilities boolean**

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Tree	<a href="#">cdn-temporary-no-facilities</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stop-ccn-err-code** *boolean*

Synopsis	Add to denylist if received with general error code
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-err-code</a> <i>boolean</i>
Tree	<a href="#">stop-ccn-err-code</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stop-ccn-other** *boolean*

Synopsis	Add to denylist if StopCCN received with general error
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on stop-ccn-other</a> <i>boolean</i>
Tree	<a href="#">stop-ccn-other</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tx-cdn-not-established-in-time** *boolean*

Synopsis	Add to denylist if CDN transmitted with result code
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">l2tp tunnel-selection-blacklist add-tunnel-on tx-cdn-not-established-in-time</a> <i>boolean</i>
Tree	<a href="#">tx-cdn-not-established-in-time</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**max-list-length** (*number* | *keyword*)

Synopsis	Number of tunnels or peers in the denylist
Context	<b>configure service vpn string l2tp tunnel-selection-blacklist max-list-length</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-list-length</a>
Range	1 to 65535
Options	infinite
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-time** *number*

Synopsis	Time that a tunnel or peer can remain in the denylist
Context	<b>configure service vpn string l2tp tunnel-selection-blacklist max-time</b> <i>number</i>
Tree	<a href="#">max-time</a>
Range	1 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout-action** *keyword*

Synopsis	Action when a tunnel or peer exceeds time in denylist
Context	<b>configure service vpn string l2tp tunnel-selection-blacklist timeout-action</b> <i>keyword</i>
Tree	<a href="#">timeout-action</a>
Options	remove-from-blacklist, try-one-session
Default	remove-from-blacklist
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tunnel-session-limit** *number*

Synopsis	L2TP session limit for each tunnel of this router
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Context	<b>configure service vprn</b> <i>string l2tp tunnel-session-limit number</i>
Tree	<a href="#">tunnel-session-limit</a>
Range	1 to 65534
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### label-mode *keyword*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allocation mode for VPRN service labels
Context	<b>configure service vprn</b> <i>string label-mode keyword</i>
Tree	<a href="#">label-mode</a>
Options	vrf, next-hop
Default	vrf
Introduced	16.0.R1
Platforms	All

### local-routes-domain-id *string*

Synopsis	Local routes domain ID
Context	<b>configure service vprn</b> <i>string local-routes-domain-id string</i>
Tree	<a href="#">local-routes-domain-id</a>
Description	<p>This command specifies the domain ID that is used in the D-PATH attribute for local routes before those routes are exported to a BGP neighbor using BGP-IPVPN, EVPN-IFF, EVPN-IFL, or PE-CE BGP. A local route is a non-BGP route installed in the VPRN route table and learned using static route or an IGP.</p> <p>The domain IDs are used in the D-PATH attribute, in accordance with draft-ietf-bess-evpn-ipvpn-interworking. Gateway routers modify the D-PATH attribute. A gateway is a PE where a VPRN is instantiated. The VPRN in this case advertises or receives routes from multiple BGP owners (for example, EVPN IFL and BGP IPVPN).</p> <p>Gateways use the D-PATH attribute to detect loops (for received routes where the D-PATH contains a local domain ID) and to make BGP best-path selection decisions based on the D-PATH length (shorter D-PATH is preferred).</p>
Introduced	21.10.R1
Platforms	All

**log**

Synopsis	Enter the <b>log</b> context
Context	<b>configure service vprn string log</b>
Tree	<a href="#">log</a>
Introduced	16.0.R1
Platforms	All

**filter [filter-name] string**

Synopsis	Enter the <b>filter</b> list instance
Context	<b>configure service vprn string log filter string</b>
Tree	<a href="#">filter</a>
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

**[filter-name] string**

Synopsis	Filter ID
Context	<b>configure service vprn string log filter string</b>
Tree	<a href="#">filter</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**default-action keyword**

Synopsis	Default action for the event filter
Context	<b>configure service vprn string log filter string default-action keyword</b>
Tree	<a href="#">default-action</a>
Options	drop, forward
Default	forward

Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure** [service](#) [vpn](#) *string* [log filter](#) *string* [description](#) *string*  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

### **named-entry** [[entry-name](#)] *string*

Synopsis Enter the **named-entry** list instance  
Context **configure** [service](#) [vpn](#) *string* [log filter](#) *string* [named-entry](#) *string*  
Tree [named-entry](#)  
Description Commands in this context create or edit an event filter entry.  
Max. Instances 999  
Notes This element is ordered by the user.  
Introduced 21.2.R1  
Platforms All

### **[entry-name]** *string*

Synopsis Entry name  
Context **configure** [service](#) [vpn](#) *string* [log filter](#) *string* [named-entry](#) *string*  
Tree [named-entry](#)  
String Length 1 to 64  
Notes This element is part of a list key.  
Introduced 21.2.R1  
Platforms All

### **action** *keyword*

Synopsis	Action for this event filter entry
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	drop, forward
Introduced	21.2.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	21.2.R1
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Introduced	21.2.R1
Platforms	All

### **application**

Synopsis	Enter the <b>application</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log filter</a> <i>string</i> <a href="#">named-entry</a> <i>string</i> <a href="#">match</a> <a href="#">application</a>
Tree	<a href="#">application</a>
Introduced	21.2.R1
Platforms	All

**eq keyword**

Synopsis	Application to match
Context	<b>configure service vprn string log filter string named-entry string match application eq keyword</b>
Tree	<b>eq</b>
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, sr-policy, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**neq keyword**

Synopsis	Application to be filtered out
Context	<b>configure service vprn string log filter string named-entry string match application neq keyword</b>
Tree	<b>neq</b>
Options	application-assurance, aps, bgp, cflowd, chassis, debug, dhcp, dhcps, diameter, dot1x, efm-oam, elmi, ering, eth-cfm, etun, filter, gsmp, igmp, igmp-snooping, ip, ipsec, isis, l2tp, lag, ldp, li, lldp, logger, mcpath, mc-redundancy, mirror, mld, mld-snooping, mpls, msdp, nat, ntp, oam, ospf, pim, pim-snooping, port, pppoe, ptp, rip, route-policy, rsvp, security, snmp, stp, svcmgr, system, user, video, vrrp, vrtr, radius, wpp, wlan-gw, dynsvc, mpls-tp, bfd, python, ripng, openflow, sflow, rpki, pcep, calltrace, satellite, ldap, pppoe-clnt, tls, adp, mgmt-core, macsec, sr-policy, pcap, auto-prov, bier, pfc, tree-sid, srv6, sr-mpls, anysec
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**event**

Synopsis	Enter the <b>event</b> context
Context	<b>configure service vprn string log filter string named-entry string match event</b>
Tree	<b>event</b>

Introduced 21.2.R1  
 Platforms All

### **eq number**

Synopsis Log event message to match  
 Context **configure service vprn string log filter string named-entry string match event eq number**  
 Tree [eq](#)  
 Range 1 to 4294967295  
 Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**  
 Introduced 21.2.R1  
 Platforms All

### **gt number**

Synopsis Number of the log event to match  
 Context **configure service vprn string log filter string named-entry string match event gt number**  
 Tree [gt](#)  
 Range 1 to 4294967295  
 Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**  
 Introduced 21.2.R1  
 Platforms All

### **gte number**

Synopsis Number of the log event to match  
 Context **configure service vprn string log filter string named-entry string match event gte number**  
 Tree [gte](#)  
 Range 1 to 4294967295  
 Notes The following elements are part of a choice: **eq, gt, gte, lt, lte, or neq.**  
 Introduced 21.2.R1  
 Platforms All

### **lt number**

Synopsis	Number of the log event to match
Context	<b>configure service vprn string log filter string named-entry string match event lt number</b>
Tree	<b>lt</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq, gt, gte, lt, lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **lte number**

Synopsis	Number of the log event to match
Context	<b>configure service vprn string log filter string named-entry string match event lte number</b>
Tree	<b>lte</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq, gt, gte, lt, lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq number**

Synopsis	Log event message to filter out
Context	<b>configure service vprn string log filter string named-entry string match event neq number</b>
Tree	<b>neq</b>
Range	1 to 4294967295
Notes	The following elements are part of a choice: <b>eq, gt, gte, lt, lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **message**

Synopsis	Enter the <b>message</b> context
Context	<b>configure service vprn string log filter string named-entry string match message</b>
Tree	<b>message</b>



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Introduced	21.2.R1
Platforms	All

### **eq string**

Synopsis	Log event message to match
Context	<b>configure service vprn string log filter string named-entry string match message eq string</b>
Tree	<b>eq</b>
String Length	1 to 400
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **neq string**

Synopsis	Log event message to be filtered out
Context	<b>configure service vprn string log filter string named-entry string match message neq string</b>
Tree	<b>neq</b>
String Length	1 to 400
Notes	The following elements are part of a choice: <b>eq</b> or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

### **regexp boolean**

Synopsis	String comparison to determine if the log event matches the value of pattern
Context	<b>configure service vprn string log filter string named-entry string match message regexp boolean</b>
Tree	<b>regexp</b>
Default	false
Introduced	21.2.R1
Platforms	All

## severity

Synopsis	Enter the <b>severity</b> context
Context	<b>configure service vprn string log filter string named-entry string match severity</b>
Tree	<b>severity</b>
Introduced	21.2.R1
Platforms	All

## eq keyword

Synopsis	Log event severity level to match
Context	<b>configure service vprn string log filter string named-entry string match severity eq keyword</b>
Tree	<b>eq</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq, gt, gte, lt, lte, or neq.</b>
Introduced	21.2.R1
Platforms	All

## gt keyword

Synopsis	Log event severity level
Context	<b>configure service vprn string log filter string named-entry string match severity gt keyword</b>
Tree	<b>gt</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq, gt, gte, lt, lte, or neq.</b>
Introduced	21.2.R1
Platforms	All

## gte keyword

Synopsis	Log event severity level
Context	<b>configure service vprn string log filter string named-entry string match severity gte keyword</b>
Tree	<b>gte</b>
Options	cleared, indeterminate, critical, major, minor, warning

Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**lt keyword**

Synopsis	Log event severity level
Context	<b>configure service vprn string log filter string named-entry string match severity lt keyword</b>
Tree	<b>lt</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**lte keyword**

Synopsis	Log event severity level
Context	<b>configure service vprn string log filter string named-entry string match severity lte keyword</b>
Tree	<b>lte</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1
Platforms	All

**neq keyword**

Synopsis	Log event severity level to filter out
Context	<b>configure service vprn string log filter string named-entry string match severity neq keyword</b>
Tree	<b>neq</b>
Options	cleared, indeterminate, critical, major, minor, warning
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>gte</b> , <b>lt</b> , <b>lte</b> , or <b>neq</b> .
Introduced	21.2.R1

Platforms All

## subject

Synopsis Enter the **subject** context

Context **configure service vprn string log filter string named-entry string match subject**

Tree **subject**

Introduced 21.2.R1

Platforms All

## eq string

Synopsis Log event subject string to match

Context **configure service vprn string log filter string named-entry string match subject eq string**

Tree **eq**

String Length 1 to 32

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.2.R1

Platforms All

## neq string

Synopsis Log event subject string to filter out

Context **configure service vprn string log filter string named-entry string match subject neq string**

Tree **neq**

String Length 1 to 32

Notes The following elements are part of a choice: **eq** or **neq**.

Introduced 21.2.R1

Platforms All

## regexp boolean

Synopsis String comparison to determine if the log event matches the value of subject

Context **configure service vprn string log filter string named-entry string match subject regexp boolean**

Tree	<a href="#">regex</a>
Default	false
Introduced	21.2.R1
Platforms	All

**log-id** [[name](#)] *string*

Synopsis	Enter the <b>log-id</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>log</b> <a href="#">log-id</a> <i>string</i>
Tree	<a href="#">log-id</a>
Max. Instances	30
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Log ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>log</b> <a href="#">log-id</a> <i>string</i>
Tree	<a href="#">log-id</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the log
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <b>log</b> <a href="#">log-id</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**destination**

Synopsis	Enter the <b>destination</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">destination</a>
Tree	<a href="#">destination</a>
Introduced	16.0.R1
Platforms	All

**netconf**

Synopsis	Enable the <b>netconf</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">destination</a> <a href="#">netconf</a>
Tree	<a href="#">netconf</a>
Notes	The following elements are part of a choice: <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

**max-entries** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in the NETCONF log
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">destination</a> <a href="#">netconf</a> <a href="#">max-entries</a> <i>number</i>
Tree	<a href="#">max-entries</a>
Range	50 to 3000
Default	100

Introduced	16.0.R1
Platforms	All

## snmp

Synopsis	Enable the <b>snmp</b> context
Context	<b>configure</b> <a href="#">service vprn string log log-id string destination snmp</a>
Tree	<a href="#">snmp</a>
Notes	The following elements are part of a choice: <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

## max-entries *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Number of events stored in the memory log
Context	<b>configure</b> <a href="#">service vprn string log log-id string destination snmp max-entries number</a>
Tree	<a href="#">max-entries</a>
Range	50 to 3000
Default	100
Introduced	16.0.R1
Platforms	All

## syslog *reference*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Index with the information to format event messages sent to a specific SYSLOG collector
Context	<b>configure</b> <a href="#">service vprn string log log-id string destination syslog reference</a>
Tree	<a href="#">syslog</a>
Reference	<b>configure</b> <a href="#">service vprn string log syslog string</a>

Notes	The following elements are part of a choice: <b>netconf</b> , <b>snmp</b> , or <b>syslog</b> .
Introduced	16.0.R1
Platforms	All

### **filter** *reference*

Synopsis	Event filter policy with the log destination
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">filter</a> <i>reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **netconf-stream** *string*

Synopsis	Destination NETCONF stream name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">netconf-stream</a> <i>string</i>
Tree	<a href="#">netconf-stream</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **python-policy** *reference*

Synopsis	Python policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **source**

Synopsis	Enter the <b>source</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <a href="#">source</a>



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Tree	<a href="#">source</a>
Introduced	16.0.R1
Platforms	All

### **change** *boolean*

Synopsis	Collect log events from the change event stream
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">source change</a> <i>boolean</i>
Tree	<a href="#">change</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **debug** *boolean*

Synopsis	Collect log events from the debug event stream
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">source debug</a> <i>boolean</i>
Tree	<a href="#">debug</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **main** *boolean*

Synopsis	Collect log events from the main event stream
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">source main</a> <i>boolean</i>
Tree	<a href="#">main</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **security** *boolean*

Synopsis	Collect log events from the security event stream
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log log-id</a> <i>string</i> <a href="#">source security</a> <i>boolean</i>

Tree	<a href="#">security</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **time-format** *keyword*

Synopsis	Time zone output for file log contents and syslog
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">log-id</a> <i>string</i> <b>time-format</b> <i>keyword</i>
Tree	<a href="#">time-format</a>
Options	utc, local
Default	utc
Introduced	16.0.R1
Platforms	All

### **snmp-trap-group** [[log-name](#)] *string*

Synopsis	Enter the <b>snmp-trap-group</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">snmp-trap-group</a> <i>string</i>
Tree	<a href="#">snmp-trap-group</a>
Introduced	16.0.R1
Platforms	All

### **[log-name]** *string*

Synopsis	Log ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log</a> <a href="#">snmp-trap-group</a> <i>string</i>
Tree	<a href="#">snmp-trap-group</a>
String Length	1 to 17
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**trap-target** [[name](#)] *string*

Synopsis	Enter the <b>trap-target</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i>
Tree	<a href="#">trap-target</a>
Max. Instances	25
Introduced	16.0.R1
Platforms	All

**[name]** *string*

Synopsis	Trap target name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i>
Tree	<a href="#">trap-target</a>
String Length	1 to 28
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the trap receiver
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **notify-community** *string*

Synopsis	SNMPv1 or SNMPv2c community name string, or SNMPv3 security name, for sending a notification
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>notify-community</b> <i>string</i>
Tree	<a href="#">notify-community</a>
String Length	1 to 31
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **port** *number*

Synopsis	UDP port number to send messages to this remote SNMP notification collector
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <b>port</b> <i>number</i>
Tree	<a href="#">port</a>
Range	0   1 to 65535
Default	162
Introduced	16.0.R1
Platforms	All

**replay** *boolean*

Synopsis	Retransmit missed notifications
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">replay</a> <i>boolean</i>
Tree	<a href="#">replay</a>
Default	false
Introduced	16.0.R1
Platforms	All

**security-level** *keyword*

Synopsis	Security level at which SNMP notification messages are sent to SNMP notification collector
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">security-level</a> <i>keyword</i>
Tree	<a href="#">security-level</a>
Options	no-auth-no-privacy, auth-no-privacy, privacy
Default	no-auth-no-privacy
Introduced	16.0.R1
Platforms	All

**version** *keyword*

Synopsis	SNMP version to format notification messages sent to this SNMP notification collector
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log snmp-trap-group</a> <i>string</i> <a href="#">trap-target</a> <i>string</i> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	snmpv1, snmpv2c, snmpv3
Default	snmpv3
Introduced	16.0.R1
Platforms	All

**syslog** [[syslog-name](#)] *string*

Synopsis	Enter the <b>syslog</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">log syslog</a> <i>string</i>

Tree	<a href="#">syslog</a>
Max. Instances	30
Introduced	16.0.R1
Platforms	All

**[syslog-name]** *string*

Synopsis	Syslog name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log syslog</a> <i>string</i>
Tree	<a href="#">syslog</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the Syslog target host
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log syslog</a> <i>string</i> <b>address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">log syslog</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**facility** *keyword*

Synopsis	Facility code for messages
Context	<b>configure service vprn</b> <i>string</i> <b>log syslog</b> <i>string</i> <b>facility</b> <i>keyword</i>
Tree	<b>facility</b>
Options	kernel, user, mail, systemd, auth, syslogd, printer, netnews, uucp, cron, authpriv, ftp, ntp, logaudit, logalert, cron2, local0, local1, local2, local3, local4, local5, local6, local7
Default	local7
Introduced	16.0.R1
Platforms	All

**hostname**

Synopsis	Enter the <b>hostname</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>log syslog</b> <i>string</i> <b>hostname</b>
Tree	<b>hostname</b>
Description	Commands in this context control how the HOSTNAME field of syslog messages is populated.  If no command option is configured, the HOSTNAME is populated with an IP address.
Introduced	23.7.R1
Platforms	All

**use-system-name**

Synopsis	Enable the <b>use-system-name</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>log syslog</b> <i>string</i> <b>hostname use-system-name</b>
Tree	<b>use-system-name</b>
Description	Commands in this context configure the system to use the system name configured with the <b>configure system name</b> command as the HOSTNAME field of syslog messages.  Do not use any spaces in the system name if it is used for the syslog HOSTNAME.
Notes	The following elements are part of a choice: <b>use-system-name</b> , <b>use-vprn-name</b> , or <b>value</b> .
Introduced	23.7.R1
Platforms	All

**use-vprn-name**

Synopsis	Enable the <b>use-vprn-name</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>log syslog</b> <i>string</i> <b>hostname use-vprn-name</b>
Tree	<b>use-vprn-name</b>
Description	Commands in this context configure the system to use the VPRN service name configured with the <b>configure service vprn service-name</b> command as the HOSTNAME field of syslog messages sent in this VPRN. Do not use any spaces in the VPRN name if it is used for the syslog HOSTNAME.
Notes	The following elements are part of a choice: <b>use-system-name</b> , <b>use-vprn-name</b> , or <b>value</b> .
Introduced	23.7.R1
Platforms	All

**value string**

Synopsis	Syslog HOSTNAME field value
Context	<b>configure service vprn</b> <i>string</i> <b>log syslog</b> <i>string</i> <b>hostname value string</b>
Tree	<b>value</b>
Description	This command configures a string as the HOSTNAME field of syslog messages. Do not use any spaces in the string used for the syslog HOSTNAME.
String Length	1 to 255
Notes	The following elements are part of a choice: <b>use-system-name</b> , <b>use-vprn-name</b> , or <b>value</b> .
Introduced	23.7.R1
Platforms	All

**log-prefix** (*keyword* | *string*)

Synopsis	Prefix string to log message sent to target syslog host
Context	<b>configure service vprn</b> <i>string</i> <b>log syslog</b> <i>string</i> <b>log-prefix</b> ( <i>keyword</i>   <i>string</i> )
Tree	<b>log-prefix</b>
String Length	1 to 32
Options	no-prefix
Default	TMNX
Introduced	16.0.R1



Platforms All

### **port number**

Synopsis Destination port when sending syslog over UDP  
 Context **configure service vprn string log syslog string port number**  
 Tree [port](#)  
 Range 0 | 1 to 65535  
 Default 514  
 Introduced 16.0.R1  
 Platforms All

### **severity keyword**

Synopsis Severity level threshold for the syslog message  
 Context **configure service vprn string log syslog string severity keyword**  
 Tree [severity](#)  
 Options emergency, alert, critical, error, warning, notice, info, debug  
 Default info  
 Introduced 16.0.R1  
 Platforms All

### **tls-client-profile reference**



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis TLS client profile used to encrypt syslog communication  
 Context **configure service vprn string log syslog string tls-client-profile reference**  
 Tree [tls-client-profile](#)  
 Description This command specifies the Transport Layer Security (TLS) client profile used to encrypt syslog communications. When configured, syslog messages are sent using TLS.  
 Any change to this command results in a brief interruption of the event log, which may cause the loss of a few syslog messages.  
 When this command is unconfigured, the syslog messages are sent over UDP.

Reference	<b>configure system security tls client-tls-profile</b> <i>string</i>
Introduced	21.10.R1
Platforms	All

## management

Synopsis	Enable the <b>management</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>management</b>
Tree	<b>management</b>
Description	Commands in this context control which management protocols can be used to access the SR OS router via the VPRN router instance. For SNMP control, see the <b>configure service vprn snmp access</b> command.
Introduced	16.0.R4
Platforms	All

## allow-ftp *boolean*

Synopsis	Allow access to the FTP server
Context	<b>configure service vprn</b> <i>string</i> <b>management allow-ftp</b> <i>boolean</i>
Tree	<b>allow-ftp</b>
Description	When configured to <b>true</b> , this command allows FTP access to the SR OS router via the VPRN router instance. When configured to <b>false</b> , this command disallows access to the SR OS FTP server.
Default	false
Introduced	16.0.R6
Platforms	All

## allow-grpc *boolean*

Synopsis	Allow access to the gRPC server
Context	<b>configure service vprn</b> <i>string</i> <b>management allow-grpc</b> <i>boolean</i>
Tree	<b>allow-grpc</b>
Description	When configured to <b>true</b> , this command allows access to the gRPC server via the VPRN router instance. When configured to <b>false</b> , this command disallows gRPC server access.
Default	false

Introduced	19.5.R1
Platforms	All

**allow-netconf** *boolean*

Synopsis	Allow access to the NETCONF server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">management allow-netconf</a> <i>boolean</i>
Tree	<a href="#">allow-netconf</a>
Description	When configured to <b>true</b> , this command allows NETCONF server access to the SR OS router via the VPRN router instance. When configured to <b>false</b> , this command disallows access to the NETCONF server.
Default	false
Introduced	19.5.R1
Platforms	All

**allow-ssh** *boolean*

Synopsis	Allow access to the SSH server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">management allow-ssh</a> <i>boolean</i>
Tree	<a href="#">allow-ssh</a>
Description	When configured to <b>true</b> , this command allows SSH server access to the SR OS router via the VPRN router instance. When configured to <b>false</b> , this command disallows SSH server access.
Default	false
Introduced	16.0.R5
Platforms	All

**allow-telnet** *boolean*

Synopsis	Allow access to the IPv4 Telnet server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">management allow-telnet</a> <i>boolean</i>
Tree	<a href="#">allow-telnet</a>
Description	When configured to <b>true</b> , this command allows IPv4 Telnet server access to the SR OS router via the VPRN router instance. When configured to <b>false</b> , this command disallows access to the IPv4 Telnet server.
Default	false

Introduced	16.0.R5
Platforms	All

**allow-telnet6** *boolean*

Synopsis	Allow access to the Telnet IPv6 server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">management allow-telnet6</a> <i>boolean</i>
Tree	<a href="#">allow-telnet6</a>
Description	When configured to <b>true</b> , this command allows IPv6 Telnet server access to the SR OS router via the VPRN router instance. When configured to <b>false</b> , this command removes access to the IPv6 Telnet server.
Default	false
Introduced	16.0.R5
Platforms	All

**maximum-ipv4-routes**

Synopsis	Enter the <b>maximum-ipv4-routes</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">maximum-ipv4-routes</a>
Tree	<a href="#">maximum-ipv4-routes</a>
Introduced	16.0.R1
Platforms	All

**log-only** *boolean*

Synopsis	Action when the maximum number of routes, held within a VRF context, is reached
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">maximum-ipv4-routes log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Mid-level water marker for the number of routes which this VRF holds
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Context	<b>configure service vprn</b> <i>string</i> <b>maximum-ipv4-routes</b> <b>threshold</b> <i>number</i>
Tree	<b>threshold</b>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

### **value** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of routes that are configured on this virtual router
Context	<b>configure service vprn</b> <i>string</i> <b>maximum-ipv4-routes</b> <b>value</b> <i>number</i>
Tree	<b>value</b>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

### **maximum-ipv6-routes**

Synopsis	Enter the <b>maximum-ipv6-routes</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>maximum-ipv6-routes</b>
Tree	<b>maximum-ipv6-routes</b>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Action when the maximum number of routes, held within a VRF context, is reached
Context	<b>configure service vprn</b> <i>string</i> <b>maximum-ipv6-routes</b> <b>log-only</b> <i>boolean</i>
Tree	<b>log-only</b>
Default	false
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Mid-level water marker for the number of routes which this VRF holds
Context	<b>configure</b> <a href="#">service vprn string maximum-ipv6-routes threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**value** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of routes that are configured on this virtual router
Context	<b>configure</b> <a href="#">service vprn string maximum-ipv6-routes value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**mc-maximum-routes**

Synopsis	Enter the <b>mc-maximum-routes</b> context
Context	<b>configure</b> <a href="#">service vprn string mc-maximum-routes</a>
Tree	<a href="#">mc-maximum-routes</a>
Introduced	16.0.R1
Platforms	All

**log-only** *boolean*

Synopsis	Log and allow learning of new multicast routes
Context	<b>configure</b> <a href="#">service vprn string mc-maximum-routes log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>

Default	false
Introduced	16.0.R1
Platforms	All

**threshold** *number*

Synopsis	Maximum multicast routes which the VRF holds
Context	<b>configure service vprn string mc-maximum-routes threshold number</b>
Tree	<b>threshold</b>
Range	1 to 100
Units	percent
Introduced	16.0.R1
Platforms	All

**value** *number*

Synopsis	Maximum multicast routes configured on virtual router
Context	<b>configure service vprn string mc-maximum-routes value number</b>
Tree	<b>value</b>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**mld**

Synopsis	Enable the <b>mld</b> context
Context	<b>configure service vprn string mld</b>
Tree	<b>mld</b>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MLD
Context	<b>configure service vprn string mld admin-state keyword</b>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **forwarding-group-interface** [forwarding-service](#) *string* [group-interface-name](#) *reference*

Synopsis	Enter the <b>forwarding-group-interface</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mld</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **forwarding-service** *string*

Synopsis	Forwarding service for a subscriber interface in a retailer context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mld</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface-name** *reference*

Synopsis	Group interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mld</a> <a href="#">forwarding-group-interface</a> <a href="#">forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i>
Tree	<a href="#">forwarding-group-interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the MLD interface

Context **configure** [service vprn](#) *string* [mld forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy to filter MLD packets

Context **configure** [service vprn](#) *string* [mld forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **import-policy** *reference*

Tree [import-policy](#)

Reference **configure** [policy-options policy-statement](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis Maximum number of group sources for this interface

Context **configure** [service vprn](#) *string* [mld forwarding-group-interface forwarding-service](#) *string* [group-interface-name](#) *reference* **maximum-number-group-sources** *number*

Tree [maximum-number-group-sources](#)

Description This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range 1 to 32000

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## maximum-number-groups *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">mld forwarding-group-interface forwarding-service string</a> <a href="#">group-interface-name reference</a> <a href="#">maximum-number-groups number</a>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## maximum-number-sources *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">mld forwarding-group-interface forwarding-service string</a> <a href="#">group-interface-name reference</a> <a href="#">maximum-number-sources number</a>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mcac

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">mld forwarding-group-interface forwarding-service string</a> <a href="#">group-interface-name reference</a> <a href="#">mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bandwidth

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">mld forwarding-group-interface forwarding-service string</a> <a href="#">group-interface-name reference</a> <a href="#">mcac bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mandatory** (*number* | *keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure service vprn** *string* **mld forwarding-group-interface forwarding-service** *string* **group-interface-name** *reference* **mcac bandwidth mandatory** (*number* | *keyword*)

Tree **mandatory**

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **total** (*number* | *keyword*)

Synopsis Maximum allowed bandwidth

Context **configure service vprn** *string* **mld forwarding-group-interface forwarding-service** *string* **group-interface-name** *reference* **mcac bandwidth total** (*number* | *keyword*)

Tree **total**

Range 0 to 2147483647

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis Name of multicast CAC interface policy

Context **configure service vprn** *string* **mld forwarding-group-interface forwarding-service** *string* **group-interface-name** *reference* **mcac interface-policy** *reference*

Tree **interface-policy**

Reference **configure mcac interface-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference mcac policy reference</a>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-interval number**

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service vprn string mld forwarding-group-interface forwarding-service string group-interface-name reference query-interval number</a>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-last-member-interval number**

Synopsis	Time between group-specific query messages
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Context	<b>configure service vprn</b> <i>string</i> <b>mld forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-last-member-interval</b> <i>number</i>
Tree	<b>query-last-member-interval</b>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure service vprn</b> <i>string</i> <b>mld forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-response-interval</b> <i>number</i>
Tree	<b>query-response-interval</b>
Range	1 to 1023
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis	Source address for MLD queries
Context	<b>configure service vprn</b> <i>string</i> <b>mld forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>query-source-address</b> <i>string</i>
Tree	<b>query-source-address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure service vprn</b> <i>string</i> <b>mld forwarding-group-interface forwarding-service</b> <i>string</i> <b>group-interface-name</b> <i>reference</i> <b>router-alert-check</b> <i>boolean</i>
Tree	<b>router-alert-check</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-hosts-only** *boolean*

Synopsis	Allow MLD traffic from known hosts only
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">sub-hosts-only</a> <i>boolean</i>
Tree	<a href="#">sub-hosts-only</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subnet-check** *boolean*

Synopsis	Enable subnet checking
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">subnet-check</a> <i>boolean</i>
Tree	<a href="#">subnet-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	MLD protocol version
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld forwarding-group-interface forwarding-service</a> <i>string</i> <a href="#">group-interface-name</a> <i>reference</i> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-if-query-source-address** *string*

Synopsis	Source address in queries for group interfaces when not configured at group interface level
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-if-query-source-address</a> <i>string</i>
Tree	<a href="#">group-if-query-source-address</a>

Introduced 16.0.R1  
 Platforms All

### **group-interface** [[group-interface-name](#)] *reference*

Synopsis Enter the **group-interface** list instance  
 Context **configure** [service](#) [vprn](#) *string* [mld](#) [group-interface](#) *reference*  
 Tree [group-interface](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[group-interface-name]** *reference*

Synopsis Group interface name  
 Context **configure** [service](#) [vprn](#) *string* [mld](#) [group-interface](#) *reference*  
 Tree [group-interface](#)  
 Reference **configure** [service](#) [vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the MLD interface  
 Context **configure** [service](#) [vprn](#) *string* [mld](#) [group-interface](#) *reference* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis Import policy to filter MLD packets  
 Context **configure** [service](#) [vprn](#) *string* [mld](#) [group-interface](#) *reference* [import-policy](#) *reference*

Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">group-interface</a> <i>reference</i> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mcac

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure service vprn string mld group-interface reference mcac</b>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bandwidth

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure service vprn string mld group-interface reference mcac bandwidth</b>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mandatory (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure service vprn string mld group-interface reference mcac bandwidth mandatory (<i>number</i>   <i>keyword</i>)</b>
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## total (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure service vprn string mld group-interface reference mcac bandwidth total (<i>number</i>   <i>keyword</i>)</b>

Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">mcac interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld group-interface</a> <i>reference</i> <a href="#">mcac policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy</a> <i>string</i>

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages  
 Context **configure** [service vprn string](#) [mld group-interface reference](#) [query-interval number](#)  
 Tree [query-interval](#)  
 Range 2 to 1024  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
 Context **configure** [service vprn string](#) [mld group-interface reference](#) [query-last-member-interval number](#)  
 Tree [query-last-member-interval](#)  
 Range 1 to 1023  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
 Context **configure** [service vprn string](#) [mld group-interface reference](#) [query-response-interval number](#)  
 Tree [query-response-interval](#)  
 Range 1 to 1023  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-source-address** *string*

Synopsis Source address for MLD queries  
 Context **configure** [service vprn string](#) [mld group-interface reference](#) [query-source-address string](#)

Tree [query-source-address](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages  
Context **configure** [service vprn](#) *string* [mld group-interface](#) *reference* [router-alert-check](#) *boolean*  
Tree [router-alert-check](#)  
Default true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-hosts-only** *boolean*

Synopsis Allow MLD traffic from known hosts only  
Context **configure** [service vprn](#) *string* [mld group-interface](#) *reference* [sub-hosts-only](#) *boolean*  
Tree [sub-hosts-only](#)  
Default true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet-check** *boolean*

Synopsis Enable subnet checking  
Context **configure** [service vprn](#) *string* [mld group-interface](#) *reference* [subnet-check](#) *boolean*  
Tree [subnet-check](#)  
Default true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **version** *keyword*

Synopsis MLD protocol version  
Context **configure** [service vprn](#) *string* [mld group-interface](#) *reference* [version](#) *keyword*

Tree	<a href="#">version</a>
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface** [\[ip-interface-name\]](#) *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

### **[ip-interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the MLD interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Import policy to filter MLD packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	All

**maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	All

**maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld interface</a> <i>string</i> <a href="#">maximum-number-sources</a> <i>number</i>

Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	All

## **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

## **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	All

## **mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <a href="#">mandatory</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

## **total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
----------	---------------------------

Context	<b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac bandwidth total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac interface-policy</b> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure mcac interface-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac mc-constraints</b>
Tree	<a href="#">mc-constraints</a>
Introduced	16.0.R1
Platforms	All

### **level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>mld interface</b> <i>string</i> <b>mcac mc-constraints level</b> <i>number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All



**[level-id] number**

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <a href="#">service vprn string mld interface string mcac mc-constraints level number</a>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bandwidth number**

Synopsis	Bandwidth available for this level
Context	<b>configure</b> <a href="#">service vprn string mld interface string mcac mc-constraints level number bandwidth number</a>
Tree	<a href="#">bandwidth</a>
Range	0 to 2147483647
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**number-down [[number-lag-port-down](#)] number**

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <a href="#">service vprn string mld interface string mcac mc-constraints number-down number</a>
Tree	<a href="#">number-down</a>
Introduced	16.0.R1
Platforms	All

**[[number-lag-port-down](#)] number**

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure</b> <a href="#">service vprn string mld interface string mcac mc-constraints number-down number</a>
Tree	<a href="#">number-down</a>

Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level number**

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure service vprn string mld interface string mcac mc-constraints number-down number level number</b>
Tree	<a href="#">level</a>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **use-lag-port-weight boolean**

Synopsis	Use LAG port weight in calculating MCAC constraints
Context	<b>configure service vprn string mld interface string mcac mc-constraints use-lag-port-weight boolean</b>
Tree	<a href="#">use-lag-port-weight</a>
Description	When configured to <b>true</b> , port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.
Default	false
Introduced	16.0.R1
Platforms	All

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure service vprn string mld interface string mcac policy reference</b>

Tree	<a href="#">policy</a>
Description	<p>This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.</p> <p>Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.</p> <p>If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.</p> <p>Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:</p> <ul style="list-style-type: none"> <li>• subscriber level and redirected interface when redirection is configured</li> <li>• subscriber level and group-interface level when redirection is unconfigured</li> </ul> <p>In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).</p>
Reference	<b>configure</b> <a href="#">mcac policy string</a>
Introduced	16.0.R1
Platforms	All

### **query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service vprn string mld interface string query-interval number</a>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service vprn string mld interface string query-last-member-interval number</a>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

**query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Introduced	16.0.R1
Platforms	All

**router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

**ssm-translate**

Synopsis	Enter the <b>ssm-translate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">ssm-translate</a>
Tree	<a href="#">ssm-translate</a>
Introduced	16.0.R1
Platforms	All

**group-range** [start](#) *string* [end](#) *string*

Synopsis	Enter the <b>group-range</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">ssm-translate</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i>
Tree	<a href="#">group-range</a>
Introduced	16.0.R1
Platforms	All

**start string**

Synopsis	Lower bound of the group range
Context	<b>configure</b> <a href="#">service vprn string mld interface string ssm-translate group-range start string end string</a>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	Upper bound of the group range
Context	<b>configure</b> <a href="#">service vprn string mld interface string ssm-translate group-range start string end string</a>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source [source-address] string**

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service vprn string mld interface string ssm-translate group-range start string end string source string</a>
Tree	<a href="#">source</a>
Min. Instances	1
Introduced	16.0.R1
Platforms	All

**[source-address] string**

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">service vprn string mld interface string ssm-translate group-range start string end string source string</a>
Tree	<a href="#">source</a>

Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

## static

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>static</b>
Tree	<a href="#">static</a>
Introduced	16.0.R1
Platforms	All

## group [[group-address](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>static</b> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	All

## [[group-address](#)] *string*

Synopsis	Group address of multicast channel
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>static</b> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## source [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <b>static</b> <a href="#">group</a> <i>string</i> <b>source</b> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .

Introduced 16.0.R1  
 Platforms All

### **[source-address]** *string*

Synopsis Source IP address  
 Context **configure** *service vpn string mld interface string static group string source string*  
 Tree *source*  
 Notes This element is part of a list key.  
 Introduced 16.0.R2  
 Platforms All

### **starg**

Synopsis any source address (\*,G)  
 Context **configure** *service vpn string mld interface string static group string starg*  
 Tree *starg*  
 Notes The following elements are part of a mandatory choice: **source** or **starg**.  
 Introduced 16.0.R2  
 Platforms All

### **group-range** *start string end string step string*

Synopsis Enter the **group-range** list instance  
 Context **configure** *service vpn string mld interface string static group-range start string end string step string*  
 Tree *group-range*  
 Introduced 16.0.R1  
 Platforms All

### **start** *string*

Synopsis Lower bound of the static multicast group  
 Context **configure** *service vpn string mld interface string static group-range start string end string step string*  
 Tree *group-range*

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end string**

Synopsis	Upper bound of the static multicast group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a> <a href="#">step</a> <a href="#">string</a>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**step string**

Synopsis	Step interval for the group-range addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a> <a href="#">step</a> <a href="#">string</a>
Tree	<a href="#">group-range</a>
MD-CLI Default	::1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**source** [[source-address](#)] [string](#)

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">mld</a> <a href="#">interface</a> <a href="#">string</a> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <a href="#">string</a> <a href="#">end</a> <a href="#">string</a> <a href="#">step</a> <a href="#">string</a> <a href="#">source</a> <a href="#">string</a>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	All



**[source-address]** *string*

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**starg**

Synopsis	any source address (*,G)
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">static</a> <a href="#">group-range</a> <a href="#">start</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">step</a> <i>string</i> <a href="#">starg</a>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	All

**version** *keyword*

Synopsis	MLD protocol version
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">interface</a> <i>string</i> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	All

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mld</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>

---

Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	All

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 1023
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **robust-count** *number*

Synopsis	Number of retries after expected message loss
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mld robust-count</a> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	2 to 10
Default	2

Introduced 16.0.R1  
 Platforms All

### **ssm-translate**

Synopsis Enter the **ssm-translate** context  
 Context **configure service vprn string mld ssm-translate**  
 Tree [ssm-translate](#)  
 Introduced 16.0.R1  
 Platforms All

### **group-range start string end string**

Synopsis Enter the **group-range** list instance  
 Context **configure service vprn string mld ssm-translate group-range start string end string**  
 Tree [group-range](#)  
 Introduced 16.0.R1  
 Platforms All

### **start string**

Synopsis Lower bound of the group range  
 Context **configure service vprn string mld ssm-translate group-range start string end string**  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **end string**

Synopsis Upper bound of the group range  
 Context **configure service vprn string mld ssm-translate group-range start string end string**  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1

Platforms All

### **source** [[source-address](#)] *string*

Synopsis Add a list entry for **source**

Context **configure service vpn** *string* **mld ssm-translate group-range start** *string* **end** *string*  
[source](#) *string*

Tree [source](#)

Min. Instances 1

Introduced 16.0.R1

Platforms All

### **[source-address]** *string*

Synopsis Source IP address

Context **configure service vpn** *string* **mld ssm-translate group-range start** *string* **end** *string*  
[source](#) *string*

Tree [source](#)

Notes This element is part of a list key.

Introduced 16.0.R2

Platforms All

### **msdp**

Synopsis Enable the **msdp** context

Context **configure service vpn** *string* **msdp**

Tree [msdp](#)

Introduced 19.10.R1

Platforms All

### **active-source-limit** *number*

Synopsis Maximum number of active messages accepted by MSDP

Context **configure service vpn** *string* **msdp active-source-limit** *number*

Tree [active-source-limit](#)

Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MSDP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

**data-encapsulation** *boolean*

Synopsis	Enable encapsulation of multicast data used by MSDP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp</a> <b>data-encapsulation</b> <i>boolean</i>
Tree	<a href="#">data-encapsulation</a>
Default	true
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp</a> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**group** [*name*] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	19.10.R1
Platforms	All

**[name]** *string*

Synopsis	MSDP group name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**active-source-limit** *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">active-source-limit</a> <i>number</i>
Tree	<a href="#">active-source-limit</a>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MSDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1

Platforms All

### **export-policy** *reference*

Synopsis Policies to export source active state into MSDP

Context **configure** [service vprn string msdp group string](#) [export-policy reference](#)

Tree [export-policy](#)

Reference **configure** [policy-options policy-statement string](#)

Max. Instances 5

Notes This element is ordered by the user.

Introduced 19.10.R1

Platforms All

### **import-policy** *reference*

Synopsis Policy to import source active state from MSDP

Context **configure** [service vprn string msdp group string](#) [import-policy reference](#)

Tree [import-policy](#)

Reference **configure** [policy-options policy-statement string](#)

Max. Instances 5

Notes This element is ordered by the user.

Introduced 19.10.R1

Platforms All

### **local-address** *string*

Synopsis Local end of an MSDP session

Context **configure** [service vprn string msdp group string](#) [local-address string](#)

Tree [local-address](#)

Introduced 19.10.R1

Platforms All

**mode** *keyword*

Synopsis	Topology of groups of peers
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	standard, mesh-group
Default	standard
Introduced	19.10.R1
Platforms	All

**peer** [[ip-address](#)] *string*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <b>peer</b> <i>string</i>
Tree	<a href="#">peer</a>
Introduced	19.10.R1
Platforms	All

**[ip-address]** *string*

Synopsis	IP address of the remote MSDP router for peering
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <b>peer</b> <i>string</i>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**active-source-limit** *number*

Synopsis	Maximum number of active messages accepted by MSDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <b>peer</b> <i>string</i> <b>active-source-limit</b> <i>number</i>
Tree	<a href="#">active-source-limit</a>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of MSDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

**authentication-key** *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

**default-peer** *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>default-peer</b> <i>boolean</i>
Tree	<a href="#">default-peer</a>
Default	false
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Policy to import source active state from MSDP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **local-address** *string*

Synopsis	Local end of an MSDP session
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>local-address</b> <i>string</i>
Tree	<a href="#">local-address</a>
Introduced	19.10.R1
Platforms	All

### **receive-message-rate**

Synopsis	Enter the <b>receive-message-rate</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp group</a> <i>string</i> <a href="#">peer</a> <i>string</i> <b>receive-message-rate</b>
Tree	<a href="#">receive-message-rate</a>
Introduced	19.10.R1
Platforms	All

**rate number**

Synopsis	Number of MSDP messages read from the TCP session
Context	<b>configure service vprn string msdp group string peer string receive-message-rate rate number</b>
Tree	<b>rate</b>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

**threshold number**

Synopsis	Limit for MSDP messages read from the TCP session
Context	<b>configure service vprn string msdp group string peer string receive-message-rate threshold number</b>
Tree	<b>threshold</b>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

**time number**

Synopsis	Limit of MSDP messages read from the TCP session
Context	<b>configure service vprn string msdp group string peer string receive-message-rate time number</b>
Tree	<b>time</b>
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

**receive-message-rate**

Synopsis	Enter the <b>receive-message-rate</b> context
Context	<b>configure service vprn string msdp group string receive-message-rate</b>
Tree	<b>receive-message-rate</b>
Introduced	19.10.R1

Platforms All

### **rate** *number*

Synopsis Number of MSDP messages read from the TCP session  
 Context **configure** [service vprn](#) *string* [msdp group](#) *string* [receive-message-rate](#) *rate number*  
 Tree [rate](#)  
 Range 10 to 10000  
 Introduced 19.10.R1  
 Platforms All

### **threshold** *number*

Synopsis Limit for MSDP messages read from the TCP session  
 Context **configure** [service vprn](#) *string* [msdp group](#) *string* [receive-message-rate](#) *threshold number*  
 Tree [threshold](#)  
 Range 1 to 1000000  
 Introduced 19.10.R1  
 Platforms All

### **time** *number*

Synopsis Limit of MSDP messages read from the TCP session  
 Context **configure** [service vprn](#) *string* [msdp group](#) *string* [receive-message-rate](#) *time number*  
 Tree [time](#)  
 Range 1 to 600  
 Units seconds  
 Introduced 19.10.R1  
 Platforms All

### **import-policy** *reference*

Synopsis Policy to import source active state from MSDP  
 Context **configure** [service vprn](#) *string* [msdp import-policy](#) *reference*  
 Tree [import-policy](#)

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

### **local-address** *string*

Synopsis	Local end of an MSDP session
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">local-address</a> <i>string</i>
Tree	<a href="#">local-address</a>
Introduced	19.10.R1
Platforms	All

### **peer** [[ip-address](#)] *string*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">peer</a> <i>string</i>
Tree	<a href="#">peer</a>
Introduced	19.10.R1
Platforms	All

### **[ip-address]** *string*

Synopsis	IP address of the remote MSDP router for peering
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">msdp</a> <a href="#">peer</a> <i>string</i>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

### **active-source-limit** *number*

Synopsis	Maximum number of active messages accepted by MSDP
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Context	<b>configure service vprn string msdp peer string active-source-limit number</b>
Tree	<a href="#">active-source-limit</a>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of MSDP
Context	<b>configure service vprn string msdp peer string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	19.10.R1
Platforms	All

### **authentication-key** *string*

Synopsis	MD5 authentication key for the MSDP peering session
Context	<b>configure service vprn string msdp peer string authentication-key string</b>
Tree	<a href="#">authentication-key</a>
String Length	1 to 370
Introduced	19.10.R1
Platforms	All

### **default-peer** *boolean*

Synopsis	Enable/Disable default peer as MSDP peer
Context	<b>configure service vprn string msdp peer string default-peer boolean</b>
Tree	<a href="#">default-peer</a>
Default	false
Introduced	19.10.R1
Platforms	All

**export-policy** *reference*

Synopsis	Policies to export source active state into MSDP
Context	<b>configure</b> <a href="#">service vprn string msdp peer string export-policy reference</a>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**import-policy** *reference*

Synopsis	Policy to import source active state from MSDP
Context	<b>configure</b> <a href="#">service vprn string msdp peer string import-policy reference</a>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	19.10.R1
Platforms	All

**local-address** *string*

Synopsis	Local end of an MSDP session
Context	<b>configure</b> <a href="#">service vprn string msdp peer string local-address string</a>
Tree	<a href="#">local-address</a>
Introduced	19.10.R1
Platforms	All

**receive-message-rate**

Synopsis	Enter the <b>receive-message-rate</b> context
Context	<b>configure</b> <a href="#">service vprn string msdp peer string receive-message-rate</a>

Tree	<a href="#">receive-message-rate</a>
Introduced	19.10.R1
Platforms	All

**rate number**

Synopsis	Number of MSDP messages read from the TCP session
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">receive-message-rate</a> <a href="#">rate</a> <i>number</i>
Tree	<a href="#">rate</a>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

**threshold number**

Synopsis	Limit for MSDP messages read from the TCP session
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">receive-message-rate</a> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

**time number**

Synopsis	Limit of MSDP messages read from the TCP session
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">msdp peer</a> <i>string</i> <a href="#">receive-message-rate</a> <a href="#">time</a> <i>number</i>
Tree	<a href="#">time</a>
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

**receive-message-rate**

Synopsis	Enter the <b>receive-message-rate</b> context
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Context	<b>configure service vprn string msdp receive-message-rate</b>
Tree	<b>receive-message-rate</b>
Introduced	19.10.R1
Platforms	All

**rate number**

Synopsis	Number of MSDP messages read from the TCP session
Context	<b>configure service vprn string msdp receive-message-rate rate number</b>
Tree	<b>rate</b>
Range	10 to 10000
Introduced	19.10.R1
Platforms	All

**threshold number**

Synopsis	Limit for MSDP messages read from the TCP session
Context	<b>configure service vprn string msdp receive-message-rate threshold number</b>
Tree	<b>threshold</b>
Range	1 to 1000000
Introduced	19.10.R1
Platforms	All

**time number**

Synopsis	Limit of MSDP messages read from the TCP session
Context	<b>configure service vprn string msdp receive-message-rate time number</b>
Tree	<b>time</b>
Range	1 to 600
Units	seconds
Introduced	19.10.R1
Platforms	All

**rpf-table** *keyword*

Synopsis	Route tables for RPF lookup
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">rpf-table</a> <i>keyword</i>
Tree	<a href="#">rpf-table</a>
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	19.10.R1
Platforms	All

**source** [[ip-prefix](#)] *string*

Synopsis	Enter the <b>source</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Introduced	19.10.R1
Platforms	All

**[ip-prefix]** *string*

Synopsis	Source IP address for accepted active source messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	19.10.R1
Platforms	All

**active-source-limit** *number*

Synopsis	Number of active source messages accepted by MSDP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">msdp</a> <a href="#">source</a> <i>string</i> <a href="#">active-source-limit</a> <i>number</i>
Tree	<a href="#">active-source-limit</a>
Range	0 to 1000000
Introduced	19.10.R1
Platforms	All

**source-active-cache-lifetime** *number*

Synopsis	Lifetime of SA entries in the cache
Context	<b>configure service vprn string msdp source-active-cache-lifetime number</b>
Tree	<a href="#">source-active-cache-lifetime</a>
Range	90 to 600
Units	seconds
Default	90
Introduced	19.10.R1
Platforms	All

**mss-adjust**

Synopsis	Enable the <b>mss-adjust</b> context
Context	<b>configure service vprn string mss-adjust</b>
Tree	<a href="#">mss-adjust</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT group used for TCP-MSS adjustment
Context	<b>configure service vprn string mss-adjust nat-group number</b>
Tree	<a href="#">nat-group</a>
Max. Range	0 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**segment-size** *number*

Synopsis	TCP-MSS option value in transmitted TCP SYN requests
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Context	<b>configure service vprn</b> <i>string</i> <b>mss-adjust segment-size</b> <i>number</i>
Tree	<a href="#">segment-size</a>
Range	160 to 10240
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mtrace2

Synopsis	Enter the <b>mtrace2</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>mtrace2</b>
Tree	<a href="#">mtrace2</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of multicast path tracing
Context	<b>configure service vprn</b> <i>string</i> <b>mtrace2 admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## udp-port *number*

Synopsis	Destination and listening port for the mtrace2 command
Context	<b>configure service vprn</b> <i>string</i> <b>mtrace2 udp-port</b> <i>number</i>
Tree	<a href="#">udp-port</a>
Range	1024 to 49151
Default	5000
Introduced	16.0.R1
Platforms	All

### **multicast-info-policy** *reference*

Synopsis	Multicast policy name for virtual router
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">multicast-info-policy</a> <i>reference</i>
Tree	<a href="#">multicast-info-policy</a>
Reference	<b>configure</b> <a href="#">multicast-management</a> <a href="#">multicast-info-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mvpn**

Synopsis	Enable the <b>mvpn</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn</a>
Tree	<a href="#">mvpn</a>
Introduced	19.5.R1
Platforms	All

### **auto-discovery**

Synopsis	Enter the <b>auto-discovery</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">auto-discovery</a>
Tree	<a href="#">auto-discovery</a>
Introduced	19.5.R1
Platforms	All

### **source-address** *string*

Synopsis	IPv4 source address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">auto-discovery</a> <a href="#">source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Default	0.0.0.0
Introduced	19.5.R1
Platforms	All

**type** *keyword*

Synopsis	Status of multicast VPN membership auto-discovery
Context	<b>configure service vpn</b> <i>string mvpn auto-discovery type keyword</i>
Tree	<a href="#">type</a>
Options	bgp, mdt-safi
Introduced	19.5.R1
Platforms	All

**c-mcast-signaling** *keyword*

Synopsis	Protocol for PE-to-PE signaling of CE multicast states
Context	<b>configure service vpn</b> <i>string mvpn c-mcast-signaling keyword</i>
Tree	<a href="#">c-mcast-signaling</a>
Options	bgp, pim
Default	pim
Introduced	19.5.R1
Platforms	All

**intersite-shared**

Synopsis	Enter the <b>intersite-shared</b> context
Context	<b>configure service vpn</b> <i>string mvpn intersite-shared</i>
Tree	<a href="#">intersite-shared</a>
Description	Commands in this context configure whether to use inter-site shared C-trees. Optional parameters allow enabling additional intersite shared functionality. Not specifying an optional parameter when executing the command disables that parameter.
Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of inter-site shared C-trees use
Context	<b>configure service vpn</b> <i>string mvpn intersite-shared admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	enable
Introduced	19.5.R1
Platforms	All

### **kat-type5-advertisement-withdraw** *boolean*

Synopsis	Enable KATs on source PEs for ng-MVPN deployments
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn intersite-shared</a> <a href="#">kat-type5-advertisement-withdraw</a> <i>boolean</i>
Tree	<a href="#">kat-type5-advertisement-withdraw</a>
Description	When configured to <b>true</b> , this command specifies that the MVPN Type-5 “Source Active AD routes” are not removed even if all receivers are removed from the tree.
Default	false
Introduced	19.5.R1
Platforms	All

### **persistent-type5-advertisement** *boolean*

Synopsis	Ensure Type-5 S-A routes are generated for MCAST source
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn intersite-shared</a> <a href="#">persistent-type5-advertisement</a> <i>boolean</i>
Tree	<a href="#">persistent-type5-advertisement</a>
Description	When configured to <b>true</b> , this command removes the MVPN Type-5 “Source Active AD routes” even if receivers are present but the keepalive timer (KAT) has timed out because of no traffic.
Default	false
Introduced	19.5.R1
Platforms	All

### **mdt-type** *keyword*

Synopsis	MVPN instance type per PE node
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">mdt-type</a> <i>keyword</i>
Tree	<a href="#">mdt-type</a>
Options	sender-only, receiver-only, sender-receiver
Default	sender-receiver

Introduced	19.5.R1
Platforms	All

## provider-tunnel

Synopsis	Enter the <b>provider-tunnel</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a>
Tree	<a href="#">provider-tunnel</a>
Introduced	19.5.R1
Platforms	All

## inclusive

Synopsis	Enter the <b>inclusive</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a>
Tree	<a href="#">inclusive</a>
Introduced	19.5.R1
Platforms	All

## bier

Synopsis	Enable the <b>bier</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">bier</a>
Tree	<a href="#">bier</a>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	19.5.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of BIER
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">bier</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable



Introduced	19.5.R1
Platforms	All

**sub-domain** *number*

Synopsis	Sub-domain used to attach the BIER provider tunnel
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive bier sub-domain</b> <i>number</i>
Tree	<b>sub-domain</b>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

**bsr** *keyword*

Synopsis	BSR signaling type
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive bsr</b> <i>keyword</i>
Tree	<b>bsr</b>
Options	unicast, spmsi
Introduced	19.5.R1
Platforms	All

**mldp**

Synopsis	Enable the <b>mldp</b> context
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive mldp</b>
Tree	<b>mldp</b>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MLDP LSP use for tunnels
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive mldp admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>

Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

## **p2mp-sr**

Synopsis	Enable the <b>p2mp-sr</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>mvpn provider-tunnel inclusive p2mp-sr</b>
Tree	<b>p2mp-sr</b>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	21.5.R1
Platforms	All

## **admin-state** *keyword*

Synopsis	Administrative state for P2MP SR
Context	<b>configure service vpn</b> <i>string</i> <b>mvpn provider-tunnel inclusive p2mp-sr admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

## **bfd-leaf** *boolean*

Synopsis	Enable unidirectional multipoint BFD on the leaf PE
Context	<b>configure service vpn</b> <i>string</i> <b>mvpn provider-tunnel inclusive p2mp-sr bfd-leaf</b> <i>boolean</i>
Tree	<b>bfd-leaf</b>
Description	When configured to <b>true</b> , this command enables unidirectional multipoint BFD sessions on a receiver (leaf) PE node for upstream fast failure detection over P2MP SR tree LSP.
Default	false
Introduced	21.10.R1
Platforms	All

## bfd-root

Synopsis	Enable the <b>bfd-root</b> context
Context	<b>configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root</b>
Tree	<b>bfd-root</b>
Introduced	21.10.R1
Platforms	All

## multiplier *number*

Synopsis	Multiplier for the transmit interval of the BFD session
Context	<b>configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root multiplier <i>number</i></b>
Tree	<b>multiplier</b>
Description	This command configures the multiplier for the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	All

## transmit-interval *number*

Synopsis	Transmit interval of the BFD session
Context	<b>configure service vprn string mvpn provider-tunnel inclusive p2mp-sr bfd-root transmit-interval <i>number</i></b>
Tree	<b>transmit-interval</b>
Description	This command configures the transmit interval. The interval and the multiplier are used to calculate the detection time, which is the period of time without receiving BFD packets after which the session failure is determined.
Range	10 to 100000
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	All

**p2mp-policy** *boolean*

Synopsis	Use P2MP policy for inclusive MVPN provider tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive p2mp-sr</a> <a href="#">p2mp-policy boolean</a>
Tree	<a href="#">p2mp-policy</a>
Default	false
Introduced	21.5.R1
Platforms	All

**static-policy** *reference*

Synopsis	Static policy for inclusive MVPN provider tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive p2mp-sr</a> <a href="#">static-policy reference</a>
Tree	<a href="#">static-policy</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i>
Introduced	21.5.R1
Platforms	All

**pim**

Synopsis	Enable the <b>pim</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive pim</a>
Tree	<a href="#">pim</a>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of PIM use for provider tunnels
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive pim</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable

Introduced	19.5.R1
Platforms	All

### **group-address** *string*

Synopsis	Multicast group address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">pim</a> <a href="#">group-address</a> <i>string</i>
Tree	<a href="#">group-address</a>
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Frequency at which PIM Hello messages are transmitted
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">pim</a> <a href="#">hello-interval</a> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	0 to 255
Default	30
Introduced	19.5.R1
Platforms	All

### **hello-multiplier** *number*

Synopsis	Multiplier to determine the holdtime for a PIM neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">pim</a> <a href="#">hello-multiplier</a> <i>number</i>
Tree	<a href="#">hello-multiplier</a>
Range	20 to 100
Default	35
Introduced	19.5.R1
Platforms	All

### **improved-assert** *boolean*

Synopsis	Enable the improved assert procedure
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Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive pim improved-assert</b> <i>boolean</i>
Tree	<b>improved-assert</b>
Default	true
Introduced	19.5.R1
Platforms	All

**mode** *keyword*

Synopsis	PIM mode for the inclusive provider tunnel
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive pim mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	asm, ssm
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

**three-way-hello** *boolean*

Synopsis	Enable PIM three-way hello
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive pim three-way-hello</b> <i>boolean</i>
Tree	<b>three-way-hello</b>
Default	false
Introduced	19.5.R1
Platforms	All

**tracking-support** *boolean*

Synopsis	Enable the T bit in the LAN Prune Delay option
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel inclusive pim tracking-support</b> <i>boolean</i>
Tree	<b>tracking-support</b>
Default	false
Introduced	19.5.R1
Platforms	All

## rsvp

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure service vprn string mvpn provider-tunnel inclusive rsvp</b>
Tree	<a href="#">rsvp</a>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	19.5.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of RSVP use for provider tunnels
Context	<b>configure service vprn string mvpn provider-tunnel inclusive rsvp admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

## bfd-leaf *boolean*

Synopsis	Enable unidirectional multi-point BFD on a receiver
Context	<b>configure service vprn string mvpn provider-tunnel inclusive rsvp bfd-leaf boolean</b>
Tree	<a href="#">bfd-leaf</a>
Default	false
Introduced	19.5.R1
Platforms	All

## bfd-root

Synopsis	Enable the <b>bfd-root</b> context
Context	<b>configure service vprn string mvpn provider-tunnel inclusive rsvp bfd-root</b>
Tree	<a href="#">bfd-root</a>
Introduced	19.5.R1
Platforms	All

**multiplier** *number*

Synopsis	Enable unidirectional multi-point BFD on a sender
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">rsvp</a> <a href="#">bfd-root</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 20
Default	3
Introduced	19.5.R1
Platforms	All

**transmit-interval** *number*

Synopsis	Transmit interval for the BFD session
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">rsvp</a> <a href="#">bfd-root</a> <a href="#">transmit-interval</a> <i>number</i>
Tree	<a href="#">transmit-interval</a>
Range	10 to 100000
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

**lsp-template** *reference*

Synopsis	P2MP LSP created as the provider tunnel
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">rsvp</a> <a href="#">lsp-template</a> <i>reference</i>
Tree	<a href="#">lsp-template</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i>
Introduced	19.5.R1
Platforms	All

**umh-rate-monitoring**

Synopsis	Enter the <b>umh-rate-monitoring</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">inclusive</a> <a href="#">umh-rate-monitoring</a>



Tree	<a href="#">umh-rate-monitoring</a>
Introduced	21.5.R1
Platforms	All

**revertive-timer** *number*

Synopsis	Time until switch to primary PMSI after recovering rate
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive umh-rate-monitoring revertive-timer</a> <i>number</i>
Tree	<a href="#">revertive-timer</a>
Range	0 to 3600
Introduced	21.5.R1
Platforms	All

**traffic-rate-delta** *number*

Synopsis	Rate delta between PMSIs under which traffic switches
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive umh-rate-monitoring traffic-rate-delta</a> <i>number</i>
Tree	<a href="#">traffic-rate-delta</a>
Range	0 to 4294967294
Introduced	21.5.R1
Platforms	All

**wildcard-spmsi** *boolean*

Synopsis	Enable RFC 6625 S-PMSI functionality for NG-MVPN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel inclusive wildcard-spmsi</a> <i>boolean</i>
Tree	<a href="#">wildcard-spmsi</a>
Default	false
Introduced	19.5.R1
Platforms	All

**selective**

Synopsis	Enter the <b>selective</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective</b>
Tree	<b>selective</b>
Introduced	19.5.R1
Platforms	All

### **asm-mdt** *boolean*

Synopsis	Enable Data MDT with PIM-ASM mode on receiver PE node
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective asm-mdt</b> <i>boolean</i>
Tree	<b>asm-mdt</b>
Default	false
Introduced	19.5.R1
Platforms	All

### **auto-discovery** *boolean*

Synopsis	Enable C-trees to P-tunnel binding auto-discovery
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective auto-discovery</b> <i>boolean</i>
Tree	<b>auto-discovery</b>
Default	false
Introduced	19.5.R1
Platforms	All

### **bier**

Synopsis	Enable the <b>bier</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective bier</b>
Tree	<b>bier</b>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	19.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of BIER
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Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective bier admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

### **sub-domain** *number*

Synopsis	Sub-domain used to attach the BIER provider tunnel
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective bier sub-domain</b> <i>number</i>
Tree	<b>sub-domain</b>
Range	0 to 255
Introduced	19.5.R1
Platforms	All

### **data-delay-interval** *number*

Synopsis	Interval a PE switches from inclusive to selective
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective data-delay-interval</b> <i>number</i>
Tree	<b>data-delay-interval</b>
Range	3 to 180
Default	3
Introduced	19.5.R1
Platforms	All

### **data-threshold**

Synopsis	Enter the <b>data-threshold</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective data-threshold</b>
Tree	<b>data-threshold</b>
Introduced	19.5.R1
Platforms	All

**group-prefix** [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>group-prefix</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-prefix</a>
Introduced	19.5.R1
Platforms	All

**[ip-group-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 multicast group address and prefix
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-prefix</a>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**pe-threshold-add** *number*

Synopsis	PE add threshold
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">pe-threshold-add</a> <i>number</i>
Tree	<a href="#">pe-threshold-add</a>
Range	1 to 65535
Default	65535
Introduced	19.5.R1
Platforms	All

**pe-threshold-delete** *number*

Synopsis	PE delete threshold
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">pe-threshold-delete</a> <i>number</i>
Tree	<a href="#">pe-threshold-delete</a>
Range	2 to 65535

Default	65535
Introduced	19.5.R1
Platforms	All

**threshold** *number*

Synopsis	S-PMSI threshold
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">data-threshold</a> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>threshold</b> <i>number</i>
Tree	<a href="#">threshold</a>
Range	0 to 4294967294
Units	kilobps
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

**join-tlv-packing** *boolean*

Synopsis	Enable packing of MDT join TLVs into a single PDU
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">join-tlv-packing</a> <i>boolean</i>
Tree	<a href="#">join-tlv-packing</a>
Default	true
Introduced	19.5.R1
Platforms	All

**mldp**

Synopsis	Enable the <b>mldp</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <b>mldp</b>
Tree	<a href="#">mldp</a>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of MLDP LSP use for tunnels
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">mldp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**maximum-p2mp-spmsi** *number*

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">mldp</a> <b>maximum-p2mp-spmsi</b> <i>number</i>
Tree	<a href="#">maximum-p2mp-spmsi</a>
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

**multistream-spmsi** [[multistream-id](#)] *number*

Synopsis	Enter the <b>multistream-spmsi</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <b>multistream-spmsi</b> <i>number</i>
Tree	<a href="#">multistream-spmsi</a>
Introduced	19.5.R1
Platforms	All

**[[multistream-id](#)]** *number*

Synopsis	Multistream spmsi id
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <b>multistream-spmsi</b> <i>number</i>
Tree	<a href="#">multistream-spmsi</a>
Range	1 to 1024
Notes	This element is part of a list key.

Introduced	19.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of multi-stream S-PMSI
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**group-prefix** [[ip-group-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) [source-prefix](#) (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for <b>group-prefix</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-prefix</a>
Introduced	19.5.R1
Platforms	All

**[ip-group-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 multicast group address and prefix
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-prefix</a>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**source-prefix** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IPv4 or IPv6 unicast source address and prefix
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">group-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>source-prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-prefix</a>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**lsp-template** *reference*

Synopsis	RSVP-TE LSP template for S-PMSI
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">lsp-template</a> <i>reference</i>
Tree	<a href="#">lsp-template</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">mpls</a> <a href="#">lsp-template</a> <i>string</i>
Notes	The following elements are part of a choice: <b>lsp-template</b> , <b>p2mp-sr</b> , or <b>pim</b> .
Introduced	19.5.R1
Platforms	All

**p2mp-sr**

Synopsis	Enter the <b>p2mp-sr</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">p2mp-sr</a>
Tree	<a href="#">p2mp-sr</a>
Notes	The following elements are part of a choice: <b>lsp-template</b> , <b>p2mp-sr</b> , or <b>pim</b> .
Introduced	21.5.R1
Platforms	All

**p2mp-policy** *boolean*

Synopsis	Use P2MP policy for selective MVPN provider tunnel
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">multistream-spmsi</a> <i>number</i> <a href="#">p2mp-sr</a> <a href="#">p2mp-policy</a> <i>boolean</i>
Tree	<a href="#">p2mp-policy</a>



Default	false
Introduced	21.5.R1
Platforms	All

### **static-policy** *reference*

Synopsis	P2MP static policy for inclusive MVPN provider tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective multistream-spmsi</a> <i>number</i> <a href="#">p2mp-sr static-policy</a> <i>reference</i>
Tree	<a href="#">static-policy</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i>
Introduced	21.5.R1
Platforms	All

### **pim**

Synopsis	Enable the <b>pim</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective multistream-spmsi</a> <i>number</i> <a href="#">pim</a>
Tree	<a href="#">pim</a>
Notes	The following elements are part of a choice: <b>lsp-template</b> , <b>p2mp-sr</b> , or <b>pim</b> .
Introduced	19.5.R1
Platforms	All

### **group-address** *string*

Synopsis	Group address of the data MDT
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn provider-tunnel selective multistream-spmsi</a> <i>number</i> <a href="#">pim group-address</a> <i>string</i>
Tree	<a href="#">group-address</a>
Introduced	19.5.R1
Platforms	All

### **mode** *keyword*

Synopsis	PIM mode for the selective provider tunnel
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Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective multistream-spm</b> <i>number pim mode keyword</i>
Tree	<a href="#">mode</a>
Options	asm, ssm
Introduced	19.5.R1
Platforms	All

### **p2mp-sr**

Synopsis	Enable the <b>p2mp-sr</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective p2mp-sr</b>
Tree	<a href="#">p2mp-sr</a>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	21.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of P2MP SR
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective p2mp-sr admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	All

### **p2mp-policy** *boolean*

Synopsis	Use P2MP policy for selective MVPN provider tunnel
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective p2mp-sr p2mp-policy</b> <i>boolean</i>
Tree	<a href="#">p2mp-policy</a>
Default	false
Introduced	21.5.R1
Platforms	All

**static-policy** *reference*

Synopsis	Static policy for selective MVPN provider tunnel
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">p2mp-sr</a> <a href="#">static-policy</a> <a href="#">reference</a>
Tree	<a href="#">static-policy</a>
Reference	<b>configure</b> <a href="#">router</a> <i>string</i> <a href="#">p2mp-sr-tree</a> <a href="#">p2mp-policy</a> <i>string</i>
Introduced	21.5.R1
Platforms	All

**pim**

Synopsis	Enable the <b>pim</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">pim</a>
Tree	<a href="#">pim</a>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	19.5.R1
Platforms	All

**group-prefix** *string*

Synopsis	Multicast group address and netmask length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">pim</a> <a href="#">group-prefix</a> <i>string</i>
Tree	<a href="#">group-prefix</a>
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

**mode** *keyword*

Synopsis	PIM mode.
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">pim</a> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	asm, ssm
Notes	This element is mandatory.

Introduced	19.5.R1
Platforms	All

**rsvp**

Synopsis	Enable the <b>rsvp</b> context
Context	<b>configure service vprn string mvpn provider-tunnel selective rsvp</b>
Tree	<a href="#">rsvp</a>
Notes	The following elements are part of a choice: <b>bier</b> , <b>mldp</b> , <b>p2mp-sr</b> , <b>pim</b> , or <b>rsvp</b> .
Introduced	19.5.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of RSVP use for provider tunnels
Context	<b>configure service vprn string mvpn provider-tunnel selective rsvp admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.5.R1
Platforms	All

**lsp-template reference**

Synopsis	P2MP LSP created as the selective provider tunnel
Context	<b>configure service vprn string mvpn provider-tunnel selective rsvp lsp-template reference</b>
Tree	<a href="#">lsp-template</a>
Reference	<b>configure router string mpls lsp-template string</b>
Introduced	19.5.R1
Platforms	All

**maximum-p2mp-spmsi number**

Synopsis	Maximum number of RSVP P2MP or LDP P2MP S-PMSI tunnels
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Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective rsvp maximum-p2mp-spmsi</b> <i>number</i>
Tree	<b>maximum-p2mp-spmsi</b>
Range	1 to 4000
Default	10
Introduced	19.5.R1
Platforms	All

## umh-rate-monitoring

Synopsis	Enter the <b>umh-rate-monitoring</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective umh-rate-monitoring</b>
Tree	<b>umh-rate-monitoring</b>
Introduced	21.5.R1
Platforms	All

## **group** [**group-ip-address**] (*ipv4-prefix* | *ipv6-prefix*) **source** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective umh-rate-monitoring group</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>group</b>
Introduced	21.5.R1
Platforms	All

## **[group-ip-address]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Group IP address
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn provider-tunnel selective umh-rate-monitoring group</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>source</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>group</b>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

**source** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">umh-rate-monitoring</a> <a href="#">group</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	All

**revertive-timer** *number*

Synopsis	Time until switch to primary PMSI after recovering rate
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">umh-rate-monitoring</a> <a href="#">group</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">revertive-timer</a> <i>number</i>
Tree	<a href="#">revertive-timer</a>
Range	0 to 3600
Introduced	21.5.R1
Platforms	All

**traffic-rate-delta** *number*

Synopsis	Rate delta between PMSIs under which traffic switches
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">provider-tunnel</a> <a href="#">selective</a> <a href="#">umh-rate-monitoring</a> <a href="#">group</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">source</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">traffic-rate-delta</a> <i>number</i>
Tree	<a href="#">traffic-rate-delta</a>
Range	0 to 4294967294
Introduced	21.5.R1
Platforms	All

**redundant-source-list**

Synopsis	Enter the <b>redundant-source-list</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">redundant-source-list</a>
Tree	<a href="#">redundant-source-list</a>
Introduced	19.5.R1
Platforms	All

**source-prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for <b>source-prefix</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">redundant-source-list</a> <a href="#">source-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">source-prefix</a>
Max. Instances	16
Introduced	19.5.R1
Platforms	All

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Unicast address prefix and mask
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">redundant-source-list</a> <a href="#">source-prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">source-prefix</a>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**rpf-select**

Synopsis	Enter the <b>rpf-select</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">rpf-select</a>
Tree	<a href="#">rpf-select</a>
Introduced	19.5.R1
Platforms	All

**core-mvpn** [[core-mvpn-service-name](#)] *reference*

Synopsis	Enter the <b>core-mvpn</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">mvpn</a> <a href="#">rpf-select</a> <a href="#">core-mvpn</a> <i>reference</i>
Tree	<a href="#">core-mvpn</a>
Introduced	19.5.R1
Platforms	All

**[core-mvpn-service-name] reference**

Synopsis	Core MVPN service name
Context	<b>configure service vprn string mvpn rpf-select core-mvpn reference</b>
Tree	<a href="#">core-mvpn</a>
Reference	<b>configure service vprn string</b>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**group-prefix [ip-group-prefix] string**

Synopsis	Enter the <b>group-prefix</b> list instance
Context	<b>configure service vprn string mvpn rpf-select core-mvpn reference group-prefix string</b>
Tree	<a href="#">group-prefix</a>
Min. Instances	1
Introduced	19.5.R1
Platforms	All

**[ip-group-prefix] string**

Synopsis	IPv4 multicast address prefix and mask
Context	<b>configure service vprn string mvpn rpf-select core-mvpn reference group-prefix string</b>
Tree	<a href="#">group-prefix</a>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**starg boolean****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Starg flag.
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Context	<b>configure service vprn</b> <i>string</i> <b>mvpn rpf-select core-mvpn</b> <i>reference</i> <b>group-prefix</b> <i>string</i> <b>starg</b> <i>boolean</i>
Tree	<b>starg</b>
Default	false
Introduced	19.5.R1
Platforms	All

### **umh-pe-backup**

Synopsis	Enter the <b>umh-pe-backup</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn umh-pe-backup</b>
Tree	<b>umh-pe-backup</b>
Introduced	19.5.R1
Platforms	All

### **umh-pe** [*ip-address*] *string*

Synopsis	Enter the <b>umh-pe</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn umh-pe-backup umh-pe</b> <i>string</i>
Tree	<b>umh-pe</b>
Introduced	19.5.R1
Platforms	All

### [*ip-address*] *string*

Synopsis	IP address for the standby PE
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn umh-pe-backup umh-pe</b> <i>string</i>
Tree	<b>umh-pe</b>
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

### **standby** *string*

Synopsis	<i>ip-address</i> .
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Context	<b>configure service vprn</b> <i>string</i> <b>mvpn umh-pe-backup umh-pe</b> <i>string</i> <b>standby</b> <i>string</i>
Tree	<b>standby</b>
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	All

### **umh-selection** *keyword*

Synopsis	UMH selection mechanism
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn umh-selection</b> <i>keyword</i>
Tree	<b>umh-selection</b>
Options	highest-ip, hash-based, tunnel-status, unicast-rt-pref
Default	highest-ip
Introduced	19.5.R1
Platforms	All

### **vrf-export**

Synopsis	Enter the <b>vrf-export</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn vrf-export</b>
Tree	<b>vrf-export</b>
Introduced	19.5.R1
Platforms	All

### **policy** (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	<b>configure service vprn</b> <i>string</i> <b>mvpn vrf-export policy</b> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<b>policy</b>
Description	This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes.
String Length	1 to 255
Max. Instances	15
Min. Instances	1

Notes	The following elements are part of a choice: <b>policy</b> or <b>unicast</b> . This element is ordered by the user.
Introduced	19.5.R1
Platforms	All

### **unicast** *boolean*

Synopsis	Enable the unicast VRF export policy for the MVPN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-export unicast</a> <i>boolean</i>
Tree	<a href="#">unicast</a>
Default	false
Notes	The following elements are part of a choice: <b>policy</b> or <b>unicast</b> .
Introduced	19.5.R1
Platforms	All

### **vrf-import**

Synopsis	Enter the <b>vrf-import</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-import</a>
Tree	<a href="#">vrf-import</a>
Introduced	19.5.R1
Platforms	All

### **policy** (*policy-expr-string* | *string*)

Synopsis	Route policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-import policy</a> ( <i>policy-expr-string</i>   <i>string</i> )
Tree	<a href="#">policy</a>
Description	This command specifies the route policy name. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed between double quotes.
String Length	1 to 255
Max. Instances	15
Min. Instances	1
Notes	The following elements are part of a choice: <b>policy</b> or <b>unicast</b> .

This element is ordered by the user.

Introduced 19.5.R1  
Platforms All

### **unicast** *boolean*

Synopsis Enable the unicast VRF import policy for the MVPN  
Context **configure** [service vprn](#) *string* [mvpn vrf-import unicast](#) *boolean*  
Tree [unicast](#)  
Default false  
Notes The following elements are part of a choice: **policy** or **unicast**.  
Introduced 19.5.R1  
Platforms All

### **vrf-target**

Synopsis Enter the **vrf-target** context  
Context **configure** [service vprn](#) *string* [mvpn vrf-target](#)  
Tree [vrf-target](#)  
Introduced 19.5.R1  
Platforms All

### **community** *string*

Synopsis Extended community name for the MVPN  
Context **configure** [service vprn](#) *string* [mvpn vrf-target community](#) *string*  
Tree [community](#)  
String Length 10 to 28  
Introduced 19.5.R1  
Platforms All

### **export**

Synopsis Enter the **export** context  
Context **configure** [service vprn](#) *string* [mvpn vrf-target export](#)

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Tree	<a href="#">export</a>
Introduced	19.5.R1
Platforms	All

### **community** *string*

Synopsis	Extended community name for the MVPN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-target export community</a> <i>string</i>
Tree	<a href="#">community</a>
String Length	10 to 28
Introduced	19.5.R1
Platforms	All

### **unicast** *boolean*

Synopsis	Enable the unicast vrf-target for the MVPN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-target export unicast</a> <i>boolean</i>
Tree	<a href="#">unicast</a>
Default	false
Introduced	19.5.R1
Platforms	All

### **import**

Synopsis	Enter the <b>import</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-target import</a>
Tree	<a href="#">import</a>
Introduced	19.5.R1
Platforms	All

### **community** *string*

Synopsis	Extended community name for the MVPN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">mvpn vrf-target import community</a> <i>string</i>
Tree	<a href="#">community</a>

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String Length 10 to 28  
Introduced 19.5.R1  
Platforms All

### **unicast** *boolean*

Synopsis Enable the unicast vrf-target for the MVPN  
Context **configure** [service vprn](#) *string* [mvpn vrf-target import unicast](#) *boolean*  
Tree [unicast](#)  
Default false  
Introduced 19.5.R1  
Platforms All

### **unicast** *boolean*

Synopsis Enable unicast vrf-target for the MVPN  
Context **configure** [service vprn](#) *string* [mvpn vrf-target unicast](#) *boolean*  
Tree [unicast](#)  
Default false  
Introduced 19.5.R1  
Platforms All

### **nat**

Synopsis Enable the **nat** context  
Context **configure** [service vprn](#) *string* [nat](#)  
Tree [nat](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inside**

Synopsis Enter the **inside** context  
Context **configure** [service vprn](#) *string* [nat inside](#)  
Tree [inside](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **I2-aware**

Synopsis	Enter the <b>I2-aware</b> context
Context	<b>configure service vpn string nat inside I2-aware</b>
Tree	<a href="#">I2-aware</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **force-unique-ip-addresses boolean**

Synopsis	Enforce unique IPv4 addresses for L2-aware subscribers
Context	<b>configure service vpn string nat inside I2-aware force-unique-ip-addresses boolean</b>
Tree	<a href="#">force-unique-ip-addresses</a>
Description	When configured to <b>true</b> , the system enforces the uniqueness of IPv4 addresses of L2-aware subscribers in an inside routing context.  This functionality is required if multicast sourced from the inside routing context is enabled for L2-aware subscribers.
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **subscribers [prefix] string**

Synopsis	Add a list entry for <b>subscribers</b>
Context	<b>configure service vpn string nat inside I2-aware subscribers string</b>
Tree	<a href="#">subscribers</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **[prefix] string**

Synopsis	Layer-2 Aware NAT subscriber prefix
Context	<b>configure service vpn string nat inside I2-aware subscribers string</b>

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Tree	<a href="#">subscribers</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## large-scale

Synopsis	Enter the <b>large-scale</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale</a>
Tree	<a href="#">large-scale</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dnat-only

Synopsis	Enter the <b>dnat-only</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dnat-only</a>
Tree	<a href="#">dnat-only</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## source-prefix-list *reference*

Synopsis	NAT prefix list that contains source IP addresses
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dnat-only source-prefix-list reference</a>
Tree	<a href="#">source-prefix-list</a>
Reference	<b>configure</b> <a href="#">service nat prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dual-stack-lite

Synopsis	Enter the <b>dual-stack-lite</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite</a>



Tree	<a href="#">dual-stack-lite</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of Dual Stack Lite
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **deterministic**

Synopsis	Enter the <b>deterministic</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite deterministic</a>
Tree	<a href="#">deterministic</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix-map** [[source-prefix](#)] *string nat-policy reference*

Synopsis	Enter the <b>prefix-map</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite deterministic prefix-map</a> <i>string nat-policy reference</i>
Tree	<a href="#">prefix-map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[source-prefix]** *string*

Synopsis	List containing source IP addresses on the private side
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite deterministic prefix-map</a> <i>string nat-policy reference</i>

Tree	<a href="#">prefix-map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** *reference*

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference</a>
Tree	<a href="#">prefix-map</a>
Reference	<b>configure</b> <a href="#">service nat nat-policy string</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the prefix
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **map** [[from](#)] *string to string*

Synopsis	Enter the <b>map</b> list instance
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale dual-stack-lite deterministic prefix-map string nat-policy reference map string to string</a>
Tree	<a href="#">map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[from]** *string*

Synopsis	Beginning of the range for IPv6 addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <a href="#">string</a> <a href="#">to</a> <a href="#">string</a>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**to** *string*

Synopsis	End of the range for IPv6 addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <a href="#">string</a> <a href="#">to</a> <a href="#">string</a>
Tree	<a href="#">map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**first-outside-address** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <a href="#">string</a> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">dual-stack-lite</a> <a href="#">deterministic</a> <a href="#">prefix-map</a> <a href="#">string</a> <a href="#">nat-policy</a> <a href="#">reference</a> <a href="#">map</a> <a href="#">string</a> <a href="#">to</a> <a href="#">string</a> <a href="#">first-outside-address</a> <a href="#">string</a>
Tree	<a href="#">first-outside-address</a>
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**endpoint** [[address](#)] *string*

Synopsis	Enter the <b>endpoint</b> list instance
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Context	<b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite endpoint string</i>
Tree	<a href="#">endpoint</a>
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[address]** *string*

Synopsis	Dual Stack Lite IPv6 address
Context	<b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite endpoint string</i>
Tree	<a href="#">endpoint</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-fragmentation** *keyword*

Synopsis	Fragmentation control of the AFTR originated downstream IPv6 traffic
Context	<b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite endpoint string ip-fragmentation keyword</i>
Tree	<a href="#">ip-fragmentation</a>
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**min-first-fragment-size-rx** *number*

Synopsis	Minimum MTU size for upstream packets
Context	<b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite endpoint string min-first-fragment-size-rx number</i>
Tree	<a href="#">min-first-fragment-size-rx</a>
Description	This command configures the minimum MTU size for the first fragment in the upstream direction. This command can be used to enable processing of first IPv6 fragments smaller than 1280 bytes. RFC 8200 recommends the minimum MTU in IPv6 be 1280 bytes which allows fragmentation only for packets that are larger than 1280 bytes. If

a first fragment is smaller than 1280 bytes, DS-lite implementation in the SR OS, by default, drops the first fragment.

Range	512 to 1280
Default	1280
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **reassemble** *boolean*

Synopsis	Reassembly of IPv6 payload datagrams
Context	<b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite endpoint</i> <i>string reassemble</i> <i>boolean</i>
Tree	<a href="#">reassemble</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel-mtu** *number*

Synopsis	DS-Lite tunnel MTU for this address
Context	<b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite endpoint</i> <i>string tunnel-mtu</i> <i>number</i>
Tree	<a href="#">tunnel-mtu</a>
Description	This command configures the Dual Stack Lite (DS-Lite) tunnel MTU for this address.
Range	464 to 9212
Default	1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-subscriber-limit** *number*



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	<b>configure service vprn</b> <i>string nat inside large-scale dual-stack-lite max-subscriber-limit</i> <i>number</i>

Tree	<a href="#">max-subscriber-limit</a>
Range	1   2   4   8   16   32   64   128   256   512   1024   2048   4096   8192   16384   32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscriber-prefix-length *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length of the Dual Stack Lite subscribers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale dual-stack-lite subscriber-prefix-length</a> <i>number</i>
Tree	<a href="#">subscriber-prefix-length</a>
Range	32 to 64   128
Default	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## filters

Synopsis	Enter the <b>filters</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale filters</a>
Tree	<a href="#">filters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## downstream

Synopsis	Enter the <b>downstream</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale filters downstream</a>
Tree	<a href="#">downstream</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ipv4 reference

Synopsis IPv4 filter policy name  
 Context **configure service vprn string nat inside large-scale filters downstream ipv4 reference**  
 Tree [ipv4](#)  
 Reference **configure filter ip-filter string**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### nat-policy reference



#### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis NAT policy for LSN  
 Context **configure service vprn string nat inside large-scale nat-policy reference**  
 Tree [nat-policy](#)  
 Reference **configure service nat nat-policy string**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### nat44

Synopsis Enter the **nat44** context  
 Context **configure service vprn string nat inside large-scale nat44**  
 Tree [nat44](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### destination-prefix [[ip-prefix-length](#)] *string*

Synopsis Enter the **destination-prefix** list instance  
 Context **configure service vprn string nat inside large-scale nat44 destination-prefix string**  
 Tree [destination-prefix](#)

Max. Instances	6144
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### [ip-prefix-length] *string*

Synopsis	IP prefix for the destination address
Context	<b>configure service vpn <i>string</i> nat inside large-scale nat44 destination-prefix <i>string</i></b>
Tree	<a href="#">destination-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### nat-policy *reference*



#### WARNING:

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	NAT policy
Context	<b>configure service vpn <i>string</i> nat inside large-scale nat44 destination-prefix <i>string</i> nat-policy <i>reference</i></b>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure service nat nat-policy <i>string</i></b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### deterministic

Synopsis	Enter the <b>deterministic</b> context
Context	<b>configure service vpn <i>string</i> nat inside large-scale nat44 deterministic</b>
Tree	<a href="#">deterministic</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**prefix-map** [[source-prefix](#)] *string nat-policy reference*

Synopsis	Enter the <b>prefix-map</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i>
Tree	<a href="#">prefix-map</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[source-prefix]** *string*

Synopsis	Traffic sent from sources within this prefix will be NATed
Context	<b>configure</b> <a href="#">service vprn</a> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i>
Tree	<a href="#">prefix-map</a>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-policy** *reference*

Synopsis	NAT policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference</i>
Tree	<a href="#">prefix-map</a>
Reference	<b>configure</b> <a href="#">service nat</a> <i>nat-policy string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the prefix
Context	<b>configure</b> <a href="#">service vprn</a> <i>string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **map** [**from**] *string to string*

Synopsis	Enter the <b>map</b> list instance
Context	<b>configure service vprn string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</b>
Tree	<b>map</b>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[from]** *string*

Synopsis	Beginning of the range for IPv4 addresses
Context	<b>configure service vprn string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</b>
Tree	<b>map</b>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **to** *string*

Synopsis	End of the range for IPv4 addresses
Context	<b>configure service vprn string nat inside large-scale nat44 deterministic prefix-map string nat-policy reference map string to string</b>
Tree	<b>map</b>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**first-outside-address** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Outside IP address mapped to inside IP address range
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">nat inside large-scale nat44 deterministic prefix-map</a> <i>string</i> <a href="#">nat-policy reference map</a> <i>string to string</i> <a href="#">first-outside-address</a> <i>string</i>
Tree	<a href="#">first-outside-address</a>
Notes	This element is mandatory.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**max-subscriber-limit** *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Largest value for all subscriber limits in each deterministic pool
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">nat inside large-scale nat44 max-subscriber-limit</a> <i>number</i>
Tree	<a href="#">max-subscriber-limit</a>
Range	1   2   4   8   16   32   64   128   256   512   1024   2048   4096   8192   16384   32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-import** *reference*

Synopsis	Import BGP-VPN routes in NAT inside routing context
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">nat inside large-scale nat44 nat-import</a> <i>reference</i>
Tree	<a href="#">nat-import</a>
Description	<p>This command references an import policy to determine the routes that should be installed in the routing table as NAT routes, which are used to steer traffic to NAT.</p> <p>A dynamic route obtained by BGP-VPN can be imported into an inside (private side) routing context in NAT environment. This route is associated with a NAT policy that maps traffic destined into a NAT pool and outside routing context. If the NAT policy is not explicitly configured in the import route-policy, the imported NAT route is, by default, associated with the default NAT policy defined in the NAT inside routing context.</p>

All BGP-VPN routes that are destined to be imported into NAT inside routing context must be configured with action-type accept in the route policy.

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **source-prefix** [[ip-prefix-length](#)] *string*

Synopsis	Enter the <b>source-prefix</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">source-prefix</a> <i>string</i>
Tree	<a href="#">source-prefix</a>
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[ip-prefix-length]** *string*

Synopsis	IPv4 prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">nat</a> <a href="#">inside</a> <a href="#">large-scale</a> <a href="#">nat44</a> <a href="#">source-prefix</a> <i>string</i>
Tree	<a href="#">source-prefix</a>
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** *reference*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	AT policy associated with the source prefix
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Context	<b>configure service vprn string nat inside large-scale nat44 source-prefix string nat-policy reference</b>
Tree	<a href="#">nat-policy</a>
Reference	<b>configure service nat nat-policy string</b>
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat64

Synopsis	Enable the <b>nat64</b> context
Context	<b>configure service vprn string nat inside large-scale nat64</b>
Tree	<a href="#">nat64</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state keyword

Synopsis	Administrative state of NAT64
Context	<b>configure service vprn string nat inside large-scale nat64 admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## drop-zero-ipv4-checksum boolean



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Drop UDP datagrams with zero IPv4 checksum
Context	<b>configure service vprn string nat inside large-scale nat64 drop-zero-ipv4-checksum boolean</b>
Tree	<a href="#">drop-zero-ipv4-checksum</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **insert-ipv6-fragment-header** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Include IPv6 fragment header to indicate that the sender allows fragmentation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale nat64</a> <a href="#">insert-ipv6-fragment-header</a> <i>boolean</i>
Tree	<a href="#">insert-ipv6-fragment-header</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-fragmentation** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Control fragmentation of originated downstream IPv6 traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale nat64</a> <a href="#">ip-fragmentation</a> <i>keyword</i>
Tree	<a href="#">ip-fragmentation</a>
Options	fragment-ipv6, fragment-ipv6-unless-ipv4-df-set
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-mtu** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Size of the IPv6 downstream packet in NAT64
----------	---

Context	<b>configure service vpn</b> <i>string nat inside large-scale nat64 ipv6-mtu number</i>
Tree	<a href="#">ipv6-mtu</a>
Range	1280 to 9212
Default	1520
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix to derive the IPv6 address from the IPv4 address
Context	<b>configure service vpn</b> <i>string nat inside large-scale nat64 prefix string</i>
Tree	<a href="#">prefix</a>
Default	64:ff9b::/96
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-prefix-length** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	IPv6 prefix length for the NAT64 subscribers
Context	<b>configure service vpn</b> <i>string nat inside large-scale nat64 subscriber-prefix-length number</i>
Tree	<a href="#">subscriber-prefix-length</a>
Range	32 to 64   128
Default	128

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tos



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>tos</b> context
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale nat64 tos</a>
Tree	<a href="#">tos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## downstream



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>downstream</b> context
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale nat64 tos downstream</a>
Tree	<a href="#">downstream</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## use-ipv4 *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Copy TOS/DSCP bits from the incoming IPv4 frame to the outgoing IPv6 frame
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale nat64 tos downstream use-ipv4 boolean</a>
Tree	<a href="#">use-ipv4</a>
Default	false



Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## upstream



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>upstream</b> context
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale nat64 tos upstream</a>
Tree	<a href="#">upstream</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## set-tos (*keyword* | *number*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	TOS/DSCP bits in IPv4 frame in the upstream direction
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale nat64 tos upstream set-tos (<i>keyword</i>   <i>number</i>)</a>
Tree	<a href="#">set-tos</a>
Range	0 to 255
Options	use-ipv6
Default	use-ipv6
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## redundancy

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">service vprn string nat inside large-scale redundancy</a>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer string**

Synopsis IP address of the NAT redundancy peer for this virtual router instance  
Context **configure service vprn string nat inside large-scale redundancy peer string**  
Tree [peer](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **peer6 string**

Synopsis IPv6 address of the NAT redundancy peer for this virtual router instance  
Context **configure service vprn string nat inside large-scale redundancy peer6 string**  
Tree [peer6](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **steering-route string**

Synopsis IP address and prefix length of the steering route  
Context **configure service vprn string nat inside large-scale redundancy steering-route string**  
Tree [steering-route](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **static-port-forwards**

Synopsis Enter the **static-port-forwards** context  
Context **configure service vprn string nat inside large-scale static-port-forwards**  
Tree [static-port-forwards](#)  
Introduced 23.10.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**spf-nat-policy** [[nat-policy](#)] *reference*

Synopsis	Add a list entry for <b>spf-nat-policy</b>
Context	<b>configure service vprn string nat inside large-scale static-port-forwards spf-nat-policy reference</b>
Tree	<a href="#">spf-nat-policy</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[nat-policy]** *reference*

Synopsis	NAT policy
Context	<b>configure service vprn string nat inside large-scale static-port-forwards spf-nat-policy reference</b>
Tree	<a href="#">spf-nat-policy</a>
Reference	<b>configure service nat nat-policy string</b>
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber-identification**

Synopsis	Enter the <b>subscriber-identification</b> context
Context	<b>configure service vprn string nat inside large-scale subscriber-identification</b>
Tree	<a href="#">subscriber-identification</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of subscriber identification
Context	<b>configure service vprn string nat inside large-scale subscriber-identification admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## attribute

Synopsis Enter the **attribute** context

Context **configure service vprn string nat inside large-scale subscriber-identification attribute**

Tree [attribute](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## type keyword



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis RADIUS attribute used as subscriber identifier

Context **configure service vprn string nat inside large-scale subscriber-identification attribute type keyword**

Tree [type](#)

Options alc-sub-string, user-name, class, station-id, imsi, imei

Default alc-sub-string

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vendor keyword



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis The RADIUS Vendor

Context **configure service vprn string nat inside large-scale subscriber-identification attribute vendor keyword**

Tree [vendor](#)

Options standard, nokia, 3gpp

Default nokia

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [service vprn](#) *string* [nat inside large-scale subscriber-identification](#) [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **drop-unidentified-traffic** *boolean*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Drop traffic from unidentified flows  
 Context **configure** [service vprn](#) *string* [nat inside large-scale subscriber-identification](#) [drop-unidentified-traffic](#) *boolean*  
 Tree [drop-unidentified-traffic](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-proxy-server**

Synopsis Enable the **radius-proxy-server** context  
 Context **configure** [service vprn](#) *string* [nat inside large-scale subscriber-identification](#) [radius-proxy-server](#)  
 Tree [radius-proxy-server](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router instance
Context	<b>configure service vprn</b> <i>string</i> <b>nat inside large-scale subscriber-identification radius-proxy-server router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Server name
Context	<b>configure service vprn</b> <i>string</i> <b>nat inside large-scale subscriber-identification radius-proxy-server server</b> <i>string</i>
Tree	<a href="#">server</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**traffic-identification**

Synopsis	Enter the <b>traffic-identification</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>nat inside large-scale traffic-identification</b>
Tree	<a href="#">traffic-identification</a>
Description	Commands in this context configure traffic identification for NAT processing
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**source-prefix-only** *boolean*

Synopsis	Allow traffic associated with source prefixes only
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat inside large-scale traffic-identification</a> <a href="#">source-prefix-only</a> <i>boolean</i>
Tree	<a href="#">source-prefix-only</a>
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**map**

Synopsis	Enter the <b>map</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a>
Tree	<a href="#">map</a>
Introduced	16.0.R1
Platforms	VSR

**map-domain** [[domain-name](#)] *reference*

Synopsis	Add a list entry for <b>map-domain</b>
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a> <a href="#">map-domain</a> <i>reference</i>
Tree	<a href="#">map-domain</a>
Introduced	16.0.R1
Platforms	VSR

**[[domain-name](#)]** *reference*

Synopsis	MAP domain template name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">map</a> <a href="#">map-domain</a> <i>reference</i>
Tree	<a href="#">map-domain</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">map-t</a> <a href="#">domain</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	VSR

## outside

Synopsis	Enter the <b>outside</b> context
Context	<b>configure service vprn string nat outside</b>
Tree	<b>outside</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dnat-only

Synopsis	Enter the <b>dnat-only</b> context
Context	<b>configure service vprn string nat outside dnat-only</b>
Tree	<b>dnat-only</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## route-limit *number*

Synopsis	Limit for internal routes for downstream traffic
Context	<b>configure service vprn string nat outside dnat-only route-limit <i>number</i></b>
Tree	<b>route-limit</b>
Range	1 to 131072
Default	32768
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## filters

Synopsis	Enter the <b>filters</b> context
Context	<b>configure service vprn string nat outside filters</b>
Tree	<b>filters</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## downstream

Synopsis	Enter the <b>downstream</b> context
Context	<b>configure service vprn string nat outside filters downstream</b>
Tree	<a href="#">downstream</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4 reference

Synopsis	IPv4 filter policy name
Context	<b>configure service vprn string nat outside filters downstream ipv4 reference</b>
Tree	<a href="#">ipv4</a>
Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure service vprn string nat outside filters downstream ipv6 reference</b>
Tree	<a href="#">ipv6</a>
Reference	<b>configure filter ipv6-filter string</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## upstream

Synopsis	Enter the <b>upstream</b> context
Context	<b>configure service vprn string nat outside filters upstream</b>
Tree	<a href="#">upstream</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv4 reference**

Synopsis	IPv4 filter policy name
Context	<b>configure service vprn string nat outside filters upstream ipv4 reference</b>
Tree	<a href="#">ipv4</a>
Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ipv6 reference**

Synopsis	IPv6 filter policy name
Context	<b>configure service vprn string nat outside filters upstream ipv6 reference</b>
Tree	<a href="#">ipv6</a>
Reference	<b>configure filter ipv6-filter string</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mtu number**

Synopsis	MTU for downstream traffic
Context	<b>configure service vprn string nat outside mtu number</b>
Tree	<a href="#">mtu</a>
Range	512 to 9000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pool [name] string**

Synopsis	Enter the <b>pool</b> list instance
Context	<b>configure service vprn string nat outside pool string</b>
Tree	<a href="#">pool</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	NAT pool name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address-pooling** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Outside IP address allocation mode for a NAT subscriber
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <b>address-pooling</b> <i>keyword</i>
Tree	<a href="#">address-pooling</a>
Description	<p>This command configures address pooling which defines a relationship between the NAT subscriber and its outside IP address(es).</p> <p>The behavior in NAT, as defined in RFC 7857, strongly recommends that the NAT subscribers be mapped to a single outside IP address. If this outside IP address runs out of ports, no new ports for the subscriber are allocated. This behavior is called paired address pooling.</p> <p>The alternative behavior is arbitrary address pooling, where a NAT subscriber is mapped to multiple IP addresses when the current outside IP address runs out of ports. This way, the subscriber becomes associated with multiple outside IP addresses. While this results in better resource utilization in NAT, it may negatively affect the behavior of some applications.</p>
Options	paired, arbitrary
Default	paired
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**address-range** [[start](#)] *string* [end](#) *string*

Synopsis	Enter the <b>address-range</b> list instance
----------	--

Context	<b>configure service vprn string nat outside pool string address-range string end string</b>
Tree	<a href="#">address-range</a>
Max. Instances	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[start] string**

Synopsis	Lower bound of the NAT address range
Context	<b>configure service vprn string nat outside pool string address-range string end string</b>
Tree	<a href="#">address-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end string**

Synopsis	Upper bound of the NAT address range
Context	<b>configure service vprn string nat outside pool string address-range string end string</b>
Tree	<a href="#">address-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure service vprn string nat outside pool string address-range string end string description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**drain** *boolean*

Synopsis	Start or stop draining this NAT address range
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">address-range</a> <i>string</i> <a href="#">end</a> <i>string</i> <a href="#">drain</a> <i>boolean</i>
Tree	<a href="#">drain</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the outside routing NAT pool
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**applications**

Synopsis	Enter the <b>applications</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">applications</a>
Tree	<a href="#">applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**agnostic** *boolean***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool to create in the outside routing context
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Context	<b>configure service vpn</b> <i>string nat outside pool string applications agnostic boolean</i>
Tree	<a href="#">agnostic</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **flexible-port-allocation** *boolean*



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Allocates individual ports per subscriber in a pool
Context	<b>configure service vpn</b> <i>string nat outside pool string applications flexible-port-allocation boolean</i>
Tree	<a href="#">flexible-port-allocation</a>
Description	When configured to <b>true</b> , the router enables LSN44 pool behavior, where a subscriber allocates ports individually and not through port blocks. The port block is removed and port logging is disabled for this application. Static port forwards can be interleaved with dynamically allocated ports when this application is enabled. A subscriber limit that is the maximum number of subscribers per outside IP address is not supported for this application.
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure service vpn</b> <i>string nat outside pool string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**icmp-echo-reply *boolean***

Synopsis	Allow NAT pool IP addresses to respond to ICMP PINGs
Context	<b>configure</b> <a href="#">service vprn string nat outside pool string icmp-echo-reply boolean</a>
Tree	<a href="#">icmp-echo-reply</a>
Description	<p>This command allows IP addresses in the NAT pool to respond to ICMP Echo requests (PINGs). The configuration can be toggled while the pool is in use.</p> <p>In L2-aware NAT when port-block-extensions is disabled, the reply from an outside IP address is generated only when this IP address has at least one host (binding) behind it.</p> <p>In L2-aware NAT when port-block-extensions is enabled, the reply from an outside IP address is generated regardless if a binding is present.</p> <p>In LSN, the reply from an outside IP address is generated regardless if a binding is present.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**I2-aware**

Synopsis	Enter the <b>I2-aware</b> context
Context	<b>configure</b> <a href="#">service vprn string nat outside pool string I2-aware</a>
Tree	<a href="#">I2-aware</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**default-host**

Synopsis	Enable the <b>default-host</b> context
Context	<b>configure</b> <a href="#">service vprn string nat outside pool string I2-aware default-host</a>
Tree	<a href="#">default-host</a>
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p>

The rate of redirected unknown traffic can be restricted by configuration.

Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inside-router-instance** *string*

Synopsis	Router instance of the DMZ
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware default-host inside-router-instance</a> <i>string</i>
Tree	<a href="#">inside-router-instance</a>
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis	IP address of the default DMZ host
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware default-host ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** *number*

Synopsis	Rate limit for unknown traffic sent to default DMZ host
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware default-host rate-limit</a> <i>number</i>
Tree	<a href="#">rate-limit</a>
Description	This command configures the rate limit of the unknown traffic sent to the default DMZ host.



Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range	1 to 10000
Units	megabps
Default	10
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### external-assignment *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	External IP address for Layer-2-aware
Context	<b>configure service vpn</b> <i>string nat outside pool string l2-aware external-assignment boolean</i>
Tree	<a href="#">external-assignment</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### port-block-extension



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>port-block-extension</b> context
Context	<b>configure service vpn</b> <i>string nat outside pool string l2-aware port-block-extension</i>
Tree	<a href="#">port-block-extension</a>
Description	Commands in this context configure the attributes of the port block reserved for a dynamic NAT traffic flow for each subscriber with a port forwarding entry.
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ports *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of ports per dynamic port-block
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware port-block-extension</a> <a href="#">ports</a> <i>number</i>
Tree	<a href="#">ports</a>
Description	<p>For Carrier Grade NAT (CGN), this command represents the size of all port blocks for NAT subscribes in the NAT pool.</p> <p>For L2-Aware NAT, this command represents only the size of the initial port block of a subscriber in the L2-aware NAT pool. Additional port-blocks (extended port blocks) for the L2-Aware subscriber must be explicitly enabled under the <b>l2-aware port-block-extension</b> hierarchy in the NAT pool.</p> <p>This command does not affect the size of extended port-blocks.</p>
Range	10 to 5000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## subscriber

Synopsis	Enter the <b>subscriber</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware port-block-extension</a> <a href="#">subscriber</a>
Tree	<a href="#">subscriber</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware port-block-extension</a> <a href="#">subscriber</a> <a href="#">watermarks</a>

Tree	<a href="#">watermarks</a>
Description	This command configures watermarks for NAT resources.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **high number**

Synopsis	High watermark percentage
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware port-block-extension subscriber watermarks high number</a>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis	Low watermark percentage
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">l2-aware port-block-extension subscriber watermarks low number</a>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber-limit** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Number of L2-Aware NAT subscribers per outside address
Context	<b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>l2-aware port-block-extension subscriber-limit</b> <i>number</i>
Tree	<b>subscriber-limit</b>
Description	<p>When port-block extensions for the L2-Aware subscribers are enabled, the port space for an outside IP address is divided into the following:</p> <ul style="list-style-type: none"> <li>• well-known port (this is a fixed and permanently allocated block of ports for all NAT types)</li> <li>• static port-forwarding range (if enabled by configuration)</li> <li>• port range allocated for initial port blocks of each L2-Aware subscriber</li> <li>• port range allocated for extended port blocks for the remainder after the three previous port ranges</li> </ul> <p>The number of L2-Aware NAT subscribers per an outside IP address multiplied by the size of the initial port-block size determines the size of the port range reserved for initial port-blocks of each subscriber.</p> <p>The lower boundary of the extended port range is determined by adding the upper boundary of the configured port forwarding range and the size of the port range allocated for initial port blocks.</p>
Range	2 to 2000
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**watermarks**

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>l2-aware port-block-extension watermarks</b>
Tree	<b>watermarks</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark percentage
Context	<b>configure service vprn string nat outside pool string l2-aware port-block-extension watermarks high number</b>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark percentage
Context	<b>configure service vprn string nat outside pool string l2-aware port-block-extension watermarks low number</b>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## large-scale

Synopsis	Enter the <b>large-scale</b> context
Context	<b>configure service vprn string nat outside pool string large-scale</b>
Tree	<a href="#">large-scale</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## default-host

Synopsis	Enable the <b>default-host</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale default-host</b>
Tree	<b>default-host</b>
Description	<p>Commands in this context configure the default DMZ host options. A default DMZ host is a node on the inside to which all unknown traffic is redirected by changing the destination IPv4 address in the traffic header. During this operation, the checksums in the Layer 3 and Layer 4 header (UDP and TCP) are recalculated.</p> <p>Unknown traffic in NAT represent all unmatched traffic arriving from the outside (where there is no pinhole or a matching flow record created by traffic initiated from the inside). The purpose of the default DMZ host is to capture and analyze the unknown traffic as part of threat analysis.</p> <p>The rate of redirected unknown traffic can be restricted by configuration.</p>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inside-router-instance *string*

Synopsis	Router instance of the DMZ
Context	<b>configure service vpn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale default-host inside-router-instance</b> <i>string</i>
Tree	<b>inside-router-instance</b>
Description	This command configures the router instance on the inside where the default DMZ host resides.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ip-address *string*

Synopsis	IP address of the default DMZ host
Context	<b>configure service vpn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale default-host ip-address</b> <i>string</i>
Tree	<b>ip-address</b>
Description	This command configures the IP address of the default DMZ host. Redirection to the default DMZ host is achieved by replacing the destination IP address in the traffic header in the unknown traffic initiated from the outside with the one of the default DMZ host.
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **rate-limit** *number*

Synopsis Rate limit for unknown traffic sent to default DMZ host

Context **configure service vpn** *string nat outside pool string large-scale default-host rate-limit number*

Tree [rate-limit](#)

Description This command configures the rate limit of the unknown traffic sent to the default DMZ host.

Unknown traffic sent to the default DMZ host is rate limited by a configurable value expressed in mbps. The rate limit is configurable per NAT pool per ISA, vISA, or ESA-VM.

Range 1 to 10000

Units megabps

Default 10

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **deterministic**

Synopsis Enter the **deterministic** context

Context **configure service vpn** *string nat outside pool string large-scale deterministic*

Tree [deterministic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-reservation** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis Number of ports per deterministic port-block

Context	<b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale deterministic port-reservation</b> <i>number</i>
Tree	<a href="#">port-reservation</a>
Range	1 to 65536
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale deterministic watermarks</b>
Tree	<a href="#">watermarks</a>
Description	<p>Commands in this context monitor extended (dynamic) port-block utilization per outside IP in a NAT pool in deterministic LSN.</p> <p>High and low thresholds are configured in percentages of total available extended port-blocks per outside IP in a pool. Both values represent extended port-block utilization or occupancy per outside IP in a pool.</p> <p>For the system to generate those events, the NAT event-id 2045 must be enabled through configuration in the log event-control.</p>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high *number*

Synopsis	High watermark percentage
Context	<b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale deterministic watermarks high</b> <i>number</i>
Tree	<a href="#">high</a>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**low number**

Synopsis	Low watermark percentage
Context	<b>configure service vprn string nat outside pool string large-scale deterministic watermarks low number</b>
Tree	<a href="#">low</a>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**flexible-port-allocation**

Synopsis	Enter the <b>flexible-port-allocation</b> context
Context	<b>configure service vprn string nat outside pool string large-scale flexible-port-allocation</b>
Tree	<a href="#">flexible-port-allocation</a>
Description	Commands in this context enable LSN44 pool behavior where a subscriber allocates ports individually instead of through port blocks. The port block concept is removed for this application. Static port forwards can be interleaved with dynamically-allocated ports. Port logging is disabled when this application is enabled. A subscriber limit that is the maximum number of subscribers per outside IP address is not supported for this application.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**free-port-limit**

Synopsis	Enter the <b>free-port-limit</b> context
Context	<b>configure service vprn string nat outside pool string large-scale flexible-port-allocation free-port-limit</b>
Tree	<a href="#">free-port-limit</a>
Description	Commands in this context configure the minimal number of ports per protocol and per outside IP address in an LSN44 pool with flexible port allocations that must be free to map new subscribers to the outside IP address. This limit avoids rapid port depletion for

new subscribers in paired pooling mode, or unnecessary toggling between external IP addresses for existing subscribers in arbitrary pooling mode.

Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### icmp number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of free ports for ICMP per outside IP address
Context	<b>configure service vprn string nat outside pool string large-scale flexible-port-allocation free-port-limit icmp number</b>
Tree	<a href="#">icmp</a>
Description	This command configures the minimum number of ports for the ICMP protocol per outside IP address in an LSN44 pool with flexible port allocations that are free so that a new subscriber is mapped to the outside IP address. This limit is set to avoid rapid port depletion for new subscribers in paired pooling mode, or unnecessary toggling between external IP addresses for existing subscribers in arbitrary pooling mode.
Range	1 to 10000
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### tcp number



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of free ports for TCP per outside IP address
Context	<b>configure service vprn string nat outside pool string large-scale flexible-port-allocation free-port-limit tcp number</b>
Tree	<a href="#">tcp</a>
Description	This command configures the minimum number of ports for TCP protocol per outside IP address in an LSN44 pool with flexible port allocations that are free so that a new subscriber is mapped to the outside IP address. This limit is set to avoid rapid port depletion for new subscribers in paired pooling mode, or unnecessary toggling between external IP addresses for existing subscribers in arbitrary pooling mode.
Range	1 to 10000

Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### udp *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of free ports for UDP per outside IP address
Context	<b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale flexible-port-allocation free-port-limit udp</b> <i>number</i>
Tree	<b>udp</b>
Description	This command configures the minimum number of ports for UDP protocol per outside IP address in an LSN44 pool with flexible port allocations that are free so that a new subscriber is mapped to the outside IP address. This limit is set to avoid rapid port depletion for new subscribers in paired pooling mode, or unnecessary toggling between external IP addresses for existing subscribers in arbitrary pooling mode.
Range	1 to 10000
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### redundancy

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale redundancy</b>
Tree	<b>redundancy</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### admin-state *keyword*

Synopsis	Administrative state of NAT pool redundancy
Context	<b>configure service vprn</b> <i>string</i> <b>nat outside pool</b> <i>string</i> <b>large-scale redundancy admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable

Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **export-route** *string*

Synopsis	Route to export to the peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">large-scale redundancy export-route</a> <i>string</i>
Tree	<a href="#">export-route</a>
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **follow**

Synopsis	Enter the <b>follow</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">large-scale redundancy follow</a>
Tree	<a href="#">follow</a>
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis	Name of the pool where activity is shared
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">large-scale redundancy follow</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string*

Synopsis	Router instance where the lead pool resides
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">follow</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**monitor-route** *string*

Synopsis	Monitor the peer route
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">redundancy</a> <a href="#">monitor-route</a> <i>string</i>
Tree	<a href="#">monitor-route</a>
Notes	The following elements are part of a choice: ( <b>admin-state</b> , <b>export-route</b> , and <b>monitor-route</b> ) or <b>follow</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**subscriber-limit** *number***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Maximum number of subscribers per IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">nat</a> <a href="#">outside</a> <a href="#">pool</a> <i>string</i> <a href="#">large-scale</a> <a href="#">subscriber-limit</a> <i>number</i>
Tree	<a href="#">subscriber-limit</a>
Range	1 to 65535   4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mode** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Mode of operation of this NAT address pool
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	auto, napt, one-to-one
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nat-group** *reference***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a NAT group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">nat-group</a> <i>reference</i>
Tree	<a href="#">nat-group</a>
Reference	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**port-forwarding**

Synopsis	Enter the <b>port-forwarding</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">port-forwarding</a>
Tree	<a href="#">port-forwarding</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dynamic-block-reservation** *boolean***WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Reserve dynamic block for subscriber
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>port-forwarding</b> <b>dynamic-block-reservation</b> <i>boolean</i>
Tree	<b>dynamic-block-reservation</b>
Description	<p>When configured to <b>true</b>, the system reserves dynamic port block when the first port forward for the subscriber is created. The dynamic port block allocation is logged only if the block is being used and mappings are created. Dynamic port block reservation due to the port forward creation but without any dynamic mapping, is not logged.</p> <p>The reserved port block is released only when the last mapping in the block expires and there are no port forwards associated with the subscriber. The de-allocation log (syslog or RADIUS) is generated when the dynamic port block is completely released.</p> <p>Dynamic port block reservations can be enabled only if the configured maximum number of subscribers per outside IP addresses are less than or equal to the maximum number of configured port blocks per outside IP address.</p> <p>When configured to <b>false</b>, dynamic port blocks are not reserved when the first port forward for the subscriber is created.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**range-end** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	End of the wildcard range for port forwards
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>nat</b> <b>outside</b> <b>pool</b> <i>string</i> <b>port-forwarding</b> <b>range-end</b> <i>number</i>
Tree	<b>range-end</b>
Description	This command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the <b>range-start</b> command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool.

If unconfigured, the **range-end** implicit value is set to 1023, that represents the end of the well-known port range that is always enabled.

Port forwards are supported only in pools in NAPT mode. Pools in 1:1 mode do not support port-forwards.

Range	0   1023 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### range-start *number*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start of the wildcard range for port forwards
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">port-forwarding range-start</a> <i>number</i>
Tree	<a href="#">range-start</a>
Description	This command configures the lower boundary (the starting port) of the wildcard port range dedicated to port forwarding in a NAT pool, whereas the <b>range-end</b> command configures the upper boundary of the wildcard port range dedicated to port forwarding in a NAT pool.  Port 0 is always excluded from the port forwarding range.  Port forwards are supported only in pools in Network Address and Port Translation (NAPT) mode. Pools in 1:1 mode do not support configured port forwards.
Range	0   1   1025 to 65535
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### port-reservation

Synopsis	Enter the <b>port-reservation</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">port-reservation</a>
Tree	<a href="#">port-reservation</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**port-blocks** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Port block size for NAT subscribers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">port-reservation</a> <a href="#">port-blocks</a> <i>number</i>
Tree	<a href="#">port-blocks</a>
Description	<p>In CGN, this command specifies the number of port-blocks per outside IP address in the NAT pool. The available ports per outside IP address (the end port minus the upper bound value of the static port-forwarding range) are divided into the number of port blocks specified in this command. This implicitly determines the size of each port block.</p> <p>For L2-aware NAT, this command can be configured only if the port block extensions (extended port blocks) are disabled. You must disable the <b>l2-aware port-block-extension</b> hierarchy in the NAT pool.</p>
Range	0 to 64512
Notes	The following elements are part of a choice: <b>port-blocks</b> or <b>ports</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ports** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

Synopsis	Size of the port block for NAT subscribers
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">nat outside pool</a> <i>string</i> <a href="#">port-reservation</a> <a href="#">ports</a> <i>number</i>
Tree	<a href="#">ports</a>
Description	<p>For carrier-grade NAT (CGN), this command specifies the size of port blocks for NAT subscribers in the NAT pool.</p> <p>For L2-aware NAT, this command specifies the size of the initial port-block of a subscriber in the pool. Additional port blocks (extended port blocks) for the L2-aware</p>

subscriber must be explicitly enabled under the **I2-aware port-block-extension** hierarchy in the NAT pool.

This command does not affect the size of extended port blocks.

For deterministic pools, the port range begins with zero. However, for non-deterministic pools, the port range begins with one.

Range	0 to 64512
Notes	The following elements are part of a choice: <b>port-blocks</b> or <b>ports</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **type** keyword



#### **WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	NAT pool type
Context	<b>configure service vpn</b> <i>string nat outside pool string type keyword</i>
Tree	<b>type</b>
Options	large-scale, I2-aware, wlan-gw-anchor
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **watermarks**

Synopsis	Enable the <b>watermarks</b> context
Context	<b>configure service vpn</b> <i>string nat outside pool string watermarks</i>
Tree	<b>watermarks</b>
Description	This command configures watermarks for NAT resources.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**high number**

Synopsis	High watermark percentage
Context	<b>configure service vpn string nat outside pool string watermarks high number</b>
Tree	<b>high</b>
Description	This command configures the high threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**low number**

Synopsis	Low watermark percentage
Context	<b>configure service vpn string nat outside pool string watermarks low number</b>
Tree	<b>low</b>
Description	This command configures the low threshold value as a percentage of the total port-block space in a NAT pool.
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wlan-gw-group reference****WARNING:**

Modifying this element clears ISA state, such as flow state, for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Create a WLAN GW group for NAT
Context	<b>configure service vpn string nat outside pool string wlan-gw-group reference</b>

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Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa</a> <a href="#">wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a mandatory choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## network

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">network</a>
Tree	<a href="#">network</a>
Introduced	16.0.R4
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">network</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R4
Platforms	All

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">network</a> <a href="#">ingress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R4
Platforms	All

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">network</a> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i>
Tree	<a href="#">ip</a>

Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	16.0.R4
Platforms	All

### ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure service vprn</b> <i>string</i> <b>network ingress filter ipv6</b> <i>reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure filter ipv6-filter</b> <i>string</i>
Introduced	16.0.R4
Platforms	All

### qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>network ingress qos</b>
Tree	<a href="#">qos</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### fp-redirect-group reference

Synopsis	The forwarding-plane queue group Policy for this VPRN
Context	<b>configure service vprn</b> <i>string</i> <b>network ingress qos fp-redirect-group</b> <i>reference</i>
Tree	<a href="#">fp-redirect-group</a>
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### instance number

Synopsis	Forwarding plane ingress queue group instance
Context	<b>configure service vprn</b> <i>string</i> <b>network ingress qos instance</b> <i>number</i>
Tree	<a href="#">instance</a>

Range	1 to 65535
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **network-policy** *reference*

Synopsis	Network policy name associated with a VPRN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network ingress qos network-policy</a> <i>reference</i>
Tree	<a href="#">network-policy</a>
Reference	<b>configure</b> <a href="#">qos network</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, 7950 XRS, VSR

### **urpf-check** *boolean*

Synopsis	Enable unicast RPF check of network ingress traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network ingress urpf-check</a> <i>boolean</i>
Tree	<a href="#">urpf-check</a>
Default	true
Introduced	16.0.R4
Platforms	All

### **network-interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>network-interface</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i>
Tree	<a href="#">network-interface</a>
Introduced	16.0.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	Network interface name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i>
Tree	<a href="#">network-interface</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **cflowd-parameters**

Synopsis	Enter the <b>cflowd-parameters</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">cflowd-parameters</a>
Tree	<a href="#">cflowd-parameters</a>
Introduced	16.0.R1
Platforms	All

### **sampling** [[sampling-type](#)] *keyword*

Synopsis	Enter the <b>sampling</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i>
Tree	<a href="#">sampling</a>
Introduced	16.0.R1
Platforms	All

### [[sampling-type](#)] *keyword*

Synopsis	Traffic sampling type
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Context	<b>configure service vprn string network-interface string cflowd-parameters sampling keyword</b>
Tree	<a href="#">sampling</a>
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **direction keyword**

Synopsis	Direction of traffic for cflowd sampling
Context	<b>configure service vprn string network-interface string cflowd-parameters sampling keyword direction keyword</b>
Tree	<a href="#">direction</a>
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R1
Platforms	All

### **sample-profile (keyword | number)**

Synopsis	Sample profile ID
Context	<b>configure service vprn string network-interface string cflowd-parameters sampling keyword sample-profile (keyword   number)</b>
Tree	<a href="#">sample-profile</a>
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	All



**type** *keyword*

Synopsis	Type of cflowd analysis
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**cpu-protection** *reference*

Synopsis	CPM Protection policy associated with an interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">cpu-protection</a> <i>reference</i>
Tree	<a href="#">cpu-protection</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**dist-cpu-protection** *reference*

Synopsis	Distributed CPU protection policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <i>policy</i> <i>string</i>

Introduced 16.0.R1  
Platforms All

## egress

Synopsis Enter the **egress** context  
Context **configure service vprn string network-interface string egress**  
Tree [egress](#)  
Introduced 16.0.R1  
Platforms All

## filter

Synopsis Enter the **filter** context  
Context **configure service vprn string network-interface string egress filter**  
Tree [filter](#)  
Introduced 16.0.R1  
Platforms All

## ip reference

Synopsis IPv4 filter policy name  
Context **configure service vprn string network-interface string egress filter ip reference**  
Tree [ip](#)  
Reference **configure filter ip-filter string**  
Introduced 16.0.R1  
Platforms All

## hold-time

Synopsis Enter the **hold-time** context  
Context **configure service vprn string network-interface string hold-time**  
Tree [hold-time](#)  
Introduced 16.0.R1  
Platforms All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a>
Tree	<a href="#">down</a>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	All

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">init-only</a> <i>boolean</i>
Tree	<a href="#">init-only</a>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

## seconds *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time</a> <a href="#">ipv4</a> <a href="#">down</a> <a href="#">seconds</a> <i>number</i>

Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

## up

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time ipv4</a> <b>up</b>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	All

## **seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">hold-time ipv4</a> <b>up</b> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	All

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <b>ingress</b>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	All

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vprn string network-interface string ingress filter</b>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	All

**ip reference**

Synopsis	IPv4 filter policy name
Context	<b>configure service vprn string network-interface string ingress filter ip reference</b>
Tree	<a href="#">ip</a>
Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	All

**ingress-stats boolean**

Synopsis	Collect ingress statistics
Context	<b>configure service vprn string network-interface string ingress-stats boolean</b>
Tree	<a href="#">ingress-stats</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ip-mtu number**

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure service vprn string network-interface string ip-mtu number</b>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes

Introduced 16.0.R1  
 Platforms All

## ipv4

Synopsis Enter the **ipv4** context  
 Context **configure service vprn string network-interface string ipv4**  
 Tree [ipv4](#)  
 Introduced 16.0.R1  
 Platforms All

## allow-directed-broadcasts *boolean*

Synopsis Accept broadcasts that are directed to this interface  
 Context **configure service vprn string network-interface string ipv4 allow-directed-broadcasts boolean**  
 Tree [allow-directed-broadcasts](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

## bfd

Synopsis Enter the **bfd** context  
 Context **configure service vprn string network-interface string ipv4 bfd**  
 Tree [bfd](#)  
 Introduced 16.0.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of BFD sessions  
 Context **configure service vprn string network-interface string ipv4 bfd admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable

Introduced	16.0.R1
Platforms	All

**echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 bfd</a> <a href="#">echo-receive</a> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds
Introduced	16.0.R1
Platforms	All

**multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 bfd</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	16.0.R1
Platforms	All

**receive** *number*

Synopsis	BFD receive interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 bfd</a> <a href="#">receive</a> <i>number</i>
Tree	<a href="#">receive</a>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds

Default	100
Introduced	16.0.R1
Platforms	All

### **transmit-interval** *number*

Synopsis	BFD transmit interval over this interface
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>transmit-interval</b> <i>number</i>
Tree	<b>transmit-interval</b>
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	16.0.R1
Platforms	All

### **type** *keyword*

Synopsis	Local termination point for the BFD session
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure service vprn string network-interface string ipv4 icmp</b>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	All

## mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	<b>configure service vprn string network-interface string ipv4 icmp mask-reply boolean</b>
Tree	<a href="#">mask-reply</a>
Default	true
Introduced	16.0.R1
Platforms	All

## param-problem

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure service vprn string network-interface string ipv4 icmp param-problem</b>
Tree	<a href="#">param-problem</a>
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	<b>configure service vprn string network-interface string ipv4 icmp param-problem admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1

Platforms All

### **number** *number*

Synopsis Maximum number of Parameter Problem messages to send

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 icmp param-problem](#) *number*

Tree [number](#)

Range 10 to 1000

Default 100

Introduced 16.0.R1

Platforms All

### **seconds** *number*

Synopsis Time used to limit number of Parameter Problem messages

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 icmp param-problem](#) [seconds](#) *number*

Tree [seconds](#)

Range 1 to 60

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **redirects**

Synopsis Enter the **redirects** context

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 icmp](#) [redirects](#)

Tree [redirects](#)

Description Commands in this context configure the settings for ICMP redirect messages generated by the interface.

The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.

Introduced 16.0.R1

Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>ipv4 icmp redirects admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>ipv4 icmp redirects number number</b>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds** *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>ipv4 icmp redirects seconds number</b>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**ttl-expired**

Synopsis	Enter the <b>ttl-expired</b> context
Context	<b>configure service vprn string network-interface string ipv4 icmp ttl-expired</b>
Tree	<a href="#">ttl-expired</a>
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of sending TTL expired messages
Context	<b>configure service vprn string network-interface string ipv4 icmp ttl-expired admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**number number**

Synopsis	Maximum number of TTL expired messages to send
Context	<b>configure service vprn string network-interface string ipv4 icmp ttl-expired number number</b>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	All

**seconds number**

Synopsis	Time used to limit the number of TTL expired messages
Context	<b>configure service vprn string network-interface string ipv4 icmp ttl-expired seconds number</b>

Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

## unreachables

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables</a>
Tree	<a href="#">unreachables</a>
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## number *number*

Synopsis	Maximum number of unreachable messages to send
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 icmp unreachables</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100

Introduced 16.0.R1  
 Platforms All

### **seconds** *number*

Synopsis Time to limit the number of ICMP unreachable messages  
 Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 icmp unreachable](#) [seconds](#) *number*  
 Tree [seconds](#)  
 Range 1 to 60  
 Units seconds  
 Default 10  
 Introduced 16.0.R1  
 Platforms All

### **neighbor-discovery**

Synopsis Enter the **neighbor-discovery** context  
 Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 neighbor-discovery](#)  
 Tree [neighbor-discovery](#)  
 Introduced 16.0.R1  
 Platforms All

### **retry-timer** *number*

Synopsis ARP retry interval  
 Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 neighbor-discovery](#) [retry-timer](#) *number*  
 Tree [retry-timer](#)  
 Range 1 to 300  
 Units deciseconds  
 Default 50  
 Introduced 16.0.R1  
 Platforms All

**static-neighbor** [*ipv4-address*] *string*

Synopsis	Enter the <b>static-neighbor</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery static-neighbor</a> <i>string</i>
Tree	<a href="#">static-neighbor</a>
Introduced	16.0.R1
Platforms	All

**[ipv4-address]** *string*

Synopsis	IPv4 address that corresponds to the physical address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery static-neighbor</a> <i>string</i>
Tree	<a href="#">static-neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**mac-address** *string*

Synopsis	MAC address for the static neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery static-neighbor</a> <i>string</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4 neighbor-discovery timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command configures the minimum time an ARP entry learned on the IP interface is stored in the ARP table. ARP entries are automatically refreshed when an ARP request

or gratuitous ARP is seen by an IP host. Otherwise, the ARP entry is aged from the ARP table.

Range	0 to 65535
Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	All

## primary

Synopsis	Enable the <b>primary</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <b>primary</b>
Tree	<a href="#">primary</a>
Introduced	16.0.R1
Platforms	All

## address *string*

Synopsis	Primary IPv4 address assigned to the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <b>primary</b> <b>address</b> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## broadcast *keyword*

Synopsis	Broadcast address format
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <b>primary</b> <b>broadcast</b> <i>keyword</i>
Tree	<a href="#">broadcast</a>
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1
Platforms	All



**prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**secondary** [[address](#)] *string*

Synopsis	Enter the <b>secondary</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	All

**[address]** *string*

Synopsis	Secondary IPv4 address assigned to the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i>
Tree	<a href="#">secondary</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**broadcast** *keyword*

Synopsis	Broadcast address format
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">secondary</a> <i>string</i> <a href="#">broadcast</a> <i>keyword</i>
Tree	<a href="#">broadcast</a>
Options	all-ones, host-ones
Default	host-ones
Introduced	16.0.R1

Platforms All

### **igp-inhibit** *boolean*

Synopsis Disable the running IGP from recognizing secondary IP

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 secondary](#) *string* **igp-inhibit** *boolean*

Tree [igp-inhibit](#)

Description When configured to **true**, the running IGP does not recognize the secondary IP address as a local interface.

Default false

Introduced 16.0.R1

Platforms All

### **prefix-length** *number*

Synopsis IPv4 address prefix length

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4 secondary](#) *string* **prefix-length** *number*

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **tcp-mss** *number*

Synopsis TCP maximum segment size for the interface

Context **configure** [service vprn](#) *string* [network-interface](#) *string* [ipv4](#) **tcp-mss** *number*

Tree [tcp-mss](#)

Range 384 to 9746

Introduced 16.0.R1

Platforms All

## urpf-check

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure service vprn string network-interface string ipv4 urpf-check</b>
Tree	<a href="#">urpf-check</a>
Introduced	16.0.R1
Platforms	All

## ignore-default *boolean*

Synopsis	Ignore default route when performing a uRPF check
Context	<b>configure service vprn string network-interface string ipv4 urpf-check ignore-default boolean</b>
Tree	<a href="#">ignore-default</a>
Default	false
Introduced	16.0.R1
Platforms	All

## mode *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure service vprn string network-interface string ipv4 urpf-check mode keyword</b>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	All

## lag

Synopsis	Enter the <b>lag</b> context
Context	<b>configure service vprn string network-interface string lag</b>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	All

**link-map-profile** *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">lag link-map-profile</a> <i>number</i>
Tree	<a href="#">link-map-profile</a>
Description	This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.  If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.
Range	1 to 64
Introduced	16.0.R1
Platforms	All

**per-link-hash**

Synopsis	Enter the <b>per-link-hash</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">lag per-link-hash</a>
Tree	<a href="#">per-link-hash</a>
Introduced	16.0.R1
Platforms	All

**class** *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">lag per-link-hash class</a> <i>number</i>
Tree	<a href="#">class</a>
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	All

**weight** *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">lag per-link-hash weight</a> <i>number</i>

Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	All

## load-balancing

Synopsis	Enter the <b>load-balancing</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">network-interface string</a> <a href="#">load-balancing</a>
Tree	<a href="#">load-balancing</a>
Introduced	16.0.R1
Platforms	All

## flow-label-load-balancing *boolean*

Synopsis	Enable flow label load balancing
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">network-interface string</a> <a href="#">load-balancing flow-label-load-balancing boolean</a>
Tree	<a href="#">flow-label-load-balancing</a>
Description	When configured to <b>true</b> , the router enables load balancing in ECMP and LAG based on the output of a hash performed on the triplet (SA, DA, flow label) in the header of an IPv6 packet received on an IES, VPRN, R-VPLS, CSC, or network interface.  When configured to <b>false</b> , the router disables load balancing in ECMP and LAG.
Default	false
Introduced	21.5.R1
Platforms	All

## ip-load-balancing *keyword*

Synopsis	IP load-balancing algorithm
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">network-interface string</a> <a href="#">load-balancing ip-load-balancing keyword</a>
Tree	<a href="#">ip-load-balancing</a>
Description	This command specifies whether to include the source address, destination address, or both in LAG or ECMP hash on IP interfaces. Additionally, when the <b>l4-load-balancing</b>

command is enabled, this command also includes the source or destination port in the hash inputs.

Options	both, destination, source, inner-ip
Default	both
Introduced	16.0.R3
Platforms	All

### **lsr-load-balancing** *keyword*

Synopsis	LSR load-balancing algorithm
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">lsr-load-balancing</a> <i>keyword</i>
Tree	<a href="#">lsr-load-balancing</a>
Description	This command specifies whether the IP header is used in the LAG and ECMP LSR hashing algorithm. This is the per-interface setting.
Options	lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid
Introduced	16.0.R1
Platforms	All

### **spi-load-balancing** *boolean*

Synopsis	Enable SPI use in hashing
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">spi-load-balancing</a> <i>boolean</i>
Tree	<a href="#">spi-load-balancing</a>
Description	When configured to <b>true</b> , the router uses the Security Parameter Index (SPI) in hashing for ESP and AH encrypted IPv4 and IPv6 traffic. This is a per-interface setting.
Default	false
Introduced	16.0.R1
Platforms	All

### **teid-load-balancing** *boolean*

Synopsis	Enable use of TEID in hashing
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">load-balancing</a> <a href="#">teid-load-balancing</a> <i>boolean</i>
Tree	<a href="#">teid-load-balancing</a>

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Default	false
Introduced	16.0.R1
Platforms	All

## loopback

Synopsis	Use interface as a loopback interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">loopback</a>
Tree	<a href="#">loopback</a>
Notes	The following elements are part of a choice: <b>loopback</b> or <b>port</b> .
Introduced	16.0.R1
Platforms	All

## mac string

Synopsis	MAC address for the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	All

## port string

Synopsis	Port to bind the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">port</a> <i>string</i>
Tree	<a href="#">port</a>
String Length	1 to 45
Notes	The following elements are part of a choice: <b>loopback</b> or <b>port</b> .
Introduced	16.0.R1
Platforms	All

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">qos</a>

Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	All

### **egress-instance** *number*

Synopsis	Port egress queue group instance for this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">qos</a> <a href="#">egress-instance</a> <i>number</i>
Tree	<a href="#">egress-instance</a>
Description	This command specifies which instance to associate with this specific network IP interface since multiple instances of the same egress queue-group can be applied to the same port.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **egress-port-redirect-group** *reference*

Synopsis	QoS queue group name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">qos</a> <a href="#">egress-port-redirect-group</a> <i>reference</i>
Tree	<a href="#">egress-port-redirect-group</a>
Description	This command configures the egress queue group used for all egress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an egress queue group applied to the egress context of the port associated with the IP interface.
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">queue-group-templates</a> <a href="#">egress</a> <a href="#">queue-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ingress-fp-redirect-group** *reference*

Synopsis	Forwarding plane queue group policy for the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">network-interface</a> <i>string</i> <a href="#">qos</a> <a href="#">ingress-fp-redirect-group</a> <i>reference</i>
Tree	<a href="#">ingress-fp-redirect-group</a>



Description	This command configures the ingress queue-group used for all ingress forwarding-class redirections specified within the network QoS policy ID. The specified queue group name must exist as an ingress queue group applied to the ingress context of the forwarding plane associated with the IP interface.
Reference	<b>configure qos queue-group-templates ingress queue-group</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **ingress-instance** *number*

Synopsis	Forwarding plane ingress queue group for this interface
Context	<b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>qos ingress-instance</b> <i>number</i>
Tree	<a href="#">ingress-instance</a>
Description	This command configures which instance to associate with this specific network IP interface. An operator can apply multiple instances of the same ingress queue group to the same forwarding plane.
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **network-policy** *reference*

Synopsis	Network policy name associated with a network interface
Context	<b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>qos network-policy</b> <i>reference</i>
Tree	<a href="#">network-policy</a>
Description	This command associates an existing network policy name with the IP interface.
Reference	<b>configure qos network</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **tos-marking-state** *keyword*

Synopsis	TOS marking state
Context	<b>configure service vprn</b> <i>string</i> <b>network-interface</b> <i>string</i> <b>tos-marking-state</b> <i>keyword</i>
Tree	<a href="#">tos-marking-state</a>
Options	trusted, untrusted

Default	trusted
Introduced	16.0.R1
Platforms	All

## ntp

Synopsis	Enable the <b>ntp</b> context
Context	<b>configure service vprn string ntp</b>
Tree	<b>ntp</b>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of NTP execution
Context	<b>configure service vprn string ntp admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## authenticate *boolean*

Synopsis	Authentication of NTP PDUs when acting as a server
Context	<b>configure service vprn string ntp authenticate boolean</b>
Tree	<b>authenticate</b>
Default	false
Introduced	16.0.R1
Platforms	All

## authentication-check *boolean*

Synopsis	Authenticate NTP PDUs and reject mismatches
Context	<b>configure service vprn string ntp authentication-check boolean</b>

Tree	<a href="#">authentication-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **authentication-key** [[key-id](#)] *number*

Synopsis	Enter the <b>authentication-key</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i>
Tree	<a href="#">authentication-key</a>
Introduced	16.0.R1
Platforms	All

### **[key-id]** *number*

Synopsis	Authentication key ID used for NTP packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i>
Tree	<a href="#">authentication-key</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **key** *string*

Synopsis	Key to authenticate NTP packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i> <a href="#">key</a> <i>string</i>
Tree	<a href="#">key</a>
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Authentication method to authenticate NTP packet
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	des, message-digest
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**authentication-keychain** *reference*

Synopsis	Authentication keychain for unsolicited traffic
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command configures the authentication keychain used to handle unsolicited NTP requests.  If a request is received with a key ID that matches both a configured key and the keychain, the MAC is checked first using the key information. If the authentication fails, the MAC is checked using the information from the keychain.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	23.10.R1
Platforms	All

**broadcast** [[interface-name](#)] *reference*

Synopsis	Enter the <b>broadcast</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">broadcast</a> <i>reference</i>
Tree	<a href="#">broadcast</a>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *reference*

Synopsis	Local interface used to transmit NTP broadcast packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ntp</a> <a href="#">broadcast</a> <i>reference</i>
Tree	<a href="#">broadcast</a>

Reference	<b>configure service vprn string interface string</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	<b>configure service vprn string ntp broadcast reference authentication-keychain reference</b>
Tree	<a href="#">authentication-keychain</a>
Description	<p>This command configures the keychain used to authenticate messages sent by this node.</p> <p>The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.</p>
Reference	<b>configure system security keychains keychain string</b>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	23.10.R1
Platforms	All

### **key-id** *reference*

Synopsis	Authentication key and type used by the node
Context	<b>configure service vprn string ntp broadcast reference key-id reference</b>
Tree	<a href="#">key-id</a>
Reference	<b>configure service vprn string ntp authentication-key number</b>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	16.0.R1
Platforms	All

**ttl number**

Synopsis	TTL of messages transmitted by the broadcast address
Context	<b>configure service vprn string ntp broadcast reference ttl number</b>
Tree	<b>ttl</b>
Range	1 to 255
Default	127
Introduced	16.0.R1
Platforms	All

**version number**

Synopsis	NTP version number generated by the node
Context	<b>configure service vprn string ntp broadcast reference version number</b>
Tree	<b>version</b>
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

**ospf [ospf-instance] number**

Synopsis	Enter the <b>ospf</b> list instance
Context	<b>configure service vprn string ospf number</b>
Tree	<b>ospf</b>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

**[ospf-instance] number**

Synopsis	Specifies the value of the integrated OSPF instance.
Context	<b>configure service vprn string ospf number</b>
Tree	<b>ospf</b>
Range	0

MD-CLI	0
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the OSPF instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **advertise-router-capability** *keyword*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>advertise-router-capability</b> <i>keyword</i>
Tree	<a href="#">advertise-router-capability</a>
Options	false, link, area, as
Default	false
Introduced	16.0.R1
Platforms	All

### **area** [[area-id](#)] *string*

Synopsis	Enter the <b>area</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>area</b> <i>string</i>
Tree	<a href="#">area</a>
Introduced	16.0.R1
Platforms	All

**[area-id] string**

Synopsis	Area-ID attribute
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">area</a> <a href="#">string</a>
Tree	<a href="#">area</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise-ne-profile reference**

Synopsis	Network element profile to be advertised
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">area</a> <a href="#">string</a> <a href="#">advertise-ne-profile</a> <a href="#">reference</a>
Tree	<a href="#">advertise-ne-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <a href="#">string</a>
Introduced	19.5.R1
Platforms	All

**advertise-router-capability boolean**

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">area</a> <a href="#">string</a> <a href="#">advertise-router-capability</a> <a href="#">boolean</a>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

**area-range [ip-prefix-mask] string**

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <a href="#">string</a> <a href="#">ospf</a> <a href="#">number</a> <a href="#">area</a> <a href="#">string</a> <a href="#">area-range</a> <a href="#">string</a>
Tree	<a href="#">area-range</a>
Introduced	16.0.R1
Platforms	All



**[ip-prefix-mask]** *string*

Synopsis	IPv4 unicast address prefix and mask
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> <i>string</i>
Tree	<a href="#">area-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise** *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> <i>string</i> <b>advertise</b> <i>boolean</i>
Tree	<a href="#">advertise</a>
Default	true
Introduced	16.0.R1
Platforms	All

**blackhole-aggregate** *boolean*

Synopsis	Install a low priority blackhole route to avoid loops
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>blackhole-aggregate</b> <i>boolean</i>
Tree	<a href="#">blackhole-aggregate</a>
Default	true
Introduced	16.0.R1
Platforms	All

**export-policy** *reference*

Synopsis	Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>

Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Route imported as Summary Type 3/Inter-Area-Prefix-LSA
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>interface</b> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

### **[interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>interface</b> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OSPF interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>advertise-router-capability</b> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

**advertise-subnet** *boolean*

Synopsis	Advertise point-to-point interfaces as subnet routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>advertise-subnet</b> <i>boolean</i>
Tree	<a href="#">advertise-subnet</a>
Default	true
Introduced	16.0.R1
Platforms	All

**authentication-key** *string*

Synopsis	Authentication key
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>authentication-key</b> <i>string</i>

Tree	<a href="#">authentication-key</a>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type used on OSPF interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">authentication-type</a> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

### **bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

### **remain-down-on-failure** *boolean*

Synopsis	Force adjacency down on failure until session returns
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Context	<b>configure service vprn</b> <i>string</i> <b>ospf number area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness remain-down-on-failure</b> <i>boolean</i>
Tree	<b>remain-down-on-failure</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **strict** *boolean*

Synopsis	Enable BFD strict mode
Context	<b>configure service vprn</b> <i>string</i> <b>ospf number area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness strict</b> <i>boolean</i>
Tree	<b>strict</b>
Description	<p>When configured to <b>true</b>, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to <b>true</b>, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.</p> <p>During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.</p>
Default	false
Introduced	23.3.R1
Platforms	All

### **strict-mode-holddown** *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	<b>configure service vprn</b> <i>string</i> <b>ospf number area</b> <i>string</i> <b>interface</b> <i>string</i> <b>bfd-liveness strict-mode-holddown</b> <i>number</i>
Tree	<b>strict-mode-holddown</b>
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1

Platforms All

### **dead-interval** *number*

Synopsis OSPF wait time for Hellos before neighbor declared down

Context **configure service vprn** *string ospf number area string interface string dead-interval number*

Tree [dead-interval](#)

Range 2 to 65535

Units seconds

Introduced 16.0.R1

Platforms All

### **hello-interval** *number*

Synopsis Time between OSPF Hellos of this interface

Context **configure service vprn** *string ospf number area string interface string hello-interval number*

Tree [hello-interval](#)

Range 1 to 65535

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **interface-type** *keyword*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Interface type

Context **configure service vprn** *string ospf number area string interface string interface-type keyword*

Tree [interface-type](#)

Description This command specifies the interface type.  
**broadcast** - Broadcast network

To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.

**non-broadcast** - Non-broadcast network

**point-to-point** - Point-to-point link

Set the interface type of an Ethernet link to **point-to-point** to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.

**p2mp-nbma** - Point-to-multipoint on a link without broadcast or multicast support

No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.

**secondary** - Multiple secondary adjacencies allowed

A **secondary** interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.

Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	16.0.R1
Platforms	All

### load-balancing-weight *number*

Synopsis	Configure load-balancing-weight.
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">load-balancing-weight</a> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>
Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

### loopfree-alternate

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R3
Platforms	All

**exclude** *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">exclude</a> <i>boolean</i>
Tree	<a href="#">exclude</a>
Default	false
Introduced	16.0.R3
Platforms	All

**policy-map**

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a>
Tree	<a href="#">policy-map</a>
Introduced	16.0.R3
Platforms	All

**route-nh-template** *reference*

Synopsis	Route next hop policy template name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">loopfree-alternate</a> <a href="#">policy-map</a> <a href="#">route-nh-template</a> <i>reference</i>
Tree	<a href="#">route-nh-template</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <i>template</i> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

**lsa-filter-out** *keyword*

Synopsis	LSA flooding reduction
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">lsa-filter-out</a> <i>keyword</i>
Tree	<a href="#">lsa-filter-out</a>



Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

### **message-digest-key** [[key-id](#)] *number*

Synopsis	Enter the <b>message-digest-key</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>message-digest-key</b> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Introduced	16.0.R1
Platforms	All

### **[key-id]** *number*

Synopsis	Message digest index
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>message-digest-key</b> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **md5** *string*

Synopsis	MD5 hash key
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>message-digest-key</b> <i>number</i> <b>md5</b> <i>string</i>
Tree	<a href="#">md5</a>
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**metric number**

Synopsis	Route cost metric for the interface
Context	<b>configure</b> <a href="#">service vprn string ospf number area string interface string metric number</a>
Tree	<a href="#">metric</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**mtu number**

Synopsis	MTU for the OSPF to use on the interface
Context	<b>configure</b> <a href="#">service vprn string ospf number area string interface string mtu number</a>
Tree	<a href="#">mtu</a>
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

**neighbor [address] string**

Synopsis	Add a list entry for <b>neighbor</b>
Context	<b>configure</b> <a href="#">service vprn string ospf number area string interface string neighbor string</a>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

**[address] string**

Synopsis	IPv4 address of the OSPFv2 neighbor
Context	<b>configure</b> <a href="#">service vprn string ospf number area string interface string neighbor string</a>
Tree	<a href="#">neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**passive** *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">passive</a> <i>boolean</i>
Tree	<a href="#">passive</a>
Introduced	16.0.R1
Platforms	All

**poll-interval** *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">poll-interval</a> <i>number</i>
Tree	<a href="#">poll-interval</a>
Max. Range	0 to 4294967295
Units	seconds
Default	120
Introduced	16.0.R1
Platforms	All

**priority** *number*

Synopsis	Interface priority in the DR election on the subnet
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">retransmit-interval</a> <i>number</i>
Tree	<a href="#">retransmit-interval</a>

Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

### **rib-priority** *keyword*

Synopsis	RIB priority for OSPF
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>rib-priority</b> <i>keyword</i>
Tree	<a href="#">rib-priority</a>
Options	high
Introduced	16.0.R1
Platforms	All

### **transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>transit-delay</b> <i>number</i>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <b>loopfree-alternate-exclude</b> <i>boolean</i>
Tree	<a href="#">loopfree-alternate-exclude</a>
Default	false
Introduced	16.0.R1

Platforms All

## nssa

Synopsis Enable the **nssa** context  
 Context **configure service vprn string ospf number area string nssa**  
 Tree **nssa**  
 Introduced 16.0.R1  
 Platforms All

## area-range [ip-prefix-mask] string

Synopsis Enter the **area-range** list instance  
 Context **configure service vprn string ospf number area string nssa area-range string**  
 Tree **area-range**  
 Introduced 16.0.R1  
 Platforms All

## [ip-prefix-mask] string

Synopsis IPv4 unicast address prefix and mask  
 Context **configure service vprn string ospf number area string nssa area-range string**  
 Tree **area-range**  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

## advertise boolean

Synopsis Advertise summarized range of addresses to other areas  
 Context **configure service vprn string ospf number area string nssa area-range string advertise boolean**  
 Tree **advertise**  
 Default true  
 Introduced 16.0.R1

Platforms All

### **originate-default-route**

Synopsis Enable the **originate-default-route** context

Context **configure service vprn string ospf number area string nssa originate-default-route**

Tree [originate-default-route](#)

Introduced 16.0.R1

Platforms All

### **adjacency-check boolean**

Synopsis Perform adjacency checks before originating a default route

Context **configure service vprn string ospf number area string nssa originate-default-route adjacency-check boolean**

Tree [adjacency-check](#)

Default false

Introduced 16.0.R1

Platforms All

### **type-nssa boolean**

Synopsis Generate a default route using NSSA-LSA type

Context **configure service vprn string ospf number area string nssa originate-default-route type-nssa boolean**

Tree [type-nssa](#)

Default false

Introduced 16.0.R1

Platforms All

### **redistribute-external boolean**

Synopsis Redistribute external routes into the NSSA

Context **configure service vprn string ospf number area string nssa redistribute-external boolean**

Tree [redistribute-external](#)

Default true

Introduced 16.0.R1  
 Platforms All

### **summaries** *boolean*

Synopsis Send summary (Type 3) LSAs into the NSSA on an ABR  
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [nssa](#) [summaries](#) *boolean*  
 Tree [summaries](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **sham-link** [[interface](#)] *string* [ip-address](#) *string*

Synopsis Enter the **sham-link** list instance  
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [sham-link](#) *string* [ip-address](#) *string*  
 Tree [sham-link](#)  
 Introduced 16.0.R1  
 Platforms All

### [[interface](#)] *string*

Synopsis Local interface name used for the sham-link  
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [sham-link](#) *string* [ip-address](#) *string*  
 Tree [sham-link](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **ip-address** *string*

Synopsis IP address of the sham-link neighbor  
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [sham-link](#) *string* [ip-address](#) *string*  
 Tree [sham-link](#)

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the OSPF interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	Authentication key to send and receive OSPF packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 38
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">sham-link</a> <i>string</i> <a href="#">ip-address</a> <i>string</i> <b>authentication-keychain</b> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Introduced	16.0.R3
Platforms	All



**authentication-type** *keyword*

Synopsis	Authentication type to be used
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>sham-link</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>authentication-type</b> <i>keyword</i>
Tree	<b>authentication-type</b>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

**dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>sham-link</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>dead-interval</b> <i>number</i>
Tree	<b>dead-interval</b>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>sham-link</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>hello-interval</b> <i>number</i>
Tree	<b>hello-interval</b>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**message-digest-key** [*key-id*] *number*

Synopsis	Enter the <b>message-digest-key</b> list instance
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Context	<b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>sham-link</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>message-digest-key</b> <i>number</i>
Tree	<b>message-digest-key</b>
Introduced	16.0.R1
Platforms	All

**[key-id]** *number*

Synopsis	Message digest index
Context	<b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>sham-link</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>message-digest-key</b> <i>number</i>
Tree	<b>message-digest-key</b>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**md5** *string*

Synopsis	MD5 key or hash key
Context	<b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>sham-link</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>message-digest-key</b> <i>number</i> <b>md5</b> <i>string</i>
Tree	<b>md5</b>
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**metric** *number*

Synopsis	Explicit route cost metric that is applied to the sham link
Context	<b>configure service vprn</b> <i>string</i> <b>ospf</b> <i>number</i> <b>area</b> <i>string</i> <b>sham-link</b> <i>string</i> <b>ip-address</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	1 to 65535
Default	1

Introduced 16.0.R1  
 Platforms All

### **retransmit-interval** *number*

Synopsis Time before OSPF retransmits an unacknowledged LSA  
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [sham-link](#) *string* [ip-address](#) *string* **retransmit-interval** *number*  
 Tree [retransmit-interval](#)  
 Range 1 to 1800  
 Units seconds  
 Default 5  
 Introduced 16.0.R1  
 Platforms All

### **transit-delay** *number*

Synopsis Required LSA transmit time  
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [sham-link](#) *string* [ip-address](#) *string* **transit-delay** *number*  
 Tree [transit-delay](#)  
 Range 1 to 1800  
 Units seconds  
 Default 1  
 Introduced 16.0.R1  
 Platforms All

### **stub**

Synopsis Enable the **stub** context  
 Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* **stub**  
 Tree [stub](#)  
 Introduced 16.0.R1  
 Platforms All

**default-metric** *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">stub default-metric</a> <i>number</i>
Tree	<a href="#">default-metric</a>
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

**summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">stub summaries</a> <i>boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All

**virtual-link** [[router-id](#)] *string* [transit-area](#) *reference*

Synopsis	Enter the <b>virtual-link</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i>
Tree	<a href="#">virtual-link</a>
Introduced	16.0.R1
Platforms	All

**[[router-id](#)]** *string*

Synopsis	Router identity of the virtual link neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i>
Tree	<a href="#">virtual-link</a>
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **transit-area** *reference*

Synopsis Transit area that links backbone area to area without physical connection with the backbone

Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference*

Tree [virtual-link](#)

Reference **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the OSPF interface

Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **authentication-key** *string*

Synopsis Authentication key

Context **configure** [service](#) [vprn](#) *string* [ospf](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* [authentication-key](#) *string*

Tree [authentication-key](#)

String Length 1 to 38

Introduced 16.0.R1

Platforms All

**authentication-keychain** *reference*

Synopsis	TCP authentication keychain for the session
Context	<b>configure</b> <a href="#">service vprn string ospf number area string virtual-link string transit-area reference authentication-keychain reference</a>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system security keychains keychain string</a>
Introduced	16.0.R3
Platforms	All

**authentication-type** *keyword*

Synopsis	Authentication type used on OSPF interface
Context	<b>configure</b> <a href="#">service vprn string ospf number area string virtual-link string transit-area reference authentication-type keyword</a>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest
Introduced	16.0.R1
Platforms	All

**dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure</b> <a href="#">service vprn string ospf number area string virtual-link string transit-area reference dead-interval number</a>
Tree	<a href="#">dead-interval</a>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure</b> <a href="#">service vprn string ospf number area string virtual-link string transit-area reference hello-interval number</a>
Tree	<a href="#">hello-interval</a>

Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

### **message-digest-key** [[key-id](#)] *number*

Synopsis	Enter the <b>message-digest-key</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Introduced	16.0.R1
Platforms	All

### **[key-id]** *number*

Synopsis	Message digest index
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i>
Tree	<a href="#">message-digest-key</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **md5** *string*

Synopsis	MD5 hash key
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">message-digest-key</a> <i>number</i> <b>md5</b> <i>string</i>
Tree	<a href="#">md5</a>
String Length	1 to 51
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">retransmit-interval</a> <i>number</i>
Tree	<a href="#">retransmit-interval</a>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

**transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">transit-delay</a> <i>number</i>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**compatible-rfc1583** *boolean*

Synopsis	OSPF summary and external route calculations
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">compatible-rfc1583</a> <i>boolean</i>
Tree	<a href="#">compatible-rfc1583</a>
Default	true
Introduced	16.0.R1
Platforms	All

**export-limit**

Synopsis	Enable the <b>export-limit</b> context
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Context	<b>configure service vprn</b> <i>string ospf number export-limit</i>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R1
Platforms	All

### **log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure service vprn</b> <i>string ospf number export-limit log-percent number</i>
Tree	<a href="#">log-percent</a>
Range	1 to 100
Introduced	16.0.R1
Platforms	All

### **number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure service vprn</b> <i>string ospf number export-limit number number</i>
Tree	<a href="#">number</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Export policies that determine exported routes
Context	<b>configure service vprn</b> <i>string ospf number export-policy reference</i>
Tree	<a href="#">export-policy</a>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p>

If the **aggregate** command is also configured in the **configure router** context, the aggregation is applied before the export policy is applied.

Routing policies are created in the **configure router policy-options** context.

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### external-db-overflow

Synopsis	Enable the <b>external-db-overflow</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">external-db-overflow</a>
Tree	<a href="#">external-db-overflow</a>
Introduced	16.0.R1
Platforms	All

### interval *number*

Synopsis	Time during which the router operates in overload
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">external-db-overflow</a> <i>interval number</i>
Tree	<a href="#">interval</a>
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

### limit *number*

Synopsis	Number of external LSA at which overload is triggered
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">external-db-overflow</a> <i>limit number</i>
Tree	<a href="#">limit</a>
Range	0 to 2147483647

Default	0
Introduced	16.0.R1
Platforms	All

### **external-preference** *number*

Synopsis	Preference for OSPF external routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">external-preference</a> <i>number</i>
Tree	<a href="#">external-preference</a>
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

### **graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">graceful-restart</a>
Tree	<a href="#">graceful-restart</a>
Introduced	16.0.R1
Platforms	All

### **helper-mode** *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">helper-mode</a> <i>boolean</i>
Tree	<a href="#">helper-mode</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **strict-lsa-checking** *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">graceful-restart</a> <a href="#">strict-lsa-checking</a> <i>boolean</i>

Tree	<a href="#">strict-lsa-checking</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ignore-dn-bit** *boolean*

Synopsis	Ignore the DN bit for OSPF LSA packets for the instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>ignore-dn-bit</b> <i>boolean</i>
Tree	<a href="#">ignore-dn-bit</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **import-policy** *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **loopfree-alternate**

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>loopfree-alternate</b>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R1
Platforms	All

**exclude**

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <a href="#">service vprn string ospf number loopfree-alternate</a> <b>exclude</b>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3
Platforms	All

**prefix-policy reference**

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure</b> <a href="#">service vprn string ospf number loopfree-alternate</a> <b>exclude</b> <a href="#">prefix-policy reference</a>
Tree	<a href="#">prefix-policy</a>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All

**multicast-import boolean**

Synopsis	Submit routes into the multicast Route Table Manager
Context	<b>configure</b> <a href="#">service vprn string ospf number</a> <a href="#">multicast-import</a> <b>boolean</b>
Tree	<a href="#">multicast-import</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload boolean**

Synopsis	Change local router state to appear overloaded
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Context	<b>configure service vprn</b> <i>string ospf number overload boolean</i>
Tree	<a href="#">overload</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-include-ext-1** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure service vprn</b> <i>string ospf number overload-include-ext-1 boolean</i>
Tree	<a href="#">overload-include-ext-1</a>
Default	false
Introduced	19.7.R1
Platforms	All

### **overload-include-ext-2** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure service vprn</b> <i>string ospf number overload-include-ext-2 boolean</i>
Tree	<a href="#">overload-include-ext-2</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **overload-include-stub** *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	<b>configure service vprn</b> <i>string ospf number overload-include-stub boolean</i>
Tree	<a href="#">overload-include-stub</a>
Default	false
Introduced	16.0.R1
Platforms	All

## overload-on-boot

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure service vprn string ospf number overload-on-boot</b>
Tree	<a href="#">overload-on-boot</a>
Introduced	16.0.R1
Platforms	All

## timeout *number*

Synopsis	Time during which the router operates in overload state before reestablishing normal operations
Context	<b>configure service vprn string ospf number overload-on-boot timeout number</b>
Tree	<a href="#">timeout</a>
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

## preference *number*

Synopsis	Preference for OSPF internal routes
Context	<b>configure service vprn string ospf number preference number</b>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	10
Introduced	16.0.R1
Platforms	All

## reference-bandwidth *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	<b>configure service vprn string ospf number reference-bandwidth number</b>
Tree	<a href="#">reference-bandwidth</a>
Range	1 to 18446744073709551615
Units	kilobps

Default	100000000
Introduced	16.0.R1
Platforms	All

### rib-priority

Synopsis	Enter the <b>rib-priority</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>rib-priority</b>
Tree	<a href="#">rib-priority</a>
Introduced	16.0.R1
Platforms	All

### high

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">rib-priority</a> <b>high</b>
Tree	<a href="#">high</a>
Introduced	16.0.R1
Platforms	All

### prefix-list *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">rib-priority</a> <a href="#">high</a> <a href="#">prefix-list</a> <i>reference</i>
Tree	<a href="#">prefix-list</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### router-id *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
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Context	<b>configure service vprn</b> <i>string ospf number router-id string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

### **rtr-adv-lsa-limit**

Synopsis	Enable the <b>rtr-adv-lsa-limit</b> context
Context	<b>configure service vprn</b> <i>string ospf number rtr-adv-lsa-limit</i>
Tree	<a href="#">rtr-adv-lsa-limit</a>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Log the event without triggering overload
Context	<b>configure service vprn</b> <i>string ospf number rtr-adv-lsa-limit log-only boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-lsa-count** *number*

Synopsis	Maximum number of LSAs one router can advertise
Context	<b>configure service vprn</b> <i>string ospf number rtr-adv-lsa-limit max-lsa-count number</i>
Tree	<a href="#">max-lsa-count</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **overload-timeout** (*number* | *keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
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Context	<b>configure service vprn string ospf number rtr-adv-lsa-limit overload-timeout</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">overload-timeout</a>
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

### **warning-threshold** *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	<b>configure service vprn string ospf number rtr-adv-lsa-limit warning-threshold</b> <i>number</i>
Tree	<a href="#">warning-threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **super-backbone** *boolean*

Synopsis	Enable/disable super-backbone functionality.
Context	<b>configure service vprn string ospf number super-backbone</b> <i>boolean</i>
Tree	<a href="#">super-backbone</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **suppress-dn-bit** *boolean*

Synopsis	Suppress the DN bit setting for OSPF LSA packets
Context	<b>configure service vprn string ospf number suppress-dn-bit</b> <i>boolean</i>
Tree	<a href="#">suppress-dn-bit</a>

Default	false
Introduced	16.0.R1
Platforms	All

## timers

Synopsis	Enter the <b>timers</b> context
Context	<b>configure service vprn string ospf number timers</b>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

## incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	<b>configure service vprn string ospf number timers incremental-spf-wait number</b>
Tree	<a href="#">incremental-spf-wait</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

## lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	<b>configure service vprn string ospf number timers lsa-accumulate number</b>
Tree	<a href="#">lsa-accumulate</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**Isa-arrival** *number*

Synopsis	Minimum delay between receipt of same LSAs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">Isa-arrival</a> <i>number</i>
Tree	<a href="#">Isa-arrival</a>
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**Isa-generate**

Synopsis	Enter the <b>Isa-generate</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">Isa-generate</a>
Tree	<a href="#">Isa-generate</a>
Introduced	16.0.R1
Platforms	All

**Isa-initial-wait** *number*

Synopsis	First wait period between OSPF LSA generation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">Isa-generate</a> <a href="#">Isa-initial-wait</a> <i>number</i>
Tree	<a href="#">Isa-initial-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

**Isa-second-wait** *number*

Synopsis	Hold time between the first and second LSA generation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers</a> <a href="#">Isa-generate</a> <a href="#">Isa-second-wait</a> <i>number</i>
Tree	<a href="#">Isa-second-wait</a>
Range	10 to 600000

Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **max-lsa-wait** *number*

Synopsis	Max time between two LSAs being generated
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers lsa-generate</a> <b>max-lsa-wait</b> <i>number</i>
Tree	<a href="#">max-lsa-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **redistribute-delay** *number*

Synopsis	Hold down timer for external routes into OSPF
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers redistribute-delay</a> <i>number</i>
Tree	<a href="#">redistribute-delay</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <a href="#">timers spf-wait</a>
Tree	<a href="#">spf-wait</a>
Introduced	16.0.R1
Platforms	All

**spf-initial-wait** *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number</a> <a href="#">timers spf-wait</a> <a href="#">spf-initial-wait</a> <i>number</i>
Tree	<a href="#">spf-initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**spf-max-wait** *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number</a> <a href="#">timers spf-wait</a> <a href="#">spf-max-wait</a> <i>number</i>
Tree	<a href="#">spf-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

**spf-second-wait** *number*

Synopsis	Hold time between the first and second SPF calculation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf number</a> <a href="#">timers spf-wait</a> <a href="#">spf-second-wait</a> <i>number</i>
Tree	<a href="#">spf-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**unicast-import** *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>unicast-import</b> <i>boolean</i>
Tree	<a href="#">unicast-import</a>
Default	true
Introduced	16.0.R1
Platforms	All

**vpn-domain**

Synopsis	Enable the <b>vpn-domain</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>vpn-domain</b>
Tree	<a href="#">vpn-domain</a>
Introduced	16.0.R1
Platforms	All

**id** *string*

Synopsis	OSPF VPN domain ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>vpn-domain</b> <b>id</b> <i>string</i>
Tree	<a href="#">id</a>
Description	This command specifies the OSPF VPN domain. This is exchanged using BGP in the Extended Community attribute associated with a prefix.
String Length	14
Default	0000.0000.0000
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	VPN domain type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf</a> <i>number</i> <b>vpn-domain</b> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	0005, 0105, 0205, 8005
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	All

### **vpn-tag** *number*

Synopsis	OSPF VPN tag
Context	<b>configure</b> <a href="#">service vprn</a> <i>string ospf number vpn-tag number</i>
Tree	<a href="#">vpn-tag</a>
Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R1
Platforms	All

### **ospf3** [[ospf-instance](#)] *number*

Synopsis	Enter the <b>ospf3</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number</i>
Tree	<a href="#">ospf3</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	All

### **[ospf-instance]** *number*

Synopsis	Specifies the value of the integrated OSPF instance.
Context	<b>configure</b> <a href="#">service vprn</a> <i>string ospf3 number</i>
Tree	<a href="#">ospf3</a>
Range	0 to 31   64 to 95
MD-CLI Default	0
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the OSPF instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *keyword*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">advertise-router-capability</a> <i>keyword</i>
Tree	<a href="#">advertise-router-capability</a>
Options	false, link, area, as
Default	false
Introduced	16.0.R1
Platforms	All

**area** [[area-id](#)] *string*

Synopsis	Enter the <b>area</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i>
Tree	<a href="#">area</a>
Introduced	16.0.R1
Platforms	All

**[area-id]** *string*

Synopsis	Area-ID attribute
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i>
Tree	<a href="#">area</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">advertise-router-capability</a> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true
Introduced	16.0.R1
Platforms	All

**area-range** [[ip-prefix-mask](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">area-range</a>
Introduced	16.0.R1
Platforms	All

**[ip-prefix-mask]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">area-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**advertise** *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">area-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">advertise</a> <i>boolean</i>
Tree	<a href="#">advertise</a>
Default	true

Introduced 16.0.R1  
 Platforms All

### **blackhole-aggregate** *boolean*

Synopsis Install a low priority blackhole route to avoid loops  
 Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **blackhole-aggregate** *boolean*  
 Tree [blackhole-aggregate](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **export-policy** *reference*

Synopsis Type 3 Summary-LSA/OSPFv3 inter-area-prefix-LSA route  
 Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **export-policy** *reference*  
 Tree [export-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

### **import-policy** *reference*

Synopsis Route imported as Summary Type 3/Inter-Area-Prefix-LSA  
 Context **configure** [service](#) [vprn](#) *string* [ospf3](#) *number* [area](#) *string* **import-policy** *reference*  
 Tree [import-policy](#)  
 Reference **configure** [policy-options](#) [policy-statement](#) *string*  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

**interface** [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OSPF interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**advertise-router-capability** *boolean*

Synopsis	Allow router advertisement capabilities
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">advertise-router-capability</a> <i>boolean</i>
Tree	<a href="#">advertise-router-capability</a>
Default	true

Introduced 16.0.R1  
Platforms All

## authentication

Synopsis Enable the **authentication** context  
Context **configure** [service vprn string ospf3 number area string interface string authentication](#)  
Tree [authentication](#)  
Introduced 16.0.R6  
Platforms All

## inbound reference

Synopsis sa-name  
Context **configure** [service vprn string ospf3 number area string interface string authentication inbound reference](#)  
Tree [inbound](#)  
Reference **configure** [ipsec static-sa string](#)  
Notes This element is mandatory.  
Introduced 16.0.R6  
Platforms All

## outbound reference

Synopsis sa-name  
Context **configure** [service vprn string ospf3 number area string interface string authentication outbound reference](#)  
Tree [outbound](#)  
Reference **configure** [ipsec static-sa string](#)  
Notes This element is mandatory.  
Introduced 16.0.R6  
Platforms All

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
Context	<b>configure service vprn</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Introduced	16.0.R1
Platforms	All

**remain-down-on-failure** *boolean*

Synopsis	Force adjacency down on failure until session returns
Context	<b>configure service vprn</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness remain-down-on-failure</b> <i>boolean</i>
Tree	<b>remain-down-on-failure</b>
Default	false
Introduced	16.0.R1
Platforms	All

**strict** *boolean*

Synopsis	Enable BFD strict mode
Context	<b>configure service vprn</b> <i>string ospf3 number area string interface string</i> <b>bfd-liveness strict</b> <i>boolean</i>
Tree	<b>strict</b>
Description	<p>When configured to <b>true</b>, the system uses BFD strict-mode. BFD strict-mode mandates that an active BFD session must exist between the OSPF neighbors before establishing a full adjacency. When configured to <b>true</b>, the router uses Link-Local Signaling (LLS) with the B-flag set to instruct the OSPF neighbors that BFD must be enabled on the link. BFD strict-mode requires both sides to have the B-flag set.</p> <p>During OSPFv3 BFD strict-mode operations, the router advertises the local interface IPv4 address TLV using LLS, but the SR OS router continues to use IPv6-based BFD sessions for both the IPv4 and IPv6 address families.</p>
Default	false
Introduced	23.3.R1
Platforms	All

**strict-mode-holddown** *number*

Synopsis	Adjacency up time delay after BFD session establishment
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">bfd-liveness</a> <a href="#">strict-mode-holddown</a> <i>number</i>
Tree	<a href="#">strict-mode-holddown</a>
Description	This command configures a delay timer before bringing up the OSPF adjacency after the BFD session establishment. Holddown helps mitigate potential routing churn when BFD sessions are unstable. The holddown timer is reset when a BFD session operationally toggles.
Range	1 to 600
Units	seconds
Introduced	23.3.R1
Platforms	All

**dead-interval** *number*

Synopsis	OSPF wait time for Hellos before neighbor declared down
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">dead-interval</a> <i>number</i>
Tree	<a href="#">dead-interval</a>
Range	2 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	All

**hello-interval** *number*

Synopsis	Time between OSPF Hellos of this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">hello-interval</a> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	1 to 65535
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**interface-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Interface type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>interface-type</b> <i>keyword</i>
Tree	<a href="#">interface-type</a>
Description	<p>This command specifies the interface type.</p> <p><b>broadcast</b> - Broadcast network</p> <p>To significantly improve adjacency forming and network convergence, configure a network as point-to-point if only two routers are connected, even if the network is a broadcast media such as Ethernet.</p> <p><b>non-broadcast</b> - Non-broadcast network</p> <p><b>point-to-point</b> - Point-to-point link</p> <p>Set the interface type of an Ethernet link to <b>point-to-point</b> to avoid having to carry the broadcast adjacency maintenance overhead if the Ethernet link provided is used as a point-to-point.</p> <p><b>p2mp-nbma</b> - Point-to-multipoint on a link without broadcast or multicast support</p> <p>No designated router or backup designated router is elected on this type of interface and all OSPF neighbors connect through individual point-to-point links. Only VPRN and IES services interfaces support this interface type.</p> <p><b>secondary</b> - Multiple secondary adjacencies allowed</p> <p>A <b>secondary</b> interface allows multiple secondary adjacencies, in addition to the primary adjacency, to be established over a single IP interface. This interface type can also be applied to the system interface and to loopback interfaces to allow them to participate in multiple areas, although no adjacencies are formed over these types of interfaces.</p>
Options	broadcast, non-broadcast, point-to-point, secondary, p2mp-nbma
Introduced	16.0.R1
Platforms	All

**load-balancing-weight** *number*

Synopsis	Configure load-balancing-weight.
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>load-balancing-weight</b> <i>number</i>
Tree	<a href="#">load-balancing-weight</a>



Range	1 to 4294967295
Introduced	20.2.R1
Platforms	All

## loopfree-alternate

Synopsis	Enter the <b>loopfree-alternate</b> context
Context	<b>configure service vprn</b> <i>string ospf3 number area string interface string loopfree-alternate</i>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R3
Platforms	All

## exclude *boolean*

Synopsis	Enable fast reroute at OSPF primary interface level
Context	<b>configure service vprn</b> <i>string ospf3 number area string interface string loopfree-alternate exclude boolean</i>
Tree	<a href="#">exclude</a>
Default	false
Introduced	16.0.R3
Platforms	All

## policy-map

Synopsis	Enable the <b>policy-map</b> context
Context	<b>configure service vprn</b> <i>string ospf3 number area string interface string loopfree-alternate policy-map</i>
Tree	<a href="#">policy-map</a>
Introduced	16.0.R3
Platforms	All

## route-nh-template *reference*

Synopsis	Route next hop policy template name
Context	<b>configure service vprn</b> <i>string ospf3 number area string interface string loopfree-alternate policy-map route-nh-template reference</i>

Tree	<a href="#">route-nh-template</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">route-next-hop-policy</a> <a href="#">template</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R3
Platforms	All

### **lsa-filter-out** *keyword*

Synopsis	LSA flooding reduction
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>lsa-filter-out</b> <i>keyword</i>
Tree	<a href="#">lsa-filter-out</a>
Options	none, all, except-own-rtrlsa, except-own-rtrlsa-and-defaults
Default	none
Introduced	16.0.R1
Platforms	All

### **metric** *number*

Synopsis	Route cost metric for the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>metric</b> <i>number</i>
Tree	<a href="#">metric</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

### **mtu** *number*

Synopsis	MTU for the OSPF to use on the interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>mtu</b> <i>number</i>
Tree	<a href="#">mtu</a>
Range	512 to 9786
Introduced	16.0.R1
Platforms	All

**neighbor** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Add a list entry for <b>neighbor</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">neighbor</a>
Introduced	16.0.R1
Platforms	All

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IPv6 link local address of the OSPFv3 neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">neighbor</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">neighbor</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**passive** *boolean*

Synopsis	Advertise passive interfaces as OSPF interfaces
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">passive</a> <i>boolean</i>
Tree	<a href="#">passive</a>
Introduced	16.0.R1
Platforms	All

**poll-interval** *number*

Synopsis	Interval for Hellos to non-adjacent OSPF NBMA neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">poll-interval</a> <i>number</i>
Tree	<a href="#">poll-interval</a>
Max. Range	0 to 4294967295
Units	seconds
Default	120

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Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Interface priority in the DR election on the subnet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	1
Introduced	16.0.R1
Platforms	All

### **retransmit-interval** *number*

Synopsis	Time before OSPF retransmits an unacknowledged LSA
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>retransmit-interval</b> <i>number</i>
Tree	<a href="#">retransmit-interval</a>
Range	1 to 1800
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

### **rib-priority** *keyword*

Synopsis	RIB priority for OSPF
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <b>rib-priority</b> <i>keyword</i>
Tree	<a href="#">rib-priority</a>
Options	high
Introduced	16.0.R1
Platforms	All

**transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">interface</a> <i>string</i> <a href="#">transit-delay</a> <i>number</i>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**key-rollover-interval** *number*

Synopsis	Key rollover interval
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">key-rollover-interval</a> <i>number</i>
Tree	<a href="#">key-rollover-interval</a>
Range	10 to 300
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**loopfree-alternate-exclude** *boolean*

Synopsis	Exclude interfaces in OSPF areas in SPF LFA computation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">loopfree-alternate-exclude</a> <i>boolean</i>
Tree	<a href="#">loopfree-alternate-exclude</a>
Default	false
Introduced	16.0.R1
Platforms	All

**nssa**

Synopsis	Enable the <b>nssa</b> context
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Context	<b>configure service vprn string ospf3 number area string nssa</b>
Tree	<b>nssa</b>
Introduced	16.0.R1
Platforms	All

### **area-range** [**ip-prefix-mask**] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>area-range</b> list instance
Context	<b>configure service vprn string ospf3 number area string nssa area-range</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>area-range</b>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix-mask]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Address ranges to create on an ABR for route summarization or suppression
Context	<b>configure service vprn string ospf3 number area string nssa area-range</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<b>area-range</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **advertise** *boolean*

Synopsis	Advertise summarized range of addresses to other areas
Context	<b>configure service vprn string ospf3 number area string nssa area-range</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>advertise</b> <i>boolean</i>
Tree	<b>advertise</b>
Default	true
Introduced	16.0.R1
Platforms	All

## originate-default-route

Synopsis	Enable the <b>originate-default-route</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">originate-default-route</a>
Tree	<a href="#">originate-default-route</a>
Introduced	16.0.R1
Platforms	All

## adjacency-check *boolean*

Synopsis	Perform adjacency checks before originating a default route
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">originate-default-route</a> <a href="#">adjacency-check</a> <i>boolean</i>
Tree	<a href="#">adjacency-check</a>
Default	false
Introduced	16.0.R1
Platforms	All

## type-nssa *boolean*

Synopsis	Generate a default route using NSSA-LSA type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">originate-default-route</a> <a href="#">type-nssa</a> <i>boolean</i>
Tree	<a href="#">type-nssa</a>
Default	false
Introduced	16.0.R1
Platforms	All

## redistribute-external *boolean*

Synopsis	Redistribute external routes into the NSSA
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">redistribute-external</a> <i>boolean</i>
Tree	<a href="#">redistribute-external</a>
Default	true
Introduced	16.0.R1
Platforms	All

**summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the NSSA on an ABR
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">nssa</a> <a href="#">summaries</a> <i>boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All

**stub**

Synopsis	Enable the <b>stub</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">stub</a>
Tree	<a href="#">stub</a>
Introduced	16.0.R1
Platforms	All

**default-metric** *number*

Synopsis	Metric used by ABR for default route into the stub area
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">stub</a> <a href="#">default-metric</a> <i>number</i>
Tree	<a href="#">default-metric</a>
Range	1 to 16777214
Default	1
Introduced	16.0.R1
Platforms	All

**summaries** *boolean*

Synopsis	Send summary (Type 3) LSAs into the stub area on an ABR
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">stub</a> <a href="#">summaries</a> <i>boolean</i>
Tree	<a href="#">summaries</a>
Default	true
Introduced	16.0.R1
Platforms	All



**virtual-link** [**router-id**] *string transit-area reference*

Synopsis	Enter the <b>virtual-link</b> list instance
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string ospf3 number area string virtual-link string transit-area reference</i>
Tree	<b>virtual-link</b>
Introduced	16.0.R1
Platforms	All

**[router-id]** *string*

Synopsis	Router identity of the virtual link neighbor
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string ospf3 number area string virtual-link string transit-area reference</i>
Tree	<b>virtual-link</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**transit-area** *reference*

Synopsis	Transit area that links backbone area to area without physical connection with the backbone
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string ospf3 number area string virtual-link string transit-area reference</i>
Tree	<b>virtual-link</b>
Reference	<b>configure</b> <b>service</b> <b>vprn</b> <i>string ospf3 number area string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the OSPF interface
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string ospf3 number area string virtual-link string transit-area reference admin-state keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## authentication

Synopsis	Enable the <b>authentication</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">authentication</a>
Tree	<a href="#">authentication</a>
Introduced	16.0.R6
Platforms	All

## inbound *reference*

Synopsis	sa-name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">authentication inbound</a> <i>reference</i>
Tree	<a href="#">inbound</a>
Reference	<b>configure</b> <a href="#">ipsec static-sa</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6
Platforms	All

## outbound *reference*

Synopsis	sa-name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">area</a> <i>string</i> <a href="#">virtual-link</a> <i>string</i> <a href="#">transit-area</a> <i>reference</i> <a href="#">authentication outbound</a> <i>reference</i>
Tree	<a href="#">outbound</a>
Reference	<b>configure</b> <a href="#">ipsec static-sa</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R6

Platforms All

### **dead-interval** *number*

Synopsis OSPF wait time for Hellos before neighbor declared down

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* [dead-interval](#) *number*

Tree [dead-interval](#)

Range 2 to 65535

Units seconds

Introduced 16.0.R1

Platforms All

### **hello-interval** *number*

Synopsis Time between OSPF Hellos of this interface

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* [hello-interval](#) *number*

Tree [hello-interval](#)

Range 1 to 65535

Units seconds

Default 10

Introduced 16.0.R1

Platforms All

### **retransmit-interval** *number*

Synopsis Time before OSPF retransmits an unacknowledged LSA

Context **configure** [service vprn](#) *string* [ospf3](#) *number* [area](#) *string* [virtual-link](#) *string* [transit-area](#) *reference* [retransmit-interval](#) *number*

Tree [retransmit-interval](#)

Range 1 to 1800

Units seconds

Default 5

Introduced 16.0.R1

Platforms All

**transit-delay** *number*

Synopsis	Required LSA transmit time
Context	<b>configure</b> <a href="#">service vprn string ospf3 number area string virtual-link string transit-area reference transit-delay number</a>
Tree	<a href="#">transit-delay</a>
Range	1 to 1800
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <a href="#">service vprn string ospf3 number export-limit</a>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R1
Platforms	All

**log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <a href="#">service vprn string ospf3 number export-limit log-percent number</a>
Tree	<a href="#">log-percent</a>
Range	1 to 100
Introduced	16.0.R1
Platforms	All

**number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <a href="#">service vprn string ospf3 number export-limit number number</a>
Tree	<a href="#">number</a>
Range	1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **export-policy** *reference*

Synopsis	Export policies that determine exported routes
Context	<b>configure</b> <a href="#">service vprn string ospf3 number</a> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	<p>This command configures export routing policies for the routes exported from the routing table to IS-IS.</p> <p>If the export policy is undefined, the system does not export non IS-IS routes from the routing table manager to IS-IS.</p> <p>If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.</p> <p>If the <b>aggregate</b> command is also configured in the <b>configure router</b> context, the aggregation is applied before the export policy is applied.</p> <p>Routing policies are created in the <b>configure router policy-options</b> context.</p>
Reference	<b>configure</b> <a href="#">policy-options policy-statement string</a>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **external-db-overflow**

Synopsis	Enable the <b>external-db-overflow</b> context
Context	<b>configure</b> <a href="#">service vprn string ospf3 number</a> <b>external-db-overflow</b>
Tree	<a href="#">external-db-overflow</a>
Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Time during which the router operates in overload
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Context	<b>configure service vprn string ospf3 number external-db-overflow interval number</b>
Tree	<b>interval</b>
Range	0 to 2147483647
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	All

### **limit number**

Synopsis	Number of external LSA at which overload is triggered
Context	<b>configure service vprn string ospf3 number external-db-overflow limit number</b>
Tree	<b>limit</b>
Range	0 to 2147483647
Default	0
Introduced	16.0.R1
Platforms	All

### **external-preference number**

Synopsis	Preference for OSPF external routes
Context	<b>configure service vprn string ospf3 number external-preference number</b>
Tree	<b>external-preference</b>
Range	1 to 255
Default	150
Introduced	16.0.R1
Platforms	All

### **graceful-restart**

Synopsis	Enable the <b>graceful-restart</b> context
Context	<b>configure service vprn string ospf3 number graceful-restart</b>
Tree	<b>graceful-restart</b>
Introduced	16.0.R1
Platforms	All

**helper-mode** *boolean*

Synopsis	Enable graceful restart helper for OSPF
Context	<b>configure</b> <a href="#">service vprn string ospf3 number graceful-restart helper-mode</a> <i>boolean</i>
Tree	<a href="#">helper-mode</a>
Default	true
Introduced	16.0.R1
Platforms	All

**strict-lsa-checking** *boolean*

Synopsis	Perform strict LSA checking during graceful restart
Context	<b>configure</b> <a href="#">service vprn string ospf3 number graceful-restart strict-lsa-checking</a> <i>boolean</i>
Tree	<a href="#">strict-lsa-checking</a>
Default	true
Introduced	16.0.R1
Platforms	All

**ignore-dn-bit** *boolean*

Synopsis	Ignore the DN bit for OSPF LSA packets for the instance
Context	<b>configure</b> <a href="#">service vprn string ospf3 number ignore-dn-bit</a> <i>boolean</i>
Tree	<a href="#">ignore-dn-bit</a>
Default	false
Introduced	16.0.R1
Platforms	All

**import-policy** *reference*

Synopsis	Import policy names for routes from IGP to route table
Context	<b>configure</b> <a href="#">service vprn string ospf3 number import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Max. Instances	5

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## loopfree-alternate

Synopsis	Enable the <b>loopfree-alternate</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <a href="#">string ospf3</a> <a href="#">number loopfree-alternate</a>
Tree	<a href="#">loopfree-alternate</a>
Introduced	16.0.R1
Platforms	All

## exclude

Synopsis	Enter the <b>exclude</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <a href="#">string ospf3</a> <a href="#">number loopfree-alternate</a> <a href="#">exclude</a>
Tree	<a href="#">exclude</a>
Introduced	16.0.R3
Platforms	All

## prefix-policy *reference*

Synopsis	Policy to exclude prefixes from LFA SPF calculation
Context	<b>configure</b> <a href="#">service vprn</a> <a href="#">string ospf3</a> <a href="#">number loopfree-alternate</a> <a href="#">exclude</a> <a href="#">prefix-policy</a> <a href="#">reference</a>
Tree	<a href="#">prefix-policy</a>
Description	This command specifies the name of the policy for the prefixes to exclude from the LFA SPF calculation.  An excluded prefix is not included in LFA calculation regardless of its priority. The prefix tag is, however, used in the main SPF.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <a href="#">string</a>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R3
Platforms	All



**multicast-import** *boolean*

Synopsis	Submit routes into the multicast Route Table Manager
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>multicast-import</b> <i>boolean</i>
Tree	<a href="#">multicast-import</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload** *boolean*

Synopsis	Change local router state to appear overloaded
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>overload</b> <i>boolean</i>
Tree	<a href="#">overload</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-include-ext-1** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>overload-include-ext-1</b> <i>boolean</i>
Tree	<a href="#">overload-include-ext-1</a>
Default	false
Introduced	19.7.R1
Platforms	All

**overload-include-ext-2** *boolean*

Synopsis	Advertise routes with maximum metric value for overload
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <b>overload-include-ext-2</b> <i>boolean</i>
Tree	<a href="#">overload-include-ext-2</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-include-stub** *boolean*

Synopsis	Advertise all stub interfaces with max metric value
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">overload-include-stub</a> <i>boolean</i>
Tree	<a href="#">overload-include-stub</a>
Default	false
Introduced	16.0.R1
Platforms	All

**overload-on-boot**

Synopsis	Enable the <b>overload-on-boot</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">overload-on-boot</a>
Tree	<a href="#">overload-on-boot</a>
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Time during which the router operates in overload state before reestablishing normal operations
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">overload-on-boot</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	60 to 1800
Units	seconds
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Preference for OSPF internal routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	10

Introduced	16.0.R1
Platforms	All

### **reference-bandwidth** *number*

Synopsis	Bandwidth to reference default costing of interfaces
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">reference-bandwidth</a> <i>number</i>
Tree	<a href="#">reference-bandwidth</a>
Range	1 to 18446744073709551615
Units	kilobps
Default	100000000
Introduced	16.0.R1
Platforms	All

### **rib-priority**

Synopsis	Enter the <b>rib-priority</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rib-priority</a>
Tree	<a href="#">rib-priority</a>
Introduced	16.0.R1
Platforms	All

### **high**

Synopsis	Enter the <b>high</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rib-priority</a> <a href="#">high</a>
Tree	<a href="#">high</a>
Introduced	16.0.R1
Platforms	All

### **prefix-list** *reference*

Synopsis	Higher priority list used during OSPF route calculation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rib-priority</a> <a href="#">high</a> <a href="#">prefix-list</a> <i>reference</i>
Tree	<a href="#">prefix-list</a>

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **router-id** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Unique router ID for the OSPF instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">router-id</a> <i>string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

### **rtr-adv-lsa-limit**

Synopsis	Enable the <b>rtr-adv-lsa-limit</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a>
Tree	<a href="#">rtr-adv-lsa-limit</a>
Introduced	16.0.R1
Platforms	All

### **log-only** *boolean*

Synopsis	Log the event without triggering overload
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">rtr-adv-lsa-limit</a> <a href="#">log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **max-lsa-count** *number*

Synopsis	Maximum number of LSAs one router can advertise
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Context	<b>configure service vprn string ospf3 number rtr-adv-lsa-limit max-lsa-count number</b>
Tree	<a href="#">max-lsa-count</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **overload-timeout** (*number | keyword*)

Synopsis	Maximum time in overload after LSA limit is reached
Context	<b>configure service vprn string ospf3 number rtr-adv-lsa-limit overload-timeout (<i>number   keyword</i>)</b>
Tree	<a href="#">overload-timeout</a>
Range	1 to 1800
Units	seconds
Options	forever
Default	forever
Introduced	16.0.R1
Platforms	All

### **warning-threshold** *number*

Synopsis	Percentage of the max LSA count that causes a warning
Context	<b>configure service vprn string ospf3 number rtr-adv-lsa-limit warning-threshold <i>number</i></b>
Tree	<a href="#">warning-threshold</a>
Range	0 to 100
Units	percent
Default	0
Introduced	16.0.R1
Platforms	All

### **suppress-dn-bit** *boolean*

Synopsis	Suppress the DN bit setting for OSPF LSA packets
Context	<b>configure service vprn string ospf3 number suppress-dn-bit <i>boolean</i></b>

Tree	<a href="#">suppress-dn-bit</a>
Default	false
Introduced	16.0.R1
Platforms	All

## timers

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <a href="#">service vprn string ospf3 number timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	All

## incremental-spf-wait *number*

Synopsis	Delay time before an incremental SPF calculation starts
Context	<b>configure</b> <a href="#">service vprn string ospf3 number timers incremental-spf-wait number</a>
Tree	<a href="#">incremental-spf-wait</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

## lsa-accumulate *number*

Synopsis	Delay to gather LSAs before advertising to neighbors
Context	<b>configure</b> <a href="#">service vprn string ospf3 number timers lsa-accumulate number</a>
Tree	<a href="#">lsa-accumulate</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **Isa-arrival** *number*

Synopsis	Minimum delay between receipt of same LSAs
Context	<b>configure</b> <a href="#">service vprn</a> <a href="#">string ospf3</a> <a href="#">number timers</a> <a href="#">Isa-arrival</a> <i>number</i>
Tree	<a href="#">Isa-arrival</a>
Range	0 to 600000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **Isa-generate**

Synopsis	Enter the <b>Isa-generate</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <a href="#">string ospf3</a> <a href="#">number timers</a> <a href="#">Isa-generate</a>
Tree	<a href="#">Isa-generate</a>
Introduced	16.0.R1
Platforms	All

### **Isa-initial-wait** *number*

Synopsis	First wait period between OSPF LSA generation
Context	<b>configure</b> <a href="#">service vprn</a> <a href="#">string ospf3</a> <a href="#">number timers</a> <a href="#">Isa-generate</a> <a href="#">Isa-initial-wait</a> <i>number</i>
Tree	<a href="#">Isa-initial-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **Isa-second-wait** *number*

Synopsis	Hold time between the first and second LSA generation
Context	<b>configure</b> <a href="#">service vprn</a> <a href="#">string ospf3</a> <a href="#">number timers</a> <a href="#">Isa-generate</a> <a href="#">Isa-second-wait</a> <i>number</i>
Tree	<a href="#">Isa-second-wait</a>

Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **max-lsa-wait** *number*

Synopsis	Max time between two LSAs being generated
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers lsa-generate</a> <b>max-lsa-wait</b> <i>number</i>
Tree	<a href="#">max-lsa-wait</a>
Range	10 to 600000
Units	milliseconds
Default	5000
Introduced	16.0.R1
Platforms	All

### **redistribute-delay** *number*

Synopsis	Hold down timer for external routes into OSPF
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers redistribute-delay</a> <i>number</i>
Tree	<a href="#">redistribute-delay</a>
Range	0 to 1000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

### **spf-wait**

Synopsis	Enter the <b>spf-wait</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers spf-wait</a>
Tree	<a href="#">spf-wait</a>
Introduced	16.0.R1
Platforms	All



**spf-initial-wait** *number*

Synopsis	Initial SPF calculation delay after a topology change
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <a href="#">spf-initial-wait</a> <i>number</i>
Tree	<a href="#">spf-initial-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**spf-max-wait** *number*

Synopsis	Maximum interval between consecutive SPF calculations
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <a href="#">spf-max-wait</a> <i>number</i>
Tree	<a href="#">spf-max-wait</a>
Range	10 to 120000
Units	milliseconds
Default	10000
Introduced	16.0.R1
Platforms	All

**spf-second-wait** *number*

Synopsis	Hold time between the first and second SPF calculation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">timers</a> <a href="#">spf-wait</a> <a href="#">spf-second-wait</a> <i>number</i>
Tree	<a href="#">spf-second-wait</a>
Range	10 to 100000
Units	milliseconds
Default	1000
Introduced	16.0.R1
Platforms	All

**unicast-import** *boolean*

Synopsis	Submit routes into the unicast Route Table Manager
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ospf3</a> <i>number</i> <a href="#">unicast-import</a> <i>boolean</i>
Tree	<a href="#">unicast-import</a>
Default	true
Introduced	16.0.R1
Platforms	All

**pcp**

Synopsis	Enter the <b>pcp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pcp</a>
Tree	<a href="#">pcp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [[name](#)] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	PCP server name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i>
Tree	<a href="#">server</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the PCP server
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dual-stack-lite-address** *string*

Synopsis	Inside Dual Stack Lite AFTR address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i> <b>dual-stack-lite-address</b> <i>string</i>
Tree	<a href="#">dual-stack-lite-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fwd-inside-router** *string*

Synopsis	PCP forwarding inside virtual router instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i> <b>fwd-inside-router</b> <i>string</i>
Tree	<a href="#">fwd-inside-router</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface** [[name](#)] *reference*

Synopsis	Add a list entry for <b>interface</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Max. Instances	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *reference*

Synopsis	Interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i> <a href="#">interface</a> <i>reference</i>
Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy** *reference*

Synopsis	PCP server policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">pcp</a> <a href="#">server</a> <i>string</i> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">nat</a> <a href="#">pcp-server-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pim**

Synopsis	Enable the <b>pim</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">pim</a>
Tree	<a href="#">pim</a>
Introduced	16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of PIM

Context **configure service vprn** *string pim admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **apply-to** *keyword*

Synopsis IES and non-IES interfaces to create in PIM

Context **configure service vprn** *string pim apply-to keyword*

Tree [apply-to](#)

Options all, none

Default none

Introduced 16.0.R1

Platforms All

### **bgp-nh-override** *boolean*

Synopsis Disable VRF import EC support for next-hop resolution

Context **configure service vprn** *string pim bgp-nh-override boolean*

Tree [bgp-nh-override](#)

Description When configured to **true**, the RPF check is performed using IPv4 VPN AF next-hop instead of IPv4 AF VRF import extended community (EC).  
When configured to **false**, the RPF check is performed using IPv4 AF VRF import EC.

Default false

Introduced 19.7.R1

Platforms All

## import

Synopsis	Enter the <b>import</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <b>import</b>
Tree	<a href="#">import</a>
Introduced	16.0.R1
Platforms	All

## join-policy *reference*

Synopsis	Policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <b>import</b> <a href="#">join-policy</a> <i>reference</i>
Tree	<a href="#">join-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## register-policy *reference*

Synopsis	Policy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <b>import</b> <a href="#">register-policy</a> <i>reference</i>
Tree	<a href="#">register-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## interface [[interface-name](#)] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <b>interface</b> <i>string</i>

Tree	<a href="#">interface</a>
Introduced	16.0.R1
Platforms	All

**[interface-name] string**

Synopsis	Interface name
Context	<b>configure</b> <a href="#">service vprn string pim interface string</a>
Tree	<a href="#">interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the PIM interface
Context	<b>configure</b> <a href="#">service vprn string pim interface string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**assert-period number**

Synopsis	Time for periodic refreshes of PIM Assert messages on an interface
Context	<b>configure</b> <a href="#">service vprn string pim interface string assert-period number</a>
Tree	<a href="#">assert-period</a>
Range	1 to 300
Default	60
Introduced	16.0.R1
Platforms	All

## **bfd-liveness**

Synopsis	Enter the <b>bfd-liveness</b> context
Context	<b>configure service vprn string pim interface string bfd-liveness</b>
Tree	<a href="#">bfd-liveness</a>
Introduced	16.0.R1
Platforms	All

## **ipv4 boolean**

Synopsis	Use Bidirectional Forwarding Detection for IPv4 on PIM interface
Context	<b>configure service vprn string pim interface string bfd-liveness ipv4 boolean</b>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **ipv6 boolean**

Synopsis	Use Bidirectional Forwarding Detection for IPv6 on PIM interface
Context	<b>configure service vprn string pim interface string bfd-liveness ipv6 boolean</b>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **bsm-check-rtr-alert boolean**

Synopsis	Check router alert option in bootstrap messages received
Context	<b>configure service vprn string pim interface string bsm-check-rtr-alert boolean</b>
Tree	<a href="#">bsm-check-rtr-alert</a>
Default	false
Introduced	16.0.R1
Platforms	All



**hello-interval** *number*

Synopsis	Frequency at which PIM Hello messages are sent over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <b>hello-interval</b> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	0 to 255
Default	30
Introduced	16.0.R1
Platforms	All

**hello-multiplier** *number*

Synopsis	Multiplier to determine the hold time for PIM neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <b>hello-multiplier</b> <i>number</i>
Tree	<a href="#">hello-multiplier</a>
Range	20 to 100
Default	35
Introduced	16.0.R1
Platforms	All

**improved-assert** *boolean*

Synopsis	Allow improved assert processing on interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <b>improved-assert</b> <i>boolean</i>
Tree	<a href="#">improved-assert</a>
Default	true
Introduced	16.0.R1
Platforms	All

**instant-prune-echo** *boolean*

Synopsis	Allow PIM to send an instant prune echo when router starts the prune pending timer for PIM interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <b>instant-prune-echo</b> <i>boolean</i>
Tree	<a href="#">instant-prune-echo</a>
Default	false

Introduced 16.0.R1  
 Platforms All

## ipv4

Synopsis Enter the **ipv4** context  
 Context **configure** [service vprn string pim interface string ipv4](#)  
 Tree [ipv4](#)  
 Introduced 16.0.R1  
 Platforms All

## monitor-oper-group

Synopsis Enter the **monitor-oper-group** context  
 Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group](#)  
 Tree [monitor-oper-group](#)  
 Introduced 16.0.R1  
 Platforms All

## name *reference*

Synopsis Operational group identifier  
 Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group name reference](#)  
 Tree [name](#)  
 Reference **configure** [service oper-group string](#)  
 Introduced 16.0.R1  
 Platforms All

## operation *keyword*

Synopsis Operation performed when operational group is active  
 Context **configure** [service vprn string pim interface string ipv4 monitor-oper-group operation keyword](#)  
 Tree [operation](#)  
 Options add, subtract, set

Introduced	16.0.R1
Platforms	All

### **priority-delta** *number*

Synopsis	Delta priority with operation when operational group is active
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">ipv4 monitor-oper-group</a> <b>priority-delta</b> <i>number</i>
Tree	<a href="#">priority-delta</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **multicast** *boolean*

Synopsis	Enable PIM interface operation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">ipv4 multicast</a> <i>boolean</i>
Tree	<a href="#">multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <b>ipv6</b>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

### **monitor-oper-group**

Synopsis	Enter the <b>monitor-oper-group</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">ipv6 monitor-oper-group</a>
Tree	<a href="#">monitor-oper-group</a>
Introduced	16.0.R1

Platforms All

### **name** *reference*

Synopsis Operational group identifier

Context **configure** [service](#) [vprn](#) *string* [pim](#) [interface](#) *string* [ipv6](#) [monitor-oper-group](#) *name reference*

Tree [name](#)

Reference **configure** [service](#) [oper-group](#) *string*

Introduced 16.0.R1

Platforms All

### **operation** *keyword*

Synopsis Operation performed when operational group is active

Context **configure** [service](#) [vprn](#) *string* [pim](#) [interface](#) *string* [ipv6](#) [monitor-oper-group](#) *operation keyword*

Tree [operation](#)

Options add, subtract, set

Introduced 16.0.R1

Platforms All

### **priority-delta** *number*

Synopsis Delta priority with operation when operational group is active

Context **configure** [service](#) [vprn](#) *string* [pim](#) [interface](#) *string* [ipv6](#) [monitor-oper-group](#) *priority-delta number*

Tree [priority-delta](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **multicast** *boolean*

Synopsis Enable PIM interface operation

Context **configure** [service](#) [vprn](#) *string* [pim](#) [interface](#) *string* [ipv6](#) [multicast](#) *boolean*

Tree	<a href="#">multicast</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **max-groups** *number*

Synopsis	Maximum number of groups for the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">max-groups</a> <i>number</i>
Tree	<a href="#">max-groups</a>
Range	0   1 to 16000
Default	0
Introduced	16.0.R1
Platforms	All

### **mcac**

Synopsis	Enter the <b>mcac</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">mcac</a>
Tree	<a href="#">mcac</a>
Introduced	16.0.R1
Platforms	All

### **bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	All

### **mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <a href="#">mandatory</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

### **total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	All

### **interface-policy** *reference*

Synopsis	Name of multicast CAC interface policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a>
Tree	<a href="#">mc-constraints</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the multicast CAC constraints
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**level** [[level-id](#)] *number*

Synopsis	Enter the <b>level</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Introduced	16.0.R1
Platforms	All

**[level-id]** *number*

Synopsis	Bandwidth level ID for an MCAC constraint
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bandwidth** *number*

Synopsis	Bandwidth available for this level
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">level</a> <i>number</i> <a href="#">bandwidth</a> <i>number</i>
Tree	<a href="#">bandwidth</a>
Range	0 to 2147483647

Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **number-down** [[number-lag-port-down](#)] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i>
Tree	<a href="#">number-down</a>
Introduced	16.0.R1
Platforms	All

### **[number-lag-port-down]** *number*

Synopsis	Number of ports that are down in this LAG link
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i>
Tree	<a href="#">number-down</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **level** *number*

Synopsis	Level ID to associate with number of down LAG ports
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">mcac</a> <a href="#">mc-constraints</a> <a href="#">number-down</a> <i>number</i> <a href="#">level</a> <i>number</i>
Tree	<a href="#">level</a>
Description	This command specifies the bandwidth for a given level. Level 1 has the highest priority and level 8 has the lowest priority.
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1



Platforms All

### **use-lag-port-weight** *boolean*

Synopsis Use LAG port weight in calculating MCAC constraints

Context **configure service vprn string pim interface string mcac mc-constraints use-lag-port-weight boolean**

Tree [use-lag-port-weight](#)

Description When configured to **true**, port weight is used when determining available bandwidth per level when LAG ports go down or come up. This command is required for proper operation on mixed port-speed LAGs and can also be used for unmixed port-speed LAGs.

Default false

Introduced 16.0.R1

Platforms All

### **policy reference**

Synopsis Multicast CAC policy name

Context **configure service vprn string pim interface string mcac policy reference**

Tree [policy](#)

Description This command configures the name of the global channel bandwidth definition policy that is used for (H)MCAC and HQoS adjustment.

Within the scope of HQoS adjustment, the channel definition policy under the group interface is used if redirection is unconfigured. In this case, the HQoS adjustment can be applied to IPoE subscribers in per-SAP replication mode.

If redirection is configured, the channel bandwidth definition policy applied under the Layer 3 redirected interface is in effect.

Hierarchical MCAC (HMCAC) is supported on two levels simultaneously:

- subscriber level and redirected interface when redirection is configured
- subscriber level and group-interface level when redirection is unconfigured

In HMCAC, the subscriber is checked against its bandwidth limits first, then against the bandwidth limits of the redirected or group interface. If redirection is configured but the policy is referenced only under the group interface, no admission control is executed (HMCAC or MCAC).

Reference **configure mcac policy string**

Introduced 16.0.R1

Platforms All

**multicast-senders** *keyword*

Synopsis	Subnet matching for the incoming data packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <b>multicast-senders</b> <i>keyword</i>
Tree	<a href="#">multicast-senders</a>
Options	auto, always, never
Default	auto
Introduced	16.0.R1
Platforms	All

**p2mp-ldp-tree-join**

Synopsis	Enter the <b>p2mp-ldp-tree-join</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <b>p2mp-ldp-tree-join</b>
Tree	<a href="#">p2mp-ldp-tree-join</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ipv4** *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv4 PIM joins
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <b>p2mp-ldp-tree-join</b> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ipv6** *boolean*

Synopsis	Allow dynamic mLDP in-band signaling for IPv6 PIM joins
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <b>p2mp-ldp-tree-join</b> <b>ipv6</b> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *number*

Synopsis	DR election priority for this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 4294967295
Default	1
Introduced	16.0.R1
Platforms	All

### **sticky-dr**

Synopsis	Enable the <b>sticky-dr</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <b>sticky-dr</b>
Tree	<a href="#">sticky-dr</a>
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	DR election priority for this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <a href="#">sticky-dr</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 4294967295
Default	1024
Introduced	16.0.R1
Platforms	All

### **three-way-hello** *boolean*

Synopsis	Allow three-way hello compatibility mode
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">interface</a> <i>string</i> <b>three-way-hello</b> <i>boolean</i>
Tree	<a href="#">three-way-hello</a>
Default	false
Introduced	16.0.R1

Platforms All

### **tracking-support** *boolean*

Synopsis Allow upstream routers to explicitly track join membership  
 Context **configure** [service vprn string pim interface string tracking-support boolean](#)  
 Tree [tracking-support](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **ipv4**

Synopsis Enter the **ipv4** context  
 Context **configure** [service vprn string pim ipv4](#)  
 Tree [ipv4](#)  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of PIM operation for IPv4  
 Context **configure** [service vprn string pim ipv4 admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **grt-extranet**

Synopsis Enter the **grt-extranet** context  
 Context **configure** [service vprn string pim ipv4 grt-extranet](#)  
 Tree [grt-extranet](#)  
 Introduced 16.0.R1

Platforms All

## any

Synopsis GRT or VRF extranet for the instance  
 Context **configure service vpn** *string pim ipv4 grt-extranet any*  
 Tree [any](#)  
 Notes The following elements are part of a choice: **any** or **group-prefix**.  
 Introduced 16.0.R1  
 Platforms All

## group-prefix [[ip-prefix](#)] (*ipv4-prefix | ipv6-prefix*)

Synopsis Enter the **group-prefix** list instance  
 Context **configure service vpn** *string pim ipv4 grt-extranet group-prefix (ipv4-prefix | ipv6-prefix)*  
 Tree [group-prefix](#)  
 Notes The following elements are part of a choice: **any** or **group-prefix**.  
 Introduced 16.0.R1  
 Platforms All

## [[ip-prefix](#)] (*ipv4-prefix | ipv6-prefix*)

Synopsis IP address and mask length  
 Context **configure service vpn** *string pim ipv4 grt-extranet group-prefix (ipv4-prefix | ipv6-prefix)*  
 Tree [group-prefix](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

## starg *boolean*

Synopsis Add a static (\*,G) entry  
 Context **configure service vpn** *string pim ipv4 grt-extranet group-prefix (ipv4-prefix | ipv6-prefix) starg boolean*  
 Tree [starg](#)

Default	false
Introduced	16.0.R1
Platforms	All

### **rpf-table** *keyword*

Synopsis	Route table for RPF lookup
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ipv4</a> <b>rpf-table</b> <i>keyword</i>
Tree	<a href="#">rpf-table</a>
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

### **source-address**

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ipv4</a> <b>source-address</b>
Tree	<a href="#">source-address</a>
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

### **register-message** *string*

Synopsis	Source IPv4 address for PIM register messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ipv4</a> <a href="#">source-address</a> <b>register-message</b> <i>string</i>
Tree	<a href="#">register-message</a>
Description	<p>This command configures the source IPv4 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p>
Introduced	23.3.R1
Platforms	All

**ssm-assert-compatible-mode** *boolean*

Synopsis	Enable SSM assert compatible mode
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <b>ssm-assert-compatible-mode</b> <i>boolean</i>
Tree	<a href="#">ssm-assert-compatible-mode</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ssm-default-range** *boolean*

Synopsis	SSM default range
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv4</a> <b>ssm-default-range</b> <i>boolean</i>
Tree	<a href="#">ssm-default-range</a>
Default	true
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of PIM operation for IPv6
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">ipv6</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**rpf-table** *keyword*

Synopsis	Route table for RPF lookup
Context	<b>configure service vprn</b> <i>string</i> <b>pim ipv6 rpf-table</b> <i>keyword</i>
Tree	<b>rpf-table</b>
Options	rtable-m, rtable-u, both
Default	rtable-u
Introduced	16.0.R1
Platforms	All

**source-address**

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>pim ipv6 source-address</b>
Tree	<b>source-address</b>
Description	Commands in this context configure the source IP address for PIM messages.
Introduced	23.3.R1
Platforms	All

**register-message** *string*

Synopsis	Source IPv6 address for PIM register messages
Context	<b>configure service vprn</b> <i>string</i> <b>pim ipv6 source-address register-message</b> <i>string</i>
Tree	<b>register-message</b>
Description	<p>This command configures the source IPv6 address for register messages in this PIM instance. The IP address can be set to any unicast address, regardless of whether it resides on the node. Ensure that the specified IP address is configured on the router as a loopback or interface IP address.</p> <p>When unconfigured, the source IP address for register messages is selected by choosing the smallest IP address from available interfaces on the node.</p>
Introduced	23.3.R1
Platforms	All

**ssm-default-range** *boolean*

Synopsis	SSM default range
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Context	<b>configure service vprn</b> <i>string</i> <b>pim ipv6 ssm-default-range</b> <i>boolean</i>
Tree	<a href="#">ssm-default-range</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-balance** *boolean*

Synopsis	Enable multicast balancing of traffic over ECMP links
Context	<b>configure service vprn</b> <i>string</i> <b>pim mc-ecmp-balance</b> <i>boolean</i>
Tree	<a href="#">mc-ecmp-balance</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-balance-hold** *number*

Synopsis	Hold time for multicast balancing over ECMP links
Context	<b>configure service vprn</b> <i>string</i> <b>pim mc-ecmp-balance-hold</b> <i>number</i>
Tree	<a href="#">mc-ecmp-balance-hold</a>
Range	2 to 600
Units	minutes
Introduced	16.0.R1
Platforms	All

### **mc-ecmp-hashing**

Synopsis	Enable the <b>mc-ecmp-hashing</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>pim mc-ecmp-hashing</b>
Tree	<a href="#">mc-ecmp-hashing</a>
Introduced	16.0.R1
Platforms	All

**rebalance** *boolean*

Synopsis	Rebalance flows to newly added links immediately instead of waiting until they are pruned
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>pim mc-ecmp-hashing rebalance</b> <i>boolean</i>
Tree	<b>rebalance</b>
Default	false
Introduced	16.0.R1
Platforms	All

**mtu-over-head** *number*

Synopsis	MVPN tunnel MTU size reduction to allow for BIER header
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>pim mtu-over-head</b> <i>number</i>
Tree	<b>mtu-over-head</b>
Description	This command subtracts the specified value from the MVPN tunnel MTU to allow a BIER header to be added without exceeding the network MTU.
Range	0   44   76   140   268   536
Default	0
Introduced	20.5.R1
Platforms	All

**non-dr-attract-traffic** *boolean*

Synopsis	Attract traffic when the router is not the designated one
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>pim non-dr-attract-traffic</b> <i>boolean</i>
Tree	<b>non-dr-attract-traffic</b>
Default	false
Introduced	16.0.R1
Platforms	All

**rp**

Synopsis	Enter the <b>rp</b> context
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>pim rp</b>
Tree	<b>rp</b>

Introduced 16.0.R1  
 Platforms All

## **bootstrap**

Synopsis Enter the **bootstrap** context  
 Context **configure** [service vprn string pim rp bootstrap](#)  
 Tree [bootstrap](#)  
 Introduced 16.0.R1  
 Platforms All

## **export reference**

Synopsis Export policy to control the flow of bootstrap messages  
 Context **configure** [service vprn string pim rp bootstrap export reference](#)  
 Tree [export](#)  
 Reference **configure** [policy-options policy-statement string](#)  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

## **import reference**

Synopsis Import policy to control the flow of bootstrap messages  
 Context **configure** [service vprn string pim rp bootstrap import reference](#)  
 Tree [import](#)  
 Reference **configure** [policy-options policy-statement string](#)  
 Max. Instances 5  
 Notes This element is ordered by the user.  
 Introduced 16.0.R1  
 Platforms All

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vprn string pim rp ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	All

## **anycast** [[ipv4-address](#)] *string rp-set-peer string*

Synopsis	Add a list entry for <b>anycast</b>
Context	<b>configure</b> <a href="#">service vprn string pim rp ipv4 anycast string rp-set-peer string</a>
Tree	<a href="#">anycast</a>
Introduced	16.0.R1
Platforms	All

## **[ipv4-address]** *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	<b>configure</b> <a href="#">service vprn string pim rp ipv4 anycast string rp-set-peer string</a>
Tree	<a href="#">anycast</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## **rp-set-peer** *string*

Synopsis	Configure a peer in the anycast rp-set.
Context	<b>configure</b> <a href="#">service vprn string pim rp ipv4 anycast string rp-set-peer string</a>
Tree	<a href="#">anycast</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**auto-rp-discovery** *boolean*

Synopsis	Enable auto-RP discovery mode and auto-RP listener
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <a href="#">auto-rp-discovery</a> <i>boolean</i>
Tree	<a href="#">auto-rp-discovery</a>
Description	When configured to <b>true</b> , the system enables the auto-RP protocol in discovery mode and the auto-RP listener functionality.  See "Automatic discovery of group-to-RP mappings (auto-RP)" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR Multicast Routing Protocols Guide</i> for more information about the auto-RP protocol and configuration guidelines.
Default	false
Introduced	16.0.R1
Platforms	All

**bsr-candidate**

Synopsis	Enter the <b>bsr-candidate</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <a href="#">bsr-candidate</a>
Tree	<a href="#">bsr-candidate</a>
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <a href="#">bsr-candidate</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the Candidate BSR
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4</a> <a href="#">bsr-candidate</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	16.0.R1
Platforms	All

### **hash-mask-len** *number*

Synopsis	Length for bootstrap hash mask
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4 bsr-candidate hash-mask-len</a> <i>number</i>
Tree	<a href="#">hash-mask-len</a>
Range	0 to 32
Default	30
Introduced	16.0.R1
Platforms	All

### **priority** *number*

Synopsis	Bootstrap priority of the router
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4 bsr-candidate priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	All

### **candidate** *boolean*

Synopsis	Enable auto-RP to advertise candidate RP information
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim rp ipv4 candidate</a> <i>boolean</i>
Tree	<a href="#">candidate</a>
Description	<p>When configured to <b>true</b>, the auto-RP is enabled to advertise the candidate RP information. The auto-RP candidate RP announces the candidate RP messages on the 224.0.1.39 multicast address. This functionality is in addition to the listener functionality enabled by the auto RP discovery.</p> <p>When configured to <b>false</b>, the candidate RP information is not specified.</p>
Default	false
Introduced	20.10.R1
Platforms	All

**mapping-agent** *boolean*

Synopsis	Enable the mapping agent on the node
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv4</a> <a href="#">mapping-agent</a> <i>boolean</i>
Tree	<a href="#">mapping-agent</a>
Description	When configured to <b>true</b> , the mapping agent is enabled on the node. The auto-RP MA observes the <b>auto-rp-announcement</b> messages, selects the RP and generates the RP discovery 224.0.1.40 messages. This functionality is in addition to the auto-RP discovery functionality.
Default	false
Introduced	20.10.R1
Platforms	All

**rp-candidate**

Synopsis	Enter the <b>rp-candidate</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv4</a> <a href="#">rp-candidate</a>
Tree	<a href="#">rp-candidate</a>
Introduced	16.0.R1
Platforms	All

**address** *string*

Synopsis	Local RP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv4</a> <a href="#">rp-candidate</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Description	This command specifies the local RP address that is sent in the RP candidate advertisements to the Bootstrap Router.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the Candidate RP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv4</a> <a href="#">rp-candidate</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **group-range** [[ipv4-prefix](#)] *string*

Synopsis	Add a list entry for <b>group-range</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv4</a> <a href="#">rp-candidate</a> <a href="#">group-range</a> <i>string</i>
Tree	<a href="#">group-range</a>
Introduced	16.0.R1
Platforms	All

### **[ipv4-prefix]** *string*

Synopsis	IPv4 address and prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv4</a> <a href="#">rp-candidate</a> <a href="#">group-range</a> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **holdtime** *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim</a> <a href="#">rp</a> <a href="#">ipv4</a> <a href="#">rp-candidate</a> <a href="#">holdtime</a> <i>number</i>
Tree	<a href="#">holdtime</a>
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All



**priority number**

Synopsis	Candidate RP priority
Context	<b>configure service vprn string pim rp ipv4 rp-candidate priority number</b>
Tree	<b>priority</b>
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure service vprn string pim rp ipv4 static</b>
Tree	<b>static</b>
Introduced	16.0.R1
Platforms	All

**address [ipv4-address] string**

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure service vprn string pim rp ipv4 static address string</b>
Tree	<b>address</b>
Introduced	16.0.R1
Platforms	All

**[ipv4-address] string**

Synopsis	IPv4 address for the static RP
Context	<b>configure service vprn string pim rp ipv4 static address string</b>
Tree	<b>address</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**group-prefix** [[ipv4-prefix](#)] *string*

Synopsis	Add a list entry for <b>group-prefix</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim rp</a> <a href="#">ipv4 static address</a> <i>string</i> <a href="#">group-prefix</a> <i>string</i>
Tree	<a href="#">group-prefix</a>
Introduced	16.0.R1
Platforms	All

**[ipv4-prefix]** *string*

Synopsis	IPv4 address and prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim rp</a> <a href="#">ipv4 static address</a> <i>string</i> <a href="#">group-prefix</a> <i>string</i>
Tree	<a href="#">group-prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**override** *boolean*

Synopsis	Change the precedence for static RP over dynamically learnt RP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim rp</a> <a href="#">ipv4 static address</a> <i>string</i> <a href="#">override</a> <i>boolean</i>
Tree	<a href="#">override</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim rp</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

**anycast** [*ipv6-address*] *string rp-set-peer string*

Synopsis	Add a list entry for <b>anycast</b>
Context	<b>configure service vprn string pim rp ipv6 anycast string rp-set-peer string</b>
Tree	<b>anycast</b>
Introduced	16.0.R1
Platforms	All

**[ipv6-address]** *string*

Synopsis	Loopback IP address shared by routes in RP set
Context	<b>configure service vprn string pim rp ipv6 anycast string rp-set-peer string</b>
Tree	<b>anycast</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**rp-set-peer** *string*

Synopsis	Peer in the anycast RP set
Context	<b>configure service vprn string pim rp ipv6 anycast string rp-set-peer string</b>
Tree	<b>anycast</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**bsr-candidate**

Synopsis	Enter the <b>bsr-candidate</b> context
Context	<b>configure service vprn string pim rp ipv6 bsr-candidate</b>
Tree	<b>bsr-candidate</b>
Introduced	16.0.R1
Platforms	All

**address string**

Synopsis	Candidate BSR IP address for Bootstrap Router election
Context	<b>configure service vprn string pim rp ipv6 bsr-candidate address string</b>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the Candidate BSR
Context	<b>configure service vprn string pim rp ipv6 bsr-candidate admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**hash-mask-len number**

Synopsis	Length for bootstrap hash mask
Context	<b>configure service vprn string pim rp ipv6 bsr-candidate hash-mask-len number</b>
Tree	<a href="#">hash-mask-len</a>
Range	0 to 128
Default	126
Introduced	16.0.R1
Platforms	All

**priority number**

Synopsis	Bootstrap priority of the router
Context	<b>configure service vprn string pim rp ipv6 bsr-candidate priority number</b>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	0
Introduced	16.0.R1

Platforms All

## embedded-rp

Synopsis Enable the **embedded-rp** context  
 Context **configure service vprn string pim rp ipv6 embedded-rp**  
 Tree [embedded-rp](#)  
 Introduced 16.0.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of embedded RP  
 Context **configure service vprn string pim rp ipv6 embedded-rp admin-state keyword**  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms All

## group-range [[ipv6-prefix](#)] *string*

Synopsis Add a list entry for **group-range**  
 Context **configure service vprn string pim rp ipv6 embedded-rp group-range string**  
 Tree [group-range](#)  
 Introduced 16.0.R1  
 Platforms All

## [[ipv6-prefix](#)] *string*

Synopsis IPv6 address and prefix length  
 Context **configure service vprn string pim rp ipv6 embedded-rp group-range string**  
 Tree [group-range](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1

Platforms All

## **rp-candidate**

Synopsis Enter the **rp-candidate** context  
Context **configure service vprn string pim rp ipv6 rp-candidate**  
Tree [rp-candidate](#)  
Introduced 16.0.R1  
Platforms All

## **address string**

Synopsis Local RP address  
Context **configure service vprn string pim rp ipv6 rp-candidate address string**  
Tree [address](#)  
Introduced 16.0.R1  
Platforms All

## **admin-state keyword**

Synopsis Administrative state of the Candidate RP  
Context **configure service vprn string pim rp ipv6 rp-candidate admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

## **group-range [ipv6-prefix] string**

Synopsis Add a list entry for **group-range**  
Context **configure service vprn string pim rp ipv6 rp-candidate group-range string**  
Tree [group-range](#)  
Introduced 16.0.R1  
Platforms All

**[ipv6-prefix]** *string*

Synopsis	IPv6 address and prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim rp ipv6 rp-candidate</a> <a href="#">group-range</a> <i>string</i>
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**holdtime** *number*

Synopsis	Time during which the neighboring router considers this router to be up
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim rp ipv6 rp-candidate</a> <a href="#">holdtime</a> <i>number</i>
Tree	<a href="#">holdtime</a>
Range	5 to 255
Units	seconds
Default	150
Introduced	16.0.R1
Platforms	All

**priority** *number*

Synopsis	Candidate RP priority
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim rp ipv6 rp-candidate</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	0 to 255
Default	192
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">pim rp ipv6</a> <a href="#">static</a>
Tree	<a href="#">static</a>

Introduced 16.0.R1  
Platforms All

### **address** [ipv6-address] *string*

Synopsis Enter the **address** list instance  
Context **configure service vprn string pim rp ipv6 static address string**  
Tree [address](#)  
Introduced 16.0.R1  
Platforms All

### **[ipv6-address]** *string*

Synopsis Static IP address of the RP  
Context **configure service vprn string pim rp ipv6 static address string**  
Tree [address](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **group-prefix** [ipv6-prefix] *string*

Synopsis Add a list entry for **group-prefix**  
Context **configure service vprn string pim rp ipv6 static address string group-prefix string**  
Tree [group-prefix](#)  
Introduced 16.0.R1  
Platforms All

### **[ipv6-prefix]** *string*

Synopsis IPv6 address and prefix length  
Context **configure service vprn string pim rp ipv6 static address string group-prefix string**  
Tree [group-prefix](#)  
Notes This element is part of a list key.  
Introduced 16.0.R1



Platforms All

### **override** *boolean*

Synopsis Change the precedence for static RP over dynamically learnt RP

Context **configure** [service vprn](#) *string* [pim rp ipv6 static address](#) *string* **override** *boolean*

Tree [override](#)

Default false

Introduced 16.0.R1

Platforms All

### **spt-switchover** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **spt-switchover** list instance

Context **configure** [service vprn](#) *string* [pim spt-switchover](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [spt-switchover](#)

Introduced 16.0.R1

Platforms All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP address and mask length

Context **configure** [service vprn](#) *string* [pim spt-switchover](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [spt-switchover](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **threshold** (*number* | *keyword*)

Synopsis SPT switchover threshold

Context **configure** [service vprn](#) *string* [pim spt-switchover](#) (*ipv4-prefix* | *ipv6-prefix*) **threshold** (*number* | *keyword*)

Tree [threshold](#)

Range 1 to 4294967294

Units	kilobps
Options	infinity
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## ssm-groups

Synopsis	Enter the <b>ssm-groups</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ssm-groups</a>
Tree	<a href="#">ssm-groups</a>
Introduced	16.0.R1
Platforms	All

## group-range [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Add a list entry for <b>group-range</b>
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ssm-groups group-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-range</a>
Introduced	16.0.R1
Platforms	All

## [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	IP address and mask length
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">pim ssm-groups group-range</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">group-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## radius

Synopsis	Enter the <b>radius</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius</a>

Tree	<a href="#">radius</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**proxy** [[name](#)] *string*

Synopsis	Enter the <b>proxy</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i>
Tree	<a href="#">proxy</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	RADIUS proxy name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i>
Tree	<a href="#">proxy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of RADIUS proxy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**attribute-matching**

Synopsis	Enter the <b>attribute-matching</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>attribute-matching</b>
Tree	<b>attribute-matching</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**entry** [*index*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure service vpn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>attribute-matching entry</b> <i>number</i>
Tree	<b>entry</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[index]** *number*

Synopsis	Index of this entry
Context	<b>configure service vpn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>attribute-matching entry</b> <i>number</i>
Tree	<b>entry</b>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-server-policy** *string*

Synopsis	Accounting server policy
Context	<b>configure service vpn</b> <i>string</i> <b>radius proxy</b> <i>string</i> <b>attribute-matching entry</b> <i>number</i> <b>accounting-server-policy</b> <i>string</i>
Tree	<b>accounting-server-policy</b>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication-server-policy** *string*

Synopsis	Authentication server policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <i>entry number</i> <a href="#">authentication-server-policy</a> <i>string</i>
Tree	<a href="#">authentication-server-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-string** *string*

Synopsis	Prefix string
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <i>entry number</i> <a href="#">prefix-string</a> <i>string</i>
Tree	<a href="#">prefix-string</a>
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**suffix-string** *string*

Synopsis	Prefix string
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <i>entry number</i> <a href="#">suffix-string</a> <i>string</i>
Tree	<a href="#">suffix-string</a>
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *number*

Synopsis	Matching attribute type to RADIUS server policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <i>type number</i>
Tree	<a href="#">type</a>
Range	1 to 255

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor** (*number* | *keyword*)

Synopsis	Matching Vendor ID to RADIUS server policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">attribute-matching</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cache**

Synopsis	Enter the <b>cache</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a>
Tree	<a href="#">cache</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the RADIUS proxy cache
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **key**

Synopsis	Enable the <b>key</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">key</a>

Tree	<a href="#">key</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **attribute-type** *number*

Synopsis	RADIUS attribute type to cache for this RADIUS proxy server
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">key</a> <a href="#">attribute-type</a> <i>number</i>
Tree	<a href="#">attribute-type</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **packet-type** *keyword*

Synopsis	Packet type of the RADIUS messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">key</a> <a href="#">packet-type</a> <i>keyword</i>
Tree	<a href="#">packet-type</a>
Options	access-request, access-accept
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor** (*number* | *keyword*)

Synopsis	RADIUS Vendor ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">key</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout** *number*

Synopsis	Idle timeout value
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	60 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**track-accounting**

Synopsis	Enter the <b>track-accounting</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">track-accounting</a>
Tree	<a href="#">track-accounting</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-off** *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">track-accounting</a> <a href="#">accounting-off</a> <i>boolean</i>
Tree	<a href="#">accounting-off</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-on** *boolean*

Synopsis	Remove all ESM hosts associated with the RADIUS client
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">cache</a> <a href="#">track-accounting</a> <a href="#">accounting-on</a> <i>boolean</i>
Tree	<a href="#">accounting-on</a>
Default	false



Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interim-update** *boolean*

Synopsis Update the ESM host with the RADIUS client that generated the interim update  
Context **configure** [service](#) [vprn](#) *string* [radius](#) [proxy](#) *string* [cache](#) [track-accounting](#) [interim-update](#) *boolean*  
Tree [interim-update](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start** *boolean*

Synopsis Update host with client that generated accounting-start  
Context **configure** [service](#) [vprn](#) *string* [radius](#) [proxy](#) *string* [cache](#) [track-accounting](#) [start](#) *boolean*  
Tree [start](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stop** *boolean*

Synopsis Remove ESM host and forward accounting-stop packet  
Context **configure** [service](#) [vprn](#) *string* [radius](#) [proxy](#) *string* [cache](#) [track-accounting](#) [stop](#) *boolean*  
Tree [stop](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-authentication**

Synopsis Enter the **track-authentication** context  
Context **configure** [service](#) [vprn](#) *string* [radius](#) [proxy](#) *string* [cache](#) [track-authentication](#)  
Tree [track-authentication](#)

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accept** *boolean*

Synopsis Track Access-Accept message for mobility  
 Context **configure** [service](#) [vprn](#) *string* [radius proxy](#) *string* [cache](#) [track-authentication](#) **accept** *boolean*  
 Tree [accept](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-delete-hold-time** *number*

Synopsis Delete hold time  
 Context **configure** [service](#) [vprn](#) *string* [radius proxy](#) *string* [cache](#) **track-delete-hold-time** *number*  
 Tree [track-delete-hold-time](#)  
 Range 0 to 6000  
 Units seconds  
 Default 0  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **defaults**

Synopsis Enter the **defaults** context  
 Context **configure** [service](#) [vprn](#) *string* [radius proxy](#) *string* **defaults**  
 Tree [defaults](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-server-policy** *string*

Synopsis Default accounting RADIUS server policy  
 Context **configure** [service](#) [vprn](#) *string* [radius proxy](#) *string* [defaults](#) **accounting-server-policy** *string*

Tree [accounting-server-policy](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **authentication-server-policy** *string*

Synopsis Default authentication RADIUS server policy  
 Context **configure** [service](#) [vpn](#) *string* [radius](#) [proxy](#) *string* [defaults](#) [authentication-server-policy](#) *string*  
 Tree [authentication-server-policy](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [service](#) [vpn](#) *string* [radius](#) [proxy](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface** [[interface-name](#)] *reference*

Synopsis Add a list entry for **interface**  
 Context **configure** [service](#) [vpn](#) *string* [radius](#) [proxy](#) *string* [interface](#) *reference*  
 Tree [interface](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[interface-name]** *reference*

Synopsis IP interface name  
 Context **configure** [service](#) [vpn](#) *string* [radius](#) [proxy](#) *string* [interface](#) *reference*

Tree	<a href="#">interface</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">interface</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## load-balance-key

Synopsis	Enter the <b>load-balance-key</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a>
Tree	<a href="#">load-balance-key</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## attribute-1

Synopsis	Enter the <b>attribute-1</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a>
Tree	<a href="#">attribute-1</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a> <a href="#">type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor** (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-1</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**attribute-2**

Synopsis	Enter the <b>attribute-2</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a>
Tree	<a href="#">attribute-2</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *number*

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a> <a href="#">type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vendor** (*number* | *keyword*)

Synopsis	Vendor-Id attribute
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">radius</a> <a href="#">proxy</a> <i>string</i> <a href="#">load-balance-key</a> <a href="#">attribute-2</a> <a href="#">vendor</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">vendor</a>

Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **attribute-3**

Synopsis	Enter the <b>attribute-3</b> context
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-3</b>
Tree	<a href="#">attribute-3</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type number**

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-3 type number</b>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor (number | keyword)**

Synopsis	Vendor-Id attribute
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-3 vendor (number   keyword)</b>
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## attribute-4

Synopsis	Enter the <b>attribute-4</b> context
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-4</b>
Tree	<a href="#">attribute-4</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type number

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-4 type number</b>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vendor (number | keyword)

Synopsis	Vendor-Id attribute
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-4 vendor (number   keyword)</b>
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## attribute-5

Synopsis	Enter the <b>attribute-5</b> context
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-5</b>
Tree	<a href="#">attribute-5</a>

Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type number**

Synopsis	Attribute type to cache for this RADIUS Proxy server
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-5 type number</b>
Tree	<a href="#">type</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor (number | keyword)**

Synopsis	Vendor-Id attribute
Context	<b>configure service vprn string radius proxy string load-balance-key attribute-5 vendor (number   keyword)</b>
Tree	<a href="#">vendor</a>
Range	1 to 16777215
Options	nokia
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-ip-udp**

Synopsis	Key to consist of the source IP address and source UDP port of the RADIUS message
Context	<b>configure service vprn string radius proxy string load-balance-key source-ip-udp</b>
Tree	<a href="#">source-ip-udp</a>
Notes	The following elements are part of a choice: ( <b>attribute-1</b> , <b>attribute-2</b> , <b>attribute-3</b> , <b>attribute-4</b> , and <b>attribute-5</b> ) or <b>source-ip-udp</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**purpose** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Purpose of the RADIUS proxy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">purpose</a> <i>keyword</i>
Tree	<a href="#">purpose</a>
Options	accounting, authentication, accounting-authentication
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**secret** *string*

Synopsis	Format of the secret key to access the RADIUS proxy server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">secret</a> <i>string</i>
Tree	<a href="#">secret</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**send-accounting-response** *boolean*

Synopsis	Allow RADIUS proxy server to respond to Accounting-Response messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">send-accounting-response</a> <i>boolean</i>

---

Tree	<a href="#">send-accounting-response</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## wlan-gw

Synopsis	Enter the <b>wlan-gw</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">wlan-gw</a>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address *string*

Synopsis	IPv4 address of the distributed RADIUS proxy server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Description	This command configures the IPv4 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv6-address *string*

Synopsis	IPv6 address of the distributed RADIUS proxy server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Description	This command configures the IPv6 address of the distributed RADIUS proxy server for use by the access points.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wlan-gw-group** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN gateway group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius proxy</a> <i>string</i> <a href="#">wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**server** [[name](#)] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	External RADIUS server name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i>
Tree	<a href="#">server</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accept-coa** *boolean*

Synopsis	Process Change of Authorization (CoA) messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <a href="#">accept-coa</a> <i>boolean</i>

Tree	<a href="#">accept-coa</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-port** *number*

Synopsis	UDP port number of the RADIUS for accounting events
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <a href="#">acct-port</a> <i>number</i>
Tree	<a href="#">acct-port</a>
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <a href="#">address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **auth-port** *number*

Synopsis	UDP port number of the RADIUS to be used as match criteria
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <a href="#">auth-port</a> <i>number</i>
Tree	<a href="#">auth-port</a>
Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pending-requests-limit** *number*

Synopsis	Limit of the number for pending RADIUS requests
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <a href="#">pending-requests-limit</a> <i>number</i>
Tree	<a href="#">pending-requests-limit</a>
Range	1 to 4096
Default	4096
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**python-policy** *reference*

Synopsis	Python script policy to modify CoA messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**secret** *string*

Synopsis	Secret key associated with this RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">radius server</a> <i>string</i> <a href="#">secret</a> <i>string</i>
Tree	<a href="#">secret</a>
String Length	1 to 115
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## reassemble

Synopsis Enable the **reassemble** context  
 Context **configure service vprn string reassemble**  
 Tree [reassemble](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nat-group *number*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis NAT group (including WLAN Gateway group) that executes the reassemble  
 Context **configure service vprn string reassemble nat-group number**  
 Tree [nat-group](#)  
 Max. Range 0 to 4294967295  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## to-base-network *boolean*

Synopsis Allow reassembled traffic sent to network interface  
 Context **configure service vprn string reassemble to-base-network boolean**  
 Tree [to-base-network](#)  
 Default false  
 Introduced 19.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## redundant-interface [*interface-name*] *string*

Synopsis Enter the **redundant-interface** list instance  
 Context **configure service vprn string redundant-interface string**

Tree	<a href="#">redundant-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[interface-name] string**

Synopsis	Interface name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i>
Tree	<a href="#">redundant-interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hold-time

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure service vprn string redundant-interface string hold-time</b>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service vprn string redundant-interface string hold-time ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure service vprn string redundant-interface string hold-time ipv4 down</b>
Tree	<a href="#">down</a>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure service vprn string redundant-interface string hold-time ipv4 down init-only <i>boolean</i></b>
Tree	<a href="#">init-only</a>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">hold-time ipv4 down</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">hold-time ipv4 up</a>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">hold-time ipv4 up</a> <a href="#">seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-mtu *number***

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**primary**

Synopsis	Enable the <b>primary</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a>
Tree	<a href="#">primary</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**address *string***

Synopsis	IPv4 address to be assigned to the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-length** *number*

Synopsis	IPv4 address prefix length
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 32
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-ip** *string*

Synopsis	Remote IP address for the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">primary</a> <a href="#">remote-ip</a> <i>string</i>
Tree	<a href="#">remote-ip</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis	Enter the <b>spoke-sdp</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[sdp-bind-id]** *string*

Synopsis	SDP binding ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i>
Tree	<a href="#">spoke-sdp</a>
String Length	3 to 16

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the SDP binding to the service
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **control-word** *boolean*

Synopsis	Use the control word as preferred
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>control-word</b> <i>boolean</i>
Tree	<b>control-word</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">filter</a> <a href="#">ip reference</a>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vc-label *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Egress MPLS VC label to send packets to the far end
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i> <a href="#">spoke-sdp</a> <i>string</i> <a href="#">egress</a> <a href="#">vc-label</a> <i>number</i>
Tree	<a href="#">vc-label</a>
Range	16 to 1048575

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis Enter the **ingress** context  
 Context **configure** [service](#) [vprn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#)  
 Tree [ingress](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis Enter the **filter** context  
 Context **configure** [service](#) [vprn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#)  
 Tree [filter](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis IPv4 filter policy name  
 Context **configure** [service](#) [vprn](#) *string* [redundant-interface](#) *string* [spoke-sdp](#) *string* [ingress](#) [filter](#) [ip](#) [reference](#)  
 Tree [ip](#)  
 Reference **configure** [filter](#) [ip-filter](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vc-label *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Ingress MPLS VC label to send packets to the far end

Context	<b>configure service vprn</b> <i>string</i> <b>redundant-interface</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>ingress vc-label</b> <i>number</i>
Tree	<b>vc-label</b>
Range	1 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rip

Synopsis	Enable the <b>rip</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>rip</b>
Tree	<b>rip</b>
Introduced	16.0.R4
Platforms	All

## **admin-state** *keyword*

Synopsis	Administrative state of the RIP instance
Context	<b>configure service vprn</b> <i>string</i> <b>rip admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

## **authentication-key** *string*

Synopsis	Authentication password passed between RIP neighbors
Context	<b>configure service vprn</b> <i>string</i> <b>rip authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>

String Length	1 to 51
Introduced	16.0.R4
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	<b>configure</b> <b>service vprn</b> <i>string rip authentication-type keyword</i>
Tree	<a href="#">authentication-type</a>
Description	This command sets the type of authentication to be used between RIP neighbors. The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed. When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Default	none
Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>service vprn</b> <i>string rip bfd-liveness boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

### **check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>service vprn</b> <i>string rip check-zero boolean</i>



Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip export-limit</a>
Tree	<a href="#">export-limit</a>
Introduced	16.0.R4
Platforms	All

### **log-percent** *number*

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip export-limit</a> <a href="#">log-percent</a> <i>number</i>
Tree	<a href="#">log-percent</a>
Range	1 to 100
Introduced	16.0.R4
Platforms	All

**number** *number*

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">export-limit</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**export-policy** *reference*

Synopsis	Policies to determine exported routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**group** [[group-name](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R4
Platforms	All

**[group-name]** *string*

Synopsis	RIP group name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of RIP neighbor interface group
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>rip group</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

### **authentication-key** *string*

Synopsis	Authentication password passed between RIP neighbors
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>rip group</b> <i>string</i> <b>authentication-key</b> <i>string</i>
Tree	<b>authentication-key</b>
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, the authentication password is removed from the configuration and authentication is disabled.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

### **authentication-type** *keyword*

Synopsis	Authentication type
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>rip group</b> <i>string</i> <b>authentication-type</b> <i>keyword</i>
Tree	<b>authentication-type</b>
Description	This command configures the type of authentication to be used.

The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.

When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.

Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>bfd-liveness</b> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.  When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

### **check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>check-zero</b> <i>boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.  When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>

String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**message-size** *number*

Synopsis	Maximum number of routes per RIP update message
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">message-size</a> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

**metric-in** *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">metric-in</a> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">metric-out</a> <i>number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**neighbor** [[interface-name](#)] *string*

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R4
Platforms	All

**[interface-name] string**

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i>
Tree	<a href="#">neighbor</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the RIP neighbor interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**authentication-key string**

Synopsis	Authentication password passed between RIP neighbors
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	<p>This command sets the authentication password to be passed between RIP neighbors. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes.</p> <p>The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.</p> <p>When unconfigured, this command removes the authentication password from the configuration and disables authentication.</p>
String Length	1 to 51
Introduced	16.0.R4
Platforms	All

**authentication-type** *keyword*

Synopsis	Authentication type
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">authentication-type</a> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Description	This command configures the type of authentication to be used.  The authentication type and authentication key must match exactly for the RIP message to be considered authentic and processed.  When unconfigured, this command removes the authentication type from the configuration and effectively disables authentication.
Options	none, password, md5, md20
Introduced	16.0.R4
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency.  When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

**check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">check-zero</a> <i>boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.  When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4



Platforms All

### **description** *string*

Synopsis Text description

Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string* [neighbor](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R4

Platforms All

### **export-policy** *reference*

Synopsis Policies used to rule which routes are exported to RIP

Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string* [neighbor](#) *string* [export-policy](#) *reference*

Tree [export-policy](#)

Description This command specifies the export route policies used to determine which routes are exported to RIP.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

Reference **configure** [policy-options](#) [policy-statement](#) *string*

Max. Instances 5

Notes This element is ordered by the user.

Introduced 16.0.R4

Platforms All

### **import-policy** *reference*

Synopsis Policies to decide routes accepted from RIP neighbors

Context **configure** [service](#) [vprn](#) *string* [rip](#) [group](#) *string* [neighbor](#) *string* [import-policy](#) *reference*

Tree [import-policy](#)

Description This command configures import route policies to determine which routes are accepted from RIP neighbors.

If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.

---

Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes per RIP update message
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>message-size</b> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>metric-in</b> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **metric-out** *number*

Synopsis	Metric added to routes exported into RIP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">rip</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <b>metric-out</b> <i>number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

**preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

**receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>receive</b> <i>keyword</i>
Tree	<b>receive</b>
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

**send** *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>send</b> <i>keyword</i>
Tree	<b>send</b>
Options	none, version-1, broadcast, multicast, unicast
Introduced	16.0.R4
Platforms	All

**split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>rip</b> <b>group</b> <i>string</i> <b>neighbor</b> <i>string</i> <b>split-horizon</b> <i>boolean</i>
Tree	<b>split-horizon</b>
Description	When configured to <b>true</b> , this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).

When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <a href="#">service vprn string rip group string neighbor string timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

## flush number

Synopsis	RIP flush timer
Context	<b>configure</b> <a href="#">service vprn string rip group string neighbor string timers flush number</a>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout number

Synopsis	RIP timeout timer
Context	<b>configure</b> <a href="#">service vprn string rip group string neighbor string timers timeout number</a>
Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">timers</a> <a href="#">update</a> <i>number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **unicast-address** [[address](#)] *string*

Synopsis	Add a list entry for <b>unicast-address</b>
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">unicast-address</a> <i>string</i>
Tree	<a href="#">unicast-address</a>
Introduced	16.0.R4
Platforms	All

### **[address]** *string*

Synopsis	Unicast IPv6 address for the neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">neighbor</a> <i>string</i> <a href="#">unicast-address</a> <i>string</i>
Tree	<a href="#">unicast-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <b>service vprn</b> <i>string rip group string preference number</i>
Tree	<b>preference</b>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

**receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>service vprn</b> <i>string rip group string receive keyword</i>
Tree	<b>receive</b>
Options	version-1, version-2, both, none
Introduced	16.0.R4
Platforms	All

**send** *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure</b> <b>service vprn</b> <i>string rip group string send keyword</i>
Tree	<b>send</b>
Options	none, version-1, broadcast, multicast
Introduced	16.0.R4
Platforms	All

**split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <b>service vprn</b> <i>string rip group string split-horizon boolean</i>
Tree	<b>split-horizon</b>
Description	When configured to <b>true</b> , this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).

When configured to **false**, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.

Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure</b> <a href="#">service vprn string rip group string timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

## flush number

Synopsis	RIP flush timer
Context	<b>configure</b> <a href="#">service vprn string rip group string timers flush number</a>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout number

Synopsis	RIP timeout timer
Context	<b>configure</b> <a href="#">service vprn string rip group string timers timeout number</a>
Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip group</a> <i>string</i> <a href="#">timers</a> <a href="#">update</a> <i>number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Import policies to decide routes for routing table
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes in the RIP message
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">message-size</a> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255



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Default	25
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from a RIP neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">metric-in</a> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

### **metric-out** *number*

Synopsis	Metric added to routes exported into RIP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">metric-out</a> <i>number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

### **preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

**propagate-metric** *boolean*

Synopsis	Enable the BGP MED used to configure the RIP metric
Context	<b>configure</b> <a href="#">service vprn</a> <i>string rip propagate-metric boolean</i>
Tree	<a href="#">propagate-metric</a>
Description	When configured to <b>true</b> , this command enables the BGP MED to be used to configure the RIP metric at the BGP to RIP transition on egress routers. When configured to <b>false</b> , this command sets the RIP metric to the optional value configured with the <b>metric-out</b> command plus one.
Default	false
Introduced	16.0.R4
Platforms	All

**receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string rip receive keyword</i>
Tree	<a href="#">receive</a>
Options	version-1, version-2, both, none
Default	both
Introduced	16.0.R4
Platforms	All

**send** *keyword*

Synopsis	RIP version and method used to send RIP updates
Context	<b>configure</b> <a href="#">service vprn</a> <i>string rip send keyword</i>
Tree	<a href="#">send</a>
Options	none, version-1, broadcast, multicast
Default	broadcast
Introduced	16.0.R4
Platforms	All

**split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
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Context	<b>configure service vprn string rip split-horizon boolean</b>
Tree	<b>split-horizon</b>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Default	true
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure service vprn string rip timers</b>
Tree	<b>timers</b>
Introduced	16.0.R4
Platforms	All

## flush number

Synopsis	RIP flush timer
Context	<b>configure service vprn string rip timers flush number</b>
Tree	<b>flush</b>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**timeout** *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">timers</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">rip</a> <a href="#">timers</a> <a href="#">update</a> <i>number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**ripng**

Synopsis	Enable the <b>ripng</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a>
Tree	<a href="#">ripng</a>
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the RIPng instance
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Context	<b>configure service vprn</b> <i>string ripng admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure service vprn</b> <i>string ripng bfd-liveness boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Default	false
Introduced	16.0.R4
Platforms	All

### **check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure service vprn</b> <i>string ripng check-zero boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Default	false
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
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Context	<b>configure service vprn string ripng description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-limit**

Synopsis	Enable the <b>export-limit</b> context
Context	<b>configure service vprn string ripng export-limit</b>
Tree	<b>export-limit</b>
Introduced	16.0.R4
Platforms	All

### **log-percent number**

Synopsis	Export limit before warning and SNMP notification sent
Context	<b>configure service vprn string ripng export-limit log-percent number</b>
Tree	<b>log-percent</b>
Range	1 to 100
Introduced	16.0.R4
Platforms	All

### **number number**

Synopsis	Maximum routes or prefixes exported from route table
Context	<b>configure service vprn string ripng export-limit number number</b>
Tree	<b>number</b>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**export-policy** *reference*

Synopsis	Policies to determine exported routes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**group** [[group-name](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R4
Platforms	All

**[group-name]** *string*

Synopsis	RIP group name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of RIPng neighbor interface group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	enable
Introduced	16.0.R4
Platforms	All

**bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <b>service vprn</b> <i>string ripng group string bfd-liveness boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

**check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <b>service vprn</b> <i>string ripng group string check-zero boolean</i>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages. When configured to <b>false</b> , this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>service vprn</b> <i>string ripng group string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All



**export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <b>export-policy</b> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <b>import-policy</b> <i>reference</i>
Tree	<a href="#">import-policy</a>
Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <b>message-size</b> <i>number</i>

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Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">metric-in</a> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">metric-out</a> <i>number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **neighbor** [[interface-name](#)] *reference*

Synopsis	Enter the <b>neighbor</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>reference</i>
Tree	<a href="#">neighbor</a>
Introduced	16.0.R4
Platforms	All

### **[interface-name]** *reference*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <i>reference</i>

Tree	<a href="#">neighbor</a>
Reference	<b>configure</b> <a href="#">service vprn string interface string</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the RIPng neighbor
Context	<b>configure</b> <a href="#">service vprn string ripng group string neighbor reference admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

### **bfd-liveness** *boolean*

Synopsis	Enable BFD to control the state of protocol adjacency
Context	<b>configure</b> <a href="#">service vprn string ripng group string neighbor reference bfd-liveness boolean</a>
Tree	<a href="#">bfd-liveness</a>
Description	When configured to <b>true</b> , this command enables BFD to control the state of the associated protocol adjacency. When configured to <b>false</b> , this command removes BFD from the associated protocol adjacency.
Introduced	16.0.R4
Platforms	All

### **check-zero** *boolean*

Synopsis	Enable checking of mandatory zero fields
Context	<b>configure</b> <a href="#">service vprn string ripng group string neighbor reference check-zero boolean</a>
Tree	<a href="#">check-zero</a>
Description	When configured to <b>true</b> , this command enables checking of the mandatory zero fields in the RIPv1 and RIPv2 specifications and rejecting non-compliant RIP messages.

When configured to **false**, this command disables the check and allows the receipt of RIP messages even if the mandatory zero fields are non-zero.

Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **export-policy** *reference*

Synopsis	Policies used to rule which routes are exported to RIP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">export-policy</a> <i>reference</i>
Tree	<a href="#">export-policy</a>
Description	This command specifies the export route policies used to determine which routes are exported to RIP.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **import-policy** *reference*

Synopsis	Policies to decide routes accepted from RIP neighbors
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>

Description	This command configures import route policies to determine which routes are accepted from RIP neighbors.  If multiple policy names are specified, the policies are evaluated in the order they are specified. The first policy that matches is applied.
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

### **message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <a href="#">reference</a> <a href="#">message-size</a> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Introduced	16.0.R4
Platforms	All

### **metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <a href="#">reference</a> <a href="#">metric-in</a> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Introduced	16.0.R4
Platforms	All

### **metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">group</a> <i>string</i> <a href="#">neighbor</a> <a href="#">reference</a> <a href="#">metric-out</a> <i>number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16

Introduced 16.0.R4  
Platforms All

### **preference** *number*

Synopsis Route preference  
Context **configure** [service vprn](#) *string* [ripng group](#) *string* [neighbor reference](#) [preference number](#)  
Tree [preference](#)  
Range 1 to 255  
Introduced 16.0.R4  
Platforms All

### **receive** *keyword*

Synopsis Accepted version on received packets  
Context **configure** [service vprn](#) *string* [ripng group](#) *string* [neighbor reference](#) [receive keyword](#)  
Tree [receive](#)  
Options none, ripng  
Introduced 16.0.R4  
Platforms All

### **send** *keyword*

Synopsis RIPng version and method used to send RIPng updates  
Context **configure** [service vprn](#) *string* [ripng group](#) *string* [neighbor reference](#) [send keyword](#)  
Tree [send](#)  
Options none, ripng, unicast  
Introduced 16.0.R4  
Platforms All

### **split-horizon** *boolean*

Synopsis Enable split horizon and poison reverse  
Context **configure** [service vprn](#) *string* [ripng group](#) *string* [neighbor reference](#) [split-horizon boolean](#)  
Tree [split-horizon](#)

Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure service vprn string ripng group string neighbor reference timers</b>
Tree	<b>timers</b>
Introduced	16.0.R4
Platforms	All

## flush number

Synopsis	RIP flush timer
Context	<b>configure service vprn string ripng group string neighbor reference timers flush number</b>
Tree	<b>flush</b>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout number

Synopsis	RIP timeout timer
Context	<b>configure service vprn string ripng group string neighbor reference timers timeout number</b>

Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">timers</a> <a href="#">update number</a>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **unicast-address** [[address](#)] *string*

Synopsis	Add a list entry for <b>unicast-address</b>
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">unicast-address string</a>
Tree	<a href="#">unicast-address</a>
Introduced	16.0.R4
Platforms	All

### **[address]** *string*

Synopsis	Unicast IPv6 address for the neighbor
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">neighbor reference</a> <a href="#">unicast-address string</a>



Tree	<a href="#">unicast-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R4
Platforms	All

### **receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">receive</a> <i>keyword</i>
Tree	<a href="#">receive</a>
Options	none, ripng
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">send</a> <i>keyword</i>
Tree	<a href="#">send</a>
Options	none, ripng
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
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Context	<b>configure service vprn</b> <i>string ripng group string split-horizon boolean</i>
Tree	<a href="#">split-horizon</a>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that learned the route, with the advertised metric equaling an increment of the metric-in value.</p>
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure service vprn</b> <i>string ripng group string timers</i>
Tree	<a href="#">timers</a>
Introduced	16.0.R4
Platforms	All

## flush number

Synopsis	RIP flush timer
Context	<b>configure service vprn</b> <i>string ripng group string timers flush number</i>
Tree	<a href="#">flush</a>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**timeout** *number*

Synopsis	RIP timeout timer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">timers</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng group</a> <i>string</i> <a href="#">timers</a> <a href="#">update</a> <i>number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**import-policy** *reference*

Synopsis	Import policies to decide routes for routing table
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R4
Platforms	All

**message-size** *number*

Synopsis	Maximum number of routes in the message
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <b>message-size</b> <i>number</i>
Tree	<a href="#">message-size</a>
Range	25 to 255
Default	25
Introduced	16.0.R4
Platforms	All

**metric-in** *number*

Synopsis	Metric added to routes received from the neighbor
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <b>metric-in</b> <i>number</i>
Tree	<a href="#">metric-in</a>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

**metric-out** *number*

Synopsis	Metric added to routes exported into RIPng
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <b>metric-out</b> <i>number</i>
Tree	<a href="#">metric-out</a>
Range	1 to 16
Default	1
Introduced	16.0.R4
Platforms	All

**preference** *number*

Synopsis	Route preference
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">ripng</a> <b>preference</b> <i>number</i>
Tree	<a href="#">preference</a>

---

Range	1 to 255
Default	100
Introduced	16.0.R4
Platforms	All

### **receive** *keyword*

Synopsis	Accepted version on received packets
Context	<b>configure</b> <b>service vprn</b> <i>string ripng receive keyword</i>
Tree	<b>receive</b>
Options	none, ripng
Default	ripng
Introduced	16.0.R4
Platforms	All

### **send** *keyword*

Synopsis	RIPng version and method used to send RIPng updates
Context	<b>configure</b> <b>service vprn</b> <i>string ripng send keyword</i>
Tree	<b>send</b>
Options	none, ripng
Default	ripng
Introduced	16.0.R4
Platforms	All

### **split-horizon** *boolean*

Synopsis	Enable split horizon and poison reverse
Context	<b>configure</b> <b>service vprn</b> <i>string ripng split-horizon boolean</i>
Tree	<b>split-horizon</b>
Description	<p>When configured to <b>true</b>, this command enables the use of split horizon with poison reverse. Split-horizon with poison reverse means that routes learned from a neighbor through a given interface are advertised in updates out of the same interface but with a metric of 16 (infinity).</p> <p>When configured to <b>false</b>, this command enables split horizon without poison reverse. This allows the routes to be re-advertised on interfaces other than the interface that</p>

learned the route, with the advertised metric equaling an increment of the metric-in value.

Default	true
Introduced	16.0.R4
Platforms	All

## timers

Synopsis	Enable the <b>timers</b> context
Context	<b>configure service vprn string ripng timers</b>
Tree	<b>timers</b>
Introduced	16.0.R4
Platforms	All

## flush number

Synopsis	RIP flush timer
Context	<b>configure service vprn string ripng timers flush number</b>
Tree	<b>flush</b>
Description	This command specifies the time a route is maintained in the RIP database after it has been declared invalid. When the timer expires, the route is flushed from the RIP database completely.
Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## timeout number

Synopsis	RIP timeout timer
Context	<b>configure service vprn string ripng timers timeout number</b>
Tree	<b>timeout</b>
Description	This command specifies the RIP timeout timer. If a route is not updated by the time the timer expires, the route is declared invalid, but the route is maintained in the RIP database.

Range	1 to 1200
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **update** *number*

Synopsis	Timer that controls the frequency of updates
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">ripng timers</a> <a href="#">update</a> <i>number</i>
Tree	<a href="#">update</a>
Range	1 to 600
Units	seconds
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **router-id** *string*

Synopsis	Unique router ID for the router in the AS
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">router-id</a> <i>string</i>
Tree	<a href="#">router-id</a>
Introduced	16.0.R1
Platforms	All

### **segment-routing-v6** [[instance](#)] *number*

Synopsis	Enter the <b>segment-routing-v6</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">segment-routing-v6</a> <i>number</i>
Tree	<a href="#">segment-routing-v6</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[instance]** *number*

Synopsis	Segment routing IPv6 instance
Context	<b>configure service vprn</b> <i>string segment-routing-v6 number</i>
Tree	<a href="#">segment-routing-v6</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**locator** [[locator-name](#)] *reference*

Synopsis	Enter the <b>locator</b> list instance
Context	<b>configure service vprn</b> <i>string segment-routing-v6 number locator reference</i>
Tree	<a href="#">locator</a>
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**[locator-name]** *reference*

Synopsis	SRv6 locator name
Context	<b>configure service vprn</b> <i>string segment-routing-v6 number locator reference</i>
Tree	<a href="#">locator</a>
Reference	<b>configure router</b> <i>string segment-routing segment-routing-v6 locator string</i>
Notes	This element is part of a list key.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**function**

Synopsis	Enter the <b>function</b> context
Context	<b>configure service vprn</b> <i>string segment-routing-v6 number locator reference function</i>
Tree	<a href="#">function</a>
Description	Commands in this context configure the End SID functions for each SRH mode. The <b>end-dt4</b> configuration and the <b>end-dt46</b> configuration are mutually exclusive.



The **end-dt6** configuration and the **end-dt46** configuration are mutually exclusive.

Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## end-dt4

Synopsis	Enable the <b>end-dt4</b> context
Context	<b>configure service vprn string segment-routing-v6 number locator reference function end-dt4</b>
Tree	<b>end-dt4</b>
Description	Commands in this context assign a value for IPv4 routes in the VPRN service instance.
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## value number

Synopsis	SRv6 function value
Context	<b>configure service vprn string segment-routing-v6 number locator reference function end-dt4 value number</b>
Tree	<b>value</b>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	21.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

## end-dt46

Synopsis	Enable the <b>end-dt46</b> context
Context	<b>configure service vprn string segment-routing-v6 number locator reference function end-dt46</b>
Tree	<b>end-dt46</b>
Description	Commands in this context assign a value for all IPv4 and IPv6 routes in the VPRN service instance.
Introduced	21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **value number**

Synopsis SRv6 function value

Context **configure service vprn string segment-routing-v6 number locator reference function end-dt46 value number**

Tree **value**

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.  
When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **end-dt6**

Synopsis Enable the **end-dt6** context

Context **configure service vprn string segment-routing-v6 number locator reference function end-dt6**

Tree **end-dt6**

Description Commands in this context assign a value for IPv6 routes in the VPRN service instance.

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **value number**

Synopsis SRv6 function value

Context **configure service vprn string segment-routing-v6 number locator reference function end-dt6 value number**

Tree **value**

Description This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.  
When unconfigured, the system allocates a value dynamically.

Range 1 to 1048575

Introduced 21.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **micro-segment-locator** [[locator-name](#)] *reference*

Synopsis Enter the **micro-segment-locator** list instance

Context **configure service vprn** *string* [segment-routing-v6](#) *number* [micro-segment-locator reference](#)

Tree [micro-segment-locator](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **[locator-name]** *reference*

Synopsis Micro-segment SRv6 locator name

Context **configure service vprn** *string* [segment-routing-v6](#) *number* [micro-segment-locator reference](#)

Tree [micro-segment-locator](#)

Description This command associates a pre-defined micro-segment SRv6 locator (defined in the **configure router segment-routing segment-routing-v6** context) with the SRv6 instance in the service. The same micro-segment locator can be referenced in multiple BGP instances used by IPVPN or EVPN.

Reference **configure router** *string* [segment-routing](#) [segment-routing-v6](#) [micro-segment-locator string](#)

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

### **function**

Synopsis Enter the **function** context

Context **configure service vprn** *string* [segment-routing-v6](#) *number* [micro-segment-locator reference](#) [function](#)

Tree [function](#)

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**udt4**

Synopsis	Enable the <b>udt4</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>segment-routing-v6</b> <i>number</i> <b>micro-segment-locator</b> <i>reference</i> <b>function udt4</b>
Tree	<b>udt4</b>
Description	Commands in this context configure the SRv6 uDT4 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 prefixes occur in the VPRN service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value** *number*

Synopsis	SRv6 function value
Context	<b>configure service vprn</b> <i>string</i> <b>segment-routing-v6</b> <i>number</i> <b>micro-segment-locator</b> <i>reference</i> <b>function udt4 value</b> <i>number</i>
Tree	<b>value</b>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance.  When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**udt46**

Synopsis	Enable the <b>udt46</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>segment-routing-v6</b> <i>number</i> <b>micro-segment-locator</b> <i>reference</i> <b>function udt46</b>
Tree	<b>udt46</b>
Description	The commands in this context configure the SRv6 uDT46 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv4 and IPv6 prefixes occur in the VPRN service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure</b> <a href="#">service vprn string segment-routing-v6 number micro-segment-locator reference function udt46 value number</a>
Tree	<a href="#">value</a>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**udt6**

Synopsis	Enable the <b>udt6</b> context
Context	<b>configure</b> <a href="#">service vprn string segment-routing-v6 number micro-segment-locator reference function udt6</a>
Tree	<a href="#">udt6</a>
Description	Commands in this context configure the SRv6 uDT6 behavior and the function value that is associated with the SRv6 instance in the service. When configured, decapsulation and table lookup for IPv6 prefixes occur in the VPRN service.
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**value number**

Synopsis	SRv6 function value
Context	<b>configure</b> <a href="#">service vprn string segment-routing-v6 number micro-segment-locator reference function udt6 value number</a>
Tree	<a href="#">value</a>
Description	This command assigns the optional static function value for the routes in the VPRN, VPLS, or Epipe instance. When unconfigured, the system allocates a value dynamically.
Range	1 to 1048575
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS, VSR

**selective-fib** *boolean*

Synopsis	Enable selective FIB
Context	<b>configure service vprn</b> <i>string selective-fib boolean</i>
Tree	<a href="#">selective-fib</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**service-id** *number***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure service vprn</b> <i>string service-id number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	All

**sfm-overload**

Synopsis	Enable the <b>sfm-overload</b> context
Context	<b>configure service vprn</b> <i>string sfm-overload</i>
Tree	<a href="#">sfm-overload</a>
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

**holdoff-time** *number*

Synopsis	Delay in detecting SFM failures and setting overload
Context	<b>configure service vprn</b> <i>string sfm-overload holdoff-time number</i>
Tree	<a href="#">holdoff-time</a>

Range	1 to 600
Units	seconds
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-1, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS, VSR

## sgt-qos

Synopsis	Enter the <b>sgt-qos</b> context
Context	<b>configure service vprn string sgt-qos</b>
Tree	<a href="#">sgt-qos</a>
Introduced	16.0.R1
Platforms	All

## dot1p

Synopsis	Enter the <b>dot1p</b> context
Context	<b>configure service vprn string sgt-qos dot1p</b>
Tree	<a href="#">dot1p</a>
Introduced	16.0.R1
Platforms	All

## application [[dot1p-app-name](#)] *keyword*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure service vprn string sgt-qos dot1p application keyword</b>
Tree	<a href="#">application</a>
Introduced	16.0.R1
Platforms	All

## [\[dot1p-app-name\]](#) *keyword*

Synopsis	Dot1p application ID that generates control traffic
Context	<b>configure service vprn string sgt-qos dot1p application keyword</b>
Tree	<a href="#">application</a>
Options	arp, isis, pppoe

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **dot1p** (*keyword | number*)

Synopsis	Dot1p value to the traffic generated by this application
Context	<b>configure service vprn string sgt-qos dot1p application keyword dot1p</b> ( <i>keyword   number</i> )
Tree	<a href="#">dot1p</a>
Range	0 to 7
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	All

### **dscp**

Synopsis	Enter the <b>dscp</b> context
Context	<b>configure service vprn string sgt-qos dscp</b>
Tree	<a href="#">dscp</a>
Introduced	16.0.R1
Platforms	All

### **application** [[dscp-app-name](#)] *keyword*

Synopsis	Enter the <b>application</b> list instance
Context	<b>configure service vprn string sgt-qos dscp application keyword</b>
Tree	<a href="#">application</a>
Description	Commands in this context configure DSCP remarking for self-generated application traffic.

All packets generated by the configured application instance use the value configured for the DSCP name or value. The instance can be Base, router, VPRN, or management.

The system uses the DSCP value configured in this instance to:

- set the DSCP bits in the IP packet
- signal from the CPM to the egress FC QoS policy to set the Ethernet 802.1p and MPLS EXP bits including, PPPoE, and IS-IS packets that do not carry DSCP bits



- configure the DSCP value in the egress IP header (which the egress QoS policy does not overwrite)

Introduced 16.0.R1  
 Platforms All

### [**dscp-app-name**] *keyword*

Synopsis DSCP application ID that generates control traffic  
 Context **configure service vprn string sgt-qos dscp application keyword**  
 Tree [application](#)  
 Description This command configures the DSCP application ID that generates control traffic.  
 Options bgp, dhcp, dns, ftp, icmp, igmp, l2tp, ldp, mld, msdp, ndis, ntp, ospf, pim, radius, rip, rsvp, snmp, snmp-notification, srrp, ssh, syslog, tacplus, telnet, tftp, traceroute, vrrp, ptp, gtp, diameter, pcep, call-trace, bmp, grpc, mtrace2, http, pfc, ibcp  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **dscp** (*keyword | number*)

Synopsis DSCP value to the traffic generated by this application  
 Context **configure service vprn string sgt-qos dscp application keyword dscp** (*keyword | number*)  
 Tree [dscp](#)  
 Range 0 to 63  
 Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63  
 Introduced 16.0.R1  
 Platforms All

### **dscp-map** [[dscp-name](#)] *keyword*

Synopsis Enter the **dscp-map** list instance  
 Context **configure service vprn string sgt-qos dscp dscp-map keyword**

Tree	<a href="#">dscp-map</a>
Introduced	16.0.R2
Platforms	All

**[dscp-name]** *keyword*

Synopsis	DSCP name mapped to forwarding class
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">dscp-map</a> <i>keyword</i>
Tree	<a href="#">dscp-map</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**fc** *keyword*

Synopsis	Value for the forwarding class for this mapping
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">sgt-qos</a> <a href="#">dscp</a> <a href="#">dscp-map</a> <i>keyword</i> <a href="#">fc</a> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R2
Platforms	All

**snmp**

Synopsis	Enter the <b>snmp</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">snmp</a>
Tree	<a href="#">snmp</a>
Introduced	16.0.R5
Platforms	All

**access** *boolean*

Synopsis	Enable SNMP access for the VPRN service
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">snmp access</a> <i>boolean</i>
Tree	<a href="#">access</a>
Default	false
Introduced	16.0.R5
Platforms	All

**community** [[community-string](#)] *string*

Synopsis	Enter the <b>community</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">snmp community</a> <i>string</i>
Tree	<a href="#">community</a>
Description	<p>Commands in this context set the SNMP community names to be used with the associated VPRN instance. These VPRN community names are used to associate SNMP v1/v2c requests with a particular VPRN context and to return a reply that contains VPRN-specific data or limit SNMP access to data in a specific VPRN instance.</p> <p>VPRN SNMP communities configured with an access permission of 'r' are automatically associated with the default access group "snmp-vprn-ro" and the "vprn-view" view (read only). VPRN SNMP communities configured with an access permission of 'rw' are automatically associated with the default access group "snmp-vprn" and the "vprn-view" view (read/write).</p> <p>The community in an SNMP v1/v2 request determines the SNMP context (that is, the VPRN number for accessing SNMP tables) and not the VPRN of the incoming interface on which the request was received. For example, when an SNMP request arrives on VPRN 5 interface "ringo" with a destination IP address equal to the "ringo" interface, but the community in the SNMP request is the community configured against VPRN 101, the SNMP request is processed using the VPRN 101 context. (the response contains information about VPRN 101). Nokia recommends avoiding the use of a simple series of VPRN SNMP community values that are similar to each other (for example, avoid my-vprncomm-1, my-vprn-comm-2, and so on).</p>
Introduced	16.0.R5
Platforms	All

**[community-string]** *string*

Synopsis	SNMP v1/v2c community name associated with the VPRN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">snmp community</a> <i>string</i>
Tree	<a href="#">community</a>

String Length	1 to 114
Notes	This element is part of a list key.
Introduced	16.0.R5
Platforms	All

### **access-permissions** *keyword*

Synopsis	Access permissions to MIB objects
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">snmp community</a> <i>string</i> <b>access-permissions</b> <i>keyword</i>
Tree	<a href="#">access-permissions</a>
Options	r, rw
Notes	This element is mandatory.
Introduced	16.0.R5
Platforms	All

### **source-access-list** *reference*

Synopsis	List name used to validate the source IP address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">snmp community</a> <i>string</i> <b>source-access-list</b> <i>reference</i>
Tree	<a href="#">source-access-list</a>
Description	This command specifies the SNMP source access list to use with the SNMP community. The source access list is used to validate the source IP address of all received SNMP requests that use the community.
Reference	<b>configure</b> <a href="#">system security snmp</a> <b>source-access-list</b> <i>string</i>
Introduced	16.0.R5
Platforms	All

### **version** *keyword*

Synopsis	SNMP version
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">snmp community</a> <i>string</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	v1, v2c, both
Default	both
Introduced	16.0.R5

Platforms All

### source-address

Synopsis Enter the **source-address** context  
 Context **configure service vprn string source-address**  
 Tree [source-address](#)  
 Introduced 16.0.R1  
 Platforms All

### ipv4 [[application](#)] keyword

Synopsis Enter the **ipv4** list instance  
 Context **configure service vprn string source-address ipv4 keyword**  
 Tree [ipv4](#)  
 Introduced 16.0.R1  
 Platforms All

### [[application](#)] keyword

Synopsis Application that uses the source IP address  
 Context **configure service vprn string source-address ipv4 keyword**  
 Tree [ipv4](#)  
 Options telnet, ssh, snmptrap, ping, traceroute, ntp, cflowd, ptp, icmp-error  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### address string



#### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv4 address  
 Context **configure service vprn string source-address ipv4 keyword address string**

Tree	<a href="#">address</a>
Notes	The following elements are part of a mandatory choice: <b>address</b> or <b>interface-name</b> .
Introduced	16.0.R1
Platforms	All

### **interface-name** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv4</a> <i>keyword</i> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">interface-name</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>address</b> or <b>interface-name</b> .
Introduced	16.0.R1
Platforms	All

### **ipv6** [[application](#)] *keyword*

Synopsis	Enter the <b>ipv6</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv6</a> <i>keyword</i>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	All

### **[application]** *keyword*

Synopsis	Application that uses the source IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">source-address</a> <a href="#">ipv6</a> <i>keyword</i>
Tree	<a href="#">ipv6</a>
Options	telnet, snmptrap, ping, traceroute, cflowd, ntp, icmp6-error, ssh, ptp
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **address** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv6 address

Context **configure** [service vprn](#) *string* [source-address ipv6](#) *keyword* [address](#) *string*

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **spoke-sdp** [[sdp-bind-id](#)] *string*

Synopsis Enter the **spoke-sdp** list instance

Context **configure** [service vprn](#) *string* [spoke-sdp](#) *string*

Tree [spoke-sdp](#)

Introduced 16.0.R1

Platforms All

### **[sdp-bind-id]** *string*

Synopsis SDP binding ID

Context **configure** [service vprn](#) *string* [spoke-sdp](#) *string*

Tree [spoke-sdp](#)

String Length 3 to 16

Notes This element is part of a list key.

Introduced 16.0.R3

Platforms All

### **description** *string*

Synopsis Text description

Context	<b>configure service vprn</b> <i>string</i> <b>spoke-sdp</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## static-routes

Synopsis	Enter the <b>static-routes</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes</b>
Tree	<b>static-routes</b>
Introduced	16.0.R1
Platforms	All

## hold-down

Synopsis	Enable the <b>hold-down</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes hold-down</b>
Tree	<b>hold-down</b>
Description	<p>Commands in this context enable the hold-down time feature globally for static routes in the system.</p> <p>The static route hold-down time is a mechanism to protect from rapid, fluctuating state changes of static routes resulting from issues with reachability because of link flap.</p> <p>The commands in this context apply to all static routes in the VPRN and the base router instance in which this hold-down time is configured in.</p>
Introduced	16.0.R1
Platforms	All

## initial number

Synopsis	Value for the initial hold-down time
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes hold-down initial</b> <i>number</i>
Tree	<b>initial</b>
Description	<p>This command specifies the initial value of the hold-down time globally for static routes in the system.</p> <p>When a static route is ready to become active, it remains inactive for the hold-down time before activating the static-route. If, during this hold-down period, the static route</p>



becomes inactive again because of factors such as interface failure, the hold-down timer is reset, effectively postponing the activation of the route until the next opportunity.

Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **max-value** *number*

Synopsis	Maximum value of the hold-down time
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">static-routes hold-down max-value</a> <i>number</i>
Tree	<a href="#">max-value</a>
Description	This command specifies the maximum value of the hold-down time globally for static routes in the system.
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **multiplier** *number*

Synopsis	Multiplier of the previous hold-down time
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">static-routes hold-down multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Description	This command specifies the multiplier value by which the previous hold-down time is multiplied to calculate the new one. This value applies globally for static routes in the system.
Range	1 to 10
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **route** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*) [route-type](#) *keyword*

Synopsis	Enter the <b>route</b> list instance
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Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword</b>
Tree	<b>route</b>
Introduced	16.0.R1
Platforms	All

### **[ip-prefix]** (*ipv4-prefix | ipv6-prefix*)

Synopsis	IP prefix and prefix length for the static routes
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword</b>
Tree	<b>route</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **route-type keyword**

Synopsis	Static route type
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword</b>
Tree	<b>route</b>
Options	unicast, multicast
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **backup-tag number**

Synopsis	Static route backup tag
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword backup-tag number</b>
Tree	<b>backup-tag</b>
Description	This command associates a 4-byte backup route tag with the static route when the backup next-hop functionality is activated. The tag value is used in route policies to control distribution of the static route into other protocols when the backup next-hop function is activated for the associated static route.

The tag specified at this level of the static route causes the tag values that are configured under the **next-hop**, **black-hole**, and **indirect** contexts of the static route to be ignored.

Range	1 to 4294967295
Introduced	21.2.R1
Platforms	All

## blackhole

Synopsis	Enable the <b>blackhole</b> context
Context	<b>configure service vprn string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword blackhole</b>
Tree	<b>blackhole</b>
Introduced	16.0.R1
Platforms	All

## admin-state keyword

Synopsis	Administrative state of the static route operation
Context	<b>configure service vprn string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword blackhole admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

## community string

Synopsis	Community ID associated with the static route
Context	<b>configure service vprn string static-routes route (ipv4-prefix   ipv6-prefix) route-type keyword blackhole community string</b>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>blackhole</b> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**generate-icmp** *boolean*

Synopsis	Send ICMP unreachable messages when received packets match a static route with black-hole next-hop
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>blackhole</b> <b>generate-icmp</b> <i>boolean</i>
Tree	<b>generate-icmp</b>
Default	false
Introduced	16.0.R1
Platforms	All

**metric** *number*

Synopsis	Static route metric
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>blackhole</b> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>blackhole</b> <b>preference</b> <i>number</i>

Tree	<a href="#">preference</a>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

## prefix-list

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">blackhole</a> <a href="#">prefix-list</a>
Tree	<a href="#">prefix-list</a>
Introduced	16.0.R1
Platforms	All

## flag keyword

Synopsis	Static route match condition from prefix list
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">blackhole</a> <a href="#">prefix-list</a> <a href="#">flag</a> <i>keyword</i>
Tree	<a href="#">flag</a>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

## name reference

Synopsis	Prefix list name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">blackhole</a> <a href="#">prefix-list</a> <a href="#">name</a> <i>reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">prefix-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**tag number**

Synopsis	Static route tag
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword blackhole tag number</b>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**community string**

Synopsis	Community ID associated with the static route
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword community string</b>
Tree	<b>community</b>
String Length	1 to 72
Max. Instances	12
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**grt**

Synopsis	Enable the <b>grt</b> context
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword grt</b>
Tree	<b>grt</b>
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the static route operation
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword grt admin-state keyword</b>

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Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">grt</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **metric** *number*

Synopsis	Static route metric
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">grt</a> <a href="#">metric</a> <i>number</i>
Tree	<a href="#">metric</a>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">grt</a> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

**indirect** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>indirect</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">indirect</a>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">indirect</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">admin-state</a> <a href="#">keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">community</a> <a href="#">string</a>
Tree	<a href="#">community</a>
String Length	1 to 72



Introduced	16.0.R1
Platforms	All

### **cpe-check** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>cpe-check</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">cpe-check</a>
Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p><b>Note:</b> A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of <b>cpe-ping</b>, the node paces these minor events.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <a href="#">keyword</a> <a href="#">indirect</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">cpe-check</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <i>boolean</i>
Tree	<b>log</b>
Default	false
Introduced	16.0.R1
Platforms	All

**padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i>
Tree	<b>padding-size</b>
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**destination-class** *number*

Synopsis	Destination class for this static route
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>destination-class</b> <i>number</i>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**metric** *number*

Synopsis	Static route metric
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Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>metric</b> <b>number</b>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>preference</b> <b>number</b>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

### **prefix-list**

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>prefix-list</b>
Tree	<b>prefix-list</b>
Introduced	16.0.R1
Platforms	All

### **flag** *keyword*

Synopsis	Static route match condition from prefix list
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>prefix-list</b> <b>flag</b> <b>keyword</b>
Tree	<b>flag</b>
Options	any, all, none
Default	any

Introduced 16.0.R1  
 Platforms All

### **name** *reference*

Synopsis Prefix list name  
 Context **configure** **service** **vpn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **prefix-list** **name** *reference*  
 Tree **name**  
 Reference **configure** **policy-options** **prefix-list** *string*  
 Introduced 16.0.R1  
 Platforms All

### **qos**

Synopsis Enter the **qos** context  
 Context **configure** **service** **vpn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **qos**  
 Tree **qos**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **forwarding-class** *keyword*

Synopsis Forwarding class associated with the static route  
 Context **configure** **service** **vpn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **indirect** (*ipv4-address-no-zone* | *ipv6-address-no-zone*) **qos** **forwarding-class** *keyword*  
 Tree **forwarding-class**  
 Options be, l2, af, l1, h2, ef, h1, nc  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *keyword*

Synopsis Static route priority

Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>qos priority keyword</b>
Tree	<b>priority</b>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source-class** *number*

Synopsis	Source class for the static route
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>source-class</b> <i>number</i>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **tag** *number*

Synopsis	Static route tag
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>indirect</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **interface** [*interface-name*] *string*

Synopsis	Enter the <b>interface</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
Introduced	16.0.R1
Platforms	All

**[interface-name]** *string*

Synopsis	Router interface name.
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i>
Tree	<b>interface</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

**community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

**cpe-check** [**address**] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>cpe-check</b> list instance
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>

Description	<p>When configured, this command enables the Customer Premises Equipment (CPE) check feature and specifies the IP address of the target CPE device.</p> <p>This option initiates a background ICMP ping test to the configured target IP address. The IP address can either be an IPv4 address for IPv4 static routes or an IPv6 address for IPv6 static routes. To avoid possible circular references, the target IP address cannot exist in the same subnet as the static route subnet. This command is mutually exclusive with BFD support on a specific static route.</p> <p><b>Note:</b> A node that is sourcing CPE-check packets waits an additional full interval before taking action, which gives the CPE time to respond. For example, with a drop-count of 3 and an interval of 1s, three CPE-check packets are sent out and the node waits for the duration of another interval before acting on the loss. Failure declaration may take extra time depending on the load, interval, and other factors. In line with multitasking, multi-priority operating principles of the node, and the relative priority of <b>cpe-ping</b>, the node paces these minor events.</p>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

### [address] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	16.0.R1



Platforms All

### **interval** *number*

Synopsis Interval between ICMP pings to target CPE IP address

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone | ipv6-address-no-zone) interval number*

Tree [interval](#)

Range 1 to 255

Units seconds

Default 1

Introduced 16.0.R1

Platforms All

### **log** *boolean*

Synopsis Log CPE connectivity checks transitions

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone | ipv6-address-no-zone) log boolean*

Tree [log](#)

Default false

Introduced 16.0.R1

Platforms All

### **padding-size** *number*

Synopsis Padding size for CPE connectivity checks

Context **configure service vprn** *string static-routes route (ipv4-prefix | ipv6-prefix) route-type keyword interface string cpe-check (ipv4-address-no-zone | ipv6-address-no-zone) padding-size number*

Tree [padding-size](#)

Range 0 to 16384

Units bytes

Default 56

Introduced 16.0.R1

Platforms All

### **description** *string*

Synopsis Text description

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **interface** *string* **description** *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms All

### **destination-class** *number*

Synopsis Destination class for this static route

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **interface** *string* **destination-class** *number*

Tree [destination-class](#)

Range 1 to 255

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **load-balancing-weight** *number*

Synopsis Load-balancing weight for all of the ECMP next hops

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **interface** *string* **load-balancing-weight** *number*

Tree [load-balancing-weight](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms All

### **metric** *number*

Synopsis Static route metric

Context **configure** **service** **vprn** *string* **static-routes** **route** (*ipv4-prefix* | *ipv6-prefix*) **route-type** **keyword** **interface** *string* **metric** *number*

Tree	<a href="#">metric</a>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

### **prefix-list**

Synopsis	Enter the <b>prefix-list</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i> <a href="#">prefix-list</a>
Tree	<a href="#">prefix-list</a>
Introduced	16.0.R1
Platforms	All

### **flag** *keyword*

Synopsis	Static route match condition from prefix list
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">interface</a> <i>string</i> <a href="#">prefix-list</a> <a href="#">flag</a> <i>keyword</i>
Tree	<a href="#">flag</a>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

**name** *reference*

Synopsis	Prefix list name
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>prefix-list</b> <b>name</b> <i>reference</i>
Tree	<b>name</b>
Reference	<b>configure</b> <b>policy-options</b> <b>prefix-list</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**forwarding-class** *keyword*

Synopsis	Forwarding class associated with the static route
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>qos</b> <b>forwarding-class</b> <i>keyword</i>
Tree	<b>forwarding-class</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** *keyword*

Synopsis	Static route priority
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>qos</b> <b>priority</b> <i>keyword</i>
Tree	<b>priority</b>
Options	low, high

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source-class** *number*

Synopsis	Source class for the static route
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>source-class</b> <i>number</i>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**tag** *number*

Synopsis	Static route tag
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>interface</b> <i>string</i> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**ipsec-tunnel** [**ipsec-tunnel-name**] *string*

Synopsis	Enter the <b>ipsec-tunnel</b> list instance
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>ipsec-tunnel</b> <i>string</i>
Tree	<b>ipsec-tunnel</b>
Introduced	16.0.R1
Platforms	All

**[ipsec-tunnel-name]** *string*

Synopsis	Ipssec tunnel name.
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>ipsec-tunnel</b> <i>string</i>

Tree	<a href="#">ipsec-tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the static route operation
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	All

### **community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>community</b> <i>string</i>
Tree	<a href="#">community</a>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">static-routes</a> <a href="#">route</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">route-type</a> <i>keyword</i> <a href="#">ipsec-tunnel</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **destination-class** *number*

Synopsis	Destination class for this static route
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>destination-class</b> <b>number</b>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **metric** *number*

Synopsis	Static route metric
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>metric</b> <b>number</b>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

### **preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure</b> <b>service</b> <b>vpn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <i>keyword</i> <b>ipsec-tunnel</b> <i>string</i> <b>preference</b> <b>number</b>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
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Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword ipsec-tunnel string qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **forwarding-class** *keyword*

Synopsis	Forwarding class associated with the static route
Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword ipsec-tunnel string qos forwarding-class keyword</b>
Tree	<b>forwarding-class</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority** *keyword*

Synopsis	Static route priority
Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword ipsec-tunnel string qos priority keyword</b>
Tree	<b>priority</b>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source-class** *number*

Synopsis	Source class for the static route
Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword ipsec-tunnel string source-class number</b>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS



**tag number**

Synopsis	Static route tag
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword ipsec-tunnel string tag number</b>
Tree	<a href="#">tag</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**next-hop [ip-address]** (*ipv4-address-with-zone | ipv6-address-with-zone*)

Synopsis	Enter the <b>next-hop</b> list instance
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
Tree	<a href="#">next-hop</a>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-with-zone | ipv6-address-with-zone*)

Synopsis	Next-hop IP address used to reach the destination
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
Tree	<a href="#">next-hop</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the static route operation
Context	<b>configure service vprn string static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Introduced	16.0.R1
Platforms	All

## backup-next-hop

Synopsis	Enter the <b>backup-next-hop</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>backup-next-hop</b>
Tree	<b>backup-next-hop</b>
Description	Commands in this context configure static route entry fast failover.
Introduced	21.2.R1
Platforms	All

## address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Backup next-hop IP address
Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type keyword next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>backup-next-hop address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>address</b>
Description	<p>This command specifies the backup IP forwarding address that is used for static route Fast ReRoute (FRR). The configured address, if reachable, acts as pre-installed backup forwarding information that can be used when the primary IP next-hop suddenly fails.</p> <p>The configured backup next-hop IP address can be directly or indirectly connected (using an IGP or tunnel) to the node. The backup next-hop forwarding information or the Next-hop Label Forwarding Entry (NHLFE) tunnel forwarding information from the IP Routing Table Manager (RTM) is used to preconfigure an IP fast-reroute backup path.</p> <p>One backup next-hop address can protect a single primary static route entry next-hop address without ECMP and it is only activated when the primary next-hop has no active ECMP.</p> <p>The configured IP address can be either on the network or the access side.</p>
Introduced	21.2.R1
Platforms	All

## bfd-liveness *boolean*

Synopsis	Use Bidirectional Forwarding Detection on this static route
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Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>bfd-liveness</b> <i>boolean</i>
Tree	<b>bfd-liveness</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **community** *string*

Synopsis	Community ID associated with the static route
Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>community</b> <i>string</i>
Tree	<b>community</b>
String Length	1 to 72
Introduced	16.0.R1
Platforms	All

### **cpe-check** [*address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>cpe-check</b> list instance
Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the target CPE device
Context	<b>configure service vpn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<b>cpe-check</b>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### drop-count *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	16.0.R1
Platforms	All

### interval *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	1 to 255
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

### log *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log</b> <i>boolean</i>
Tree	<b>log</b>
Default	false

Introduced	16.0.R1
Platforms	All

### **padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>cpe-check</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>padding-size</b> <i>number</i>
Tree	<b>padding-size</b>
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **destination-class** *number*

Synopsis	Destination class for this static route
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>destination-class</b> <i>number</i>
Tree	<b>destination-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**load-balancing-weight** *number*

Synopsis	Load-balancing weight for all of the ECMP next hops
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>load-balancing-weight</b> <i>number</i>
Tree	<b>load-balancing-weight</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

**metric** *number*

Synopsis	Static route metric
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Range	0 to 65535
Default	1
Introduced	16.0.R1
Platforms	All

**preference** *number*

Synopsis	Priority of this static route over the routes from different sources
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	1 to 255
Default	5
Introduced	16.0.R1
Platforms	All

**prefix-list**

Synopsis	Enter the <b>prefix-list</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <b>keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-list</b>
Tree	<b>prefix-list</b>
Introduced	16.0.R1
Platforms	All

### **flag** *keyword*

Synopsis	Static route match condition from prefix list
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <b>keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-list</b> <b>flag</b> <b>keyword</b>
Tree	<b>flag</b>
Options	any, all, none
Default	any
Introduced	16.0.R1
Platforms	All

### **name** *reference*

Synopsis	Prefix list name
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <b>keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>prefix-list</b> <b>name</b> <b>reference</b>
Tree	<b>name</b>
Reference	<b>configure policy-options prefix-list</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>route-type</b> <b>keyword next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**forwarding-class** *keyword*

Synopsis	Forwarding class associated with the static route
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>qos</b> <b>forwarding-class</b> <b>keyword</b>
Tree	<b>forwarding-class</b>
Options	be, l2, af, l1, h2, ef, h1, nc
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**priority** *keyword*

Synopsis	Static route priority
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>qos</b> <b>priority</b> <b>keyword</b>
Tree	<b>priority</b>
Options	low, high
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source-class** *number*

Synopsis	Source class for the static route
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>static-routes</b> <b>route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>source-class</b> <b>number</b>
Tree	<b>source-class</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**tag** *number*

Synopsis	Static route tag
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Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **validate-next-hop** *boolean*

Synopsis	Track the state of the next hop in the IPv4 ARP Cache or the IPv6 Neighbor Cache
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>validate-next-hop</b> <i>boolean</i>
Tree	<b>validate-next-hop</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **tag** *number*

Synopsis	Static route tag
Context	<b>configure service vprn</b> <i>string</i> <b>static-routes route</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>route-type</b> <b>keyword</b> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	All

### **subscriber-interface** [*interface-name*] *string*

Synopsis	Enter the <b>subscriber-interface</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i>
Tree	<b>subscriber-interface</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[interface-name] string**

Synopsis	Subscriber interface name
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string</a>
Tree	<a href="#">subscriber-interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the subscriber interface
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**fwd-service reference****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Configure the forwarding service.
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string fwd-service reference</a>

Tree	<a href="#">fwd-service</a>
Reference	<b>configure service vpn string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **fwd-subscriber-interface** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Forwarding subscriber interface name
Context	<b>configure service vpn string subscriber-interface string fwd-subscriber-interface reference</b>
Tree	<a href="#">fwd-subscriber-interface</a>
Reference	<b>configure service vpn string subscriber-interface string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface** [[group-interface-name](#)] *string*

Synopsis	Enter the <b>group-interface</b> list instance
Context	<b>configure service vpn string subscriber-interface string group-interface string</b>
Tree	<a href="#">group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[group-interface-name]** *string*

Synopsis	Group interface name
Context	<b>configure service vpn string subscriber-interface string group-interface string</b>
Tree	<a href="#">group-interface</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bonding-parameters**

Synopsis	Enter the <b>bonding-parameters</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <b>bonding-parameters</b>
Tree	<a href="#">bonding-parameters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of ESM connection bonding
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**connection** [[connection-index](#)] *number*

Synopsis	Enter the <b>connection</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <b>connection</b> <i>number</i>

Tree	<a href="#">connection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[connection-index] number**

Synopsis	Bonding connection index
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">connection</a> <i>number</i>
Tree	<a href="#">connection</a>
Range	1 to 2
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service string**

Synopsis	Connection service
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">connection</a> <i>number</i> <a href="#">service</a> <i>string</i>
Tree	<a href="#">service</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fpe reference**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FPE that provisions bonding functionality
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">bonding-parameters</a> <a href="#">fpe</a> <i>reference</i>
Tree	<a href="#">fpe</a>
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <a href="#">fpe</a> <i>number</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## multicast

Synopsis Enter the **multicast** context

Context **configure service vpn** *string* **subscriber-interface** *string* **group-interface** *string* **bonding-parameters multicast**

Tree **multicast**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## connection (*number* | *keyword*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Multicast connection

Context **configure service vpn** *string* **subscriber-interface** *string* **group-interface** *string* **bonding-parameters multicast connection** (*number* | *keyword*)

Tree **connection**

Range 1 to 2

Options use-incoming

Default use-incoming

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## brg

Synopsis Enter the **brg** context

Context **configure service vpn** *string* **subscriber-interface** *string* **group-interface** *string* **brg**

Tree **brg**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of BRG
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">brg</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authenticated-brg-only** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow BRGs that have been pre-authenticated
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">brg</a> <a href="#">authenticated-brg-only</a> <i>boolean</i>
Tree	<a href="#">authenticated-brg-only</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-brg-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile for new BRGs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">brg</a> <a href="#">default-brg-profile</a> <i>reference</i>
Tree	<a href="#">default-brg-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt vrgw</a> <a href="#">brg-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cflowd-parameters**

Synopsis	Enter the <b>cflowd-parameters</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters</b>
Tree	<b>cflowd-parameters</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sampling** [**sampling-type**] *keyword*

Synopsis	Enter the <b>sampling</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i>
Tree	<b>sampling</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[sampling-type]** *keyword*

Synopsis	Traffic sampling type
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i>
Tree	<b>sampling</b>
Description	This command configures the type of traffic to be sampled on the associated IP interface.
Options	unicast, multicast, both
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**direction** *keyword*

Synopsis	Direction of traffic for cflowd sampling
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>cflowd-parameters sampling</b> <i>keyword</i> <b>direction</b> <i>keyword</i>



Tree	<a href="#">direction</a>
Description	This command configures the direction in which sampling occurs on the associated IP interfaces.
Options	ingress-only, egress-only, both
Default	ingress-only
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sample-profile** (*keyword* | *number*)

Synopsis	Sample profile ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>sample-profile</b> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">sample-profile</a>
Description	This command defines the sampling rate profile associated with this interface.
Max. Range	0 to 4294967295
Options	1
Introduced	19.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis	Type of cflowd analysis
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">cflowd-parameters</a> <a href="#">sampling</a> <i>keyword</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command configures the cflowd sampling type on the associated IP interface.
Options	acl, interface
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **data-trigger**

Synopsis	Enter the <b>data-trigger</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>data-trigger</b>
Tree	<b>data-trigger</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accept-ipv6-link-local-address** *boolean*

Synopsis	Enable IPv6 Link Local Address to start authentication
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>data-trigger</b> <b>accept-ipv6-link-local-address</b> <i>boolean</i>
Tree	<b>accept-ipv6-link-local-address</b>
Description	<p>When configured to <b>true</b>, the system triggers authentication of the subscriber based on an IPv6 packet with a source IP Link Local Address (LLA). The authentication trigger only occurs if the anti-spoof is type nh-mac. If the anti-spoof is not nh-mac, the packet with an IPv6 LLA is ignored.</p> <p>When configured to <b>false</b>, the system ignores all IPv6 packets with a LLA as a source IP address.</p>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of data-triggered host creation
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>data-trigger</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>description</b> <i>string</i>

Tree	<a href="#">description</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### dynamic-routes-track-srrp

Synopsis	Enable the <b>dynamic-routes-track-srrp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">dynamic-routes-track-srrp</a>
Tree	<a href="#">dynamic-routes-track-srrp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### hold-time *number*

Synopsis	Time before route state updated after SRRP transition
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">dynamic-routes-track-srrp</a> <a href="#">hold-time</a> <i>number</i>
Tree	<a href="#">hold-time</a>
Range	1 to 50
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### gtp-parameters

Synopsis	Enter the <b>gtp-parameters</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gtp-parameters</a>
Tree	<a href="#">gtp-parameters</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of GTP access
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gtp-parameters</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**fpe** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PE that provisions the GTP user interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gtp-parameters</a> <b>fpe</b> <i>reference</i>
Tree	<a href="#">fpe</a>
Reference	<b>configure</b> <a href="#">fwd-path-ext</a> <b>fpe</b> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gx-policy** *reference*

Synopsis	Diameter application policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">gx-policy</a> <i>reference</i>
Tree	<a href="#">gx-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	19.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policy-accounting *reference*

Synopsis	Ingress policy accounting template name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress</a> <a href="#">policy-accounting</a> <i>reference</i>
Tree	<a href="#">policy-accounting</a>
Reference	<b>configure</b> <a href="#">routing-options</a> <a href="#">policy-accounting</a> <a href="#">policy-acct-template</a> <i>string</i>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s

## ingress-stats *boolean*

Synopsis	Collect ingress interface statistics
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ingress-stats</a> <i>boolean</i>
Tree	<a href="#">ingress-stats</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-mtu *number*

Synopsis	Interface IP MTU
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>
Tree	<a href="#">ip-mtu</a>
Range	512 to 9786
Units	bytes
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-linking

Synopsis Enter the **ipoe-linking** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-linking**

Tree **ipoe-linking**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **admin-state** *keyword*

Synopsis Administrative state of IPoE host linking

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-linking admin-state** *keyword*

Tree **admin-state**

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **gratuitous-router-advertisement** *boolean*



### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Send unsolicited router advertisement after DHCP setup

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipoe-linking gratuitous-router-advertisement** *boolean*

Tree **gratuitous-router-advertisement**

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**shared-circuit-id** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable circuit ID in DHCPv4 Option82 to validate DHCPv6
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-linking</b> <b>shared-circuit-id</b> <i>boolean</i>
Tree	<b>shared-circuit-id</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe-session**

Synopsis	Enter the <b>ipoe-session</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b>
Tree	<b>ipoe-session</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of IPoE session management
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session</b> <b>description</b> <i>string</i>

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Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **force-auth**

Synopsis	Enter the <b>force-auth</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">force-auth</a>
Tree	<a href="#">force-auth</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **cid-change** *boolean*

Synopsis	Ignore min-auth-interval when circuit ID changed
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">force-auth</a> <a href="#">cid-change</a> <i>boolean</i>
Tree	<a href="#">cid-change</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **rid-change** *boolean*

Synopsis	Ignore min-auth-interval when remote ID changed
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">force-auth</a> <a href="#">rid-change</a> <i>boolean</i>
Tree	<a href="#">rid-change</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## ipoe-session-policy *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE Session policy to be used for new sessions
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session ipoe-session-policy</b> <i>reference</i>
Tree	<a href="#">ipoe-session-policy</a>
Reference	<b>configure subscriber-mgmt ipoe-session-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## min-auth-interval (*keyword* | *number*)

Synopsis	Minimum time between two authentication attempts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session min-auth-interval</b> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">min-auth-interval</a>
Range	1 to 32000000
Units	seconds
Options	infinite, always-reauthenticate
Default	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## radius-session-timeout *keyword*

Synopsis	Session timeout attribute to be interpreted
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipoe-session radius-session-timeout</b> <i>keyword</i>
Tree	<a href="#">radius-session-timeout</a>
Options	absolute, ignore, backwards-compatible
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-session-limit** *number*

Synopsis	Maximum number of sessions per SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">sap-session-limit</a> <i>number</i>
Tree	<a href="#">sap-session-limit</a>
Range	1 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**session-limit** *number*

Synopsis	Maximum number of sessions on this group interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">session-limit</a> <i>number</i>
Tree	<a href="#">session-limit</a>
Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**stateless-redundancy** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remove IPoE sessions when the system becomes stand-by in a stateless multi-chassis redundancy setup
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session</a> <a href="#">stateless-redundancy</a> <i>boolean</i>
Tree	<a href="#">stateless-redundancy</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## user-db *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for IPoE session authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipoe-session user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arp-host

Synopsis	Enter the <b>arp-host</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 arp-host</a>
Tree	<a href="#">arp-host</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of ARP hosts
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 arp-host admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-limit** *number*

Synopsis	Maximum number of ARP hosts
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">arp-host</a> <b>host-limit</b> <i>number</i>
Tree	<a href="#">host-limit</a>
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**min-auth-interval** *number*

Synopsis	Minimum authentication interval
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">arp-host</a> <b>min-auth-interval</b> <i>number</i>
Tree	<a href="#">min-auth-interval</a>
Range	1 to 6000
Units	minutes
Default	15
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-host-limit** *number*

Synopsis	Maximum number of ARP hosts per SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">arp-host</a> <b>sap-host-limit</b> <i>number</i>
Tree	<a href="#">sap-host-limit</a>
Range	1 to 131071
Default	1
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd</b>
Tree	<b>bfd</b>
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd</b> <b>echo-receive</b> <i>number</i>
Tree	<b>echo-receive</b>
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd multiplier</b> <i>number</i>
Tree	<b>multiplier</b>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive number**

Synopsis	BFD receive interval over this interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd receive number</b>
Tree	<b>receive</b>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **transmit-interval number**

Synopsis	BFD transmit interval over this interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 bfd transmit-interval number</b>
Tree	<b>transmit-interval</b>
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds

Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis	Local termination point for the BFD session
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **dhcp**

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b>
Tree	<b>dhcp</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of DHCP
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Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv4 dhcp admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv4 dhcp client-applications</i>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv4 dhcp client-applications dhcp boolean</i>
Tree	<a href="#">dhcp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp boolean

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string ipv4 dhcp client-applications ppp boolean</i>
Tree	<a href="#">ppp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**description string**

Synopsis	Text description
Context	<b>configure service vpn string subscriber-interface string group-interface string ipv4 dhcp description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**filter reference**

Synopsis	DHCP filter ID for the group interface
Context	<b>configure service vpn string subscriber-interface string group-interface string ipv4 dhcp filter reference</b>
Tree	<b>filter</b>
Reference	<b>configure filter dhcp-filter number</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gi-address string**

Synopsis	GI address for the DHCP relay
Context	<b>configure service vpn string subscriber-interface string group-interface string ipv4 dhcp gi-address string</b>
Tree	<b>gi-address</b>
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-populate

Synopsis	Enter the <b>lease-populate</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate</b>
Tree	<b>lease-populate</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## I2-header

Synopsis	Enable the <b>I2-header</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate I2-header</b>
Tree	<b>I2-header</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac *string*

Synopsis	IEEE address used in anti-spoofing entries for the SAP
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate I2-header mac</b> <i>string</i>
Tree	<b>mac</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## max-leases *number*

Synopsis	Maximum number of DHCPv4 leases
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp lease-populate max-leases</b> <i>number</i>
Tree	<b>max-leases</b>
Range	1 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**match-circuit-id** *boolean*

Synopsis	Enable Option 82 circuit ID on relayed DHCP packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">match-circuit-id</a> <i>boolean</i>
Tree	<a href="#">match-circuit-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**offer-selection**

Synopsis	Enter the <b>offer-selection</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">offer-selection</a>
Tree	<a href="#">offer-selection</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-mac**

Synopsis	Enter the <b>client-mac</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">offer-selection</a> <a href="#">client-mac</a>
Tree	<a href="#">client-mac</a>
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**discover-delay** *number*

Synopsis	Delay before sending DHCP Discover messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">offer-selection</a> <a href="#">client-mac</a> <a href="#">discover-delay</a> <i>number</i>
Tree	<a href="#">discover-delay</a>
Description	This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.

Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac-address** *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">client-mac</a> <a href="#">mac-address</a> <i>keyword</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **discover-delay** *number*

Synopsis	Delay before sending DHCP Discover messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">discover-delay</a> <i>number</i>
Tree	<a href="#">discover-delay</a>
Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** [[ipv4-address](#)] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <a href="#">server</a> <i>string</i>
Tree	<a href="#">server</a>

Max. Instances	8
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [**ipv4-address**] *string*

Synopsis	IP address of the DHCP server
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection server</b> <i>string</i>
Tree	<a href="#">server</a>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **discover-delay** *number*

Synopsis	Delay before sending DHCP Discover messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection server</b> <i>string</i> <b>discover-delay</b> <i>number</i>
Tree	<a href="#">discover-delay</a>
Description	This command configures the time to delay DHCP Discover messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option-82**

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82</b>
Tree	<a href="#">option-82</a>

Description	Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis	Action to take with received DHCP Option 82
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>action</b> <i>keyword</i>
Tree	<a href="#">action</a>
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id**

Synopsis	Enter the <b>circuit-id</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>circuit-id</b>
Tree	<a href="#">circuit-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-tuple**

Synopsis	Use the ASCII-encoded tuple for the circuit ID
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4</b> <b>dhcp</b> <b>option-82</b> <b>circuit-id</b> <b>ascii-tuple</b>
Tree	<a href="#">ascii-tuple</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ifindex

Synopsis	Use the interface index for the circuit ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">ifindex</a>
Tree	<a href="#">ifindex</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## none

Synopsis	Do not include the circuit ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">none</a>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-id

Synopsis	Use the SAP ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">sap-id</a>
Tree	<a href="#">sap-id</a>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## vlan-ascii-tuple

Synopsis	Include the VLAN ID and dot1p bits in the ASCII tuple
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 circuit-id</a> <a href="#">vlan-ascii-tuple</a>

Tree	<a href="#">vlan-ascii-tuple</a>
Description	When configured, the router includes the VLAN ID and dot1p bits with the ASCII-tuple information. This only occurs on dot1q and QinQ-encapsulated ports. When the Option 82 bits are stripped, dot1p bits are copied to the Ethernet header of the outgoing packet. When unconfigured, the router leaves the circuit ID sub-option of the DHCP packet empty.
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>ifindex</b> , <b>none</b> , <b>sap-id</b> , or <b>vlan-ascii-tuple</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## remote-id

Synopsis	Enter the <b>remote-id</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 remote-id</b>
Tree	<a href="#">remote-id</a>
Description	Commands in this context configure the remote IP sub-option of the DHCP packet with the identity of the remote host end (typically the DHCP client).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis	User-defined ASCII string for the remote ID
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp option-82 remote-id ascii-string</b> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac

Synopsis	Use the MAC address for the remote ID
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Context	<b>configure service vprn</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 remote-id mac</i>
Tree	<a href="#">mac</a>
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### none

Synopsis	Do not include the remote ID
Context	<b>configure service vprn</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 remote-id none</i>
Tree	<a href="#">none</a>
Notes	The following elements are part of a choice: <b>ascii-string</b> , <b>mac</b> , or <b>none</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### vendor-specific-option

Synopsis	Enter the <b>vendor-specific-option</b> context
Context	<b>configure service vprn</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 vendor-specific-option</i>
Tree	<a href="#">vendor-specific-option</a>
Description	Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### client-mac-address *boolean*

Synopsis	Send the MAC address in the VSO
Context	<b>configure service vprn</b> <i>string</i> <i>subscriber-interface string</i> <i>group-interface string</i> <i>ipv4 dhcp option-82 vendor-specific-option client-mac-address boolean</i>
Tree	<a href="#">client-mac-address</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pool-name** *boolean*

Synopsis Send the pool name in the VSO

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option pool-name](#) *boolean*

Tree [pool-name](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-id** *boolean*

Synopsis Send SAP ID in the sub-option of the DHCP relay packet

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option sap-id](#) *boolean*

Tree [sap-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service-id** *boolean*

Synopsis Send the service ID in the Vendor Specific Option

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option service-id](#) *boolean*

Tree [service-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis User-defined ASCII string for the VSO

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option string](#) *string*

Tree	<a href="#">string</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **system-id** *boolean*

Synopsis	Send the system ID in the VSO
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">vendor-specific-option</a> <a href="#">system-id</a> <i>boolean</i>
Tree	<a href="#">system-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy-server**

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a>
Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <a href="#">dhcp</a> <a href="#">proxy-server</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **emulated-server** *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server emulated-server</a> <i>string</i>
Tree	<a href="#">emulated-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-time**

Synopsis	Enter the <b>lease-time</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server lease-time</a>
Tree	<a href="#">lease-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-override** *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server lease-time radius-override</a> <i>boolean</i>
Tree	<a href="#">radius-override</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **value** *number*

Synopsis	DHCP lease time
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp proxy-server lease-time value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python policy name

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp python-policy](#) *reference*

Tree [python-policy](#)

Description This command associates a Python policy name with the interface.

Reference **configure** [python](#) [python-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **relay-proxy**

Synopsis Enable the **relay-proxy** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp relay-proxy](#)

Tree [relay-proxy](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **release-update-src-ip** *boolean*

Synopsis Update the source IP address of a DHCP RELEASE message

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [ipv4 dhcp relay-proxy](#) [release-update-src-ip](#) *boolean*

Tree [release-update-src-ip](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **siaddr-override** *string*

Synopsis DHCP server IP address for address hiding function

Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp relay-proxy</b> <b>siaddr-override</b> <i>string</i>
Tree	<b>siaddr-override</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **release-include-gi-address** *boolean*

Synopsis	Include gateway IP address in DHCP Release messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp release-include-gi-address</b> <i>boolean</i>
Tree	<b>release-include-gi-address</b>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *string*

Synopsis	IP addresses for DHCP server requests
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp server</b> <i>string</i>
Tree	<b>server</b>
Description	This command configures a list of servers that this interface forwards requests to. The operator can enter the list of servers as either IP addresses or fully qualified domain names. The operator must specify at least one server specified for DHCP relay to work. If there are multiple servers, the system forwards the request to all the servers in the list.
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **src-ip-addr** *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 dhcp src-ip-addr</b> <i>keyword</i>

Tree	<a href="#">src-ip-addr</a>
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### trusted *boolean*

Synopsis	Relay untrusted packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">trusted</a> <i>boolean</i>
Tree	<a href="#">trusted</a>
Description	<p>When configured to <b>true</b>, the router enables the trusted mode on the interface. When enabled, the relay agent changes the existing GI address (of the request) to the ingress interface, and forwards the request.</p> <p>A DHCP request that contains a GI address of 0.0.0.0 and an Option 82 field in the packet is discarded unless it arrives on a trusted circuit.</p> <p>This behavior only applies if the Relay Agent Information Option action is to keep the existing information. When the Option 82 field is replaced by the relay agent, the original Option 82 information is lost, and there is no reason to enable the trusted option.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### user-db *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure service vprn string subscriber-interface string group-interface string ipv4 icmp</b>
Tree	<b>icmp</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	<b>configure service vprn string subscriber-interface string group-interface string ipv4 icmp mask-reply boolean</b>
Tree	<b>mask-reply</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## param-problem

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure service vprn string subscriber-interface string group-interface string ipv4 icmp param-problem</b>
Tree	<b>param-problem</b>
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	<b>configure service vprn string subscriber-interface string group-interface string ipv4 icmp param-problem admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable



Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **number** *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp param-problem</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp param-problem</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **redirects**

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp redirects</b>
Tree	<b>redirects</b>
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **number** *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4 icmp redirects</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ttl-expired**

Synopsis	Enter the <b>ttl-expired</b> context
Context	<b>configure service vprn string subscriber-interface string group-interface string ipv4 icmp ttl-expired</b>
Tree	<b>ttl-expired</b>
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of sending TTL expired messages
Context	<b>configure service vprn string subscriber-interface string group-interface string ipv4 icmp ttl-expired admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**number number**

Synopsis	Maximum number of TTL expired messages to send
Context	<b>configure service vprn string subscriber-interface string group-interface string ipv4 icmp ttl-expired number number</b>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**seconds number**

Synopsis	Time used to limit the number of TTL expired messages
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired</b> <i>seconds</i> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-matching-address** *boolean*

Synopsis	Use the subscriber interface address as source address
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp ttl-expired use-matching-address</b> <i>boolean</i>
Tree	<b>use-matching-address</b>
Description	<p>When configured to <b>true</b>, the system uses a matching subscriber interface address as the source address of the ICMP TTL expired message.</p> <p>For matching to occur, the source address of the offending packet must be in the same subnet of the subscriber interface address.</p> <p>When configured to <b>false</b>, the system uses the first configured address.</p>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **unreachables**

Synopsis	Enter the <b>unreachables</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b>
Tree	<b>unreachables</b>
Description	Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**number** *number*

Synopsis	Maximum number of unreachable messages to send
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b> <b>number</b> <i>number</i>
Tree	<b>number</b>
Range	10 to 2000
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**seconds** *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 icmp unreachables</b> <b>seconds</b> <i>number</i>
Tree	<b>seconds</b>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ignore-df-bit** *boolean*

Synopsis	Ignore DF bit in the IPv4 header when fragmenting
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 ignore-df-bit</b> <i>boolean</i>
Tree	<b>ignore-df-bit</b>
Description	When configured to <b>true</b> , fragmentation is applied according to the applicable egress MTU instead of the DF bit for frames egressing the WLAN-GW group. The DF bit is reset for frames that are fragmented.  When configured to <b>false</b> , the router fragments a packet larger than the MTU if the DF bit is set to 0 and drops the packet if the DF bit is set to 1.
Default	false
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### neighbor-discovery

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery</b>
Tree	<b>neighbor-discovery</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### local-proxy-arp *boolean*

Synopsis	Enable local proxy ARP on interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery local-proxy-arp</b> <i>boolean</i>
Tree	<b>local-proxy-arp</b>
Description	When configured to <b>true</b> , the router enables local proxy ARP on the interface.  When configured to <b>false</b> , the router does not respond to ARP requests for addresses on the same subnet.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### populate *boolean*

Synopsis	Allow population of static and dynamic hosts
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery populate</b> <i>boolean</i>
Tree	<b>populate</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy-arp-policy** *reference*

Synopsis	Proxy ARP policy name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery proxy-arp-policy</b> <i>reference</i>
Tree	<b>proxy-arp-policy</b>
Reference	<b>configure</b> <b>policy-options policy-statement</b> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-proxy-arp** *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery remote-proxy-arp</b> <i>boolean</i>
Tree	<b>remote-proxy-arp</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Timeout for an ARP entry learned on the interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv4 neighbor-discovery timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	0 to 65535

Units	seconds
Default	14400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **qos-route-lookup** *keyword*

Synopsis	QoS route lookup
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>qos-route-lookup</b> <i>keyword</i>
Tree	<a href="#">qos-route-lookup</a>
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>urpf-check</b>
Tree	<a href="#">urpf-check</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mode** *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv4</a> <b>urpf-check</b> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## allow-multiple-wan-addresses *boolean*

Synopsis	Allow multiple WAN addresses
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">allow-multiple-wan-addresses</a> <i>boolean</i>
Tree	<a href="#">allow-multiple-wan-addresses</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-reply

Synopsis	Enter the <b>auto-reply</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">auto-reply</a>
Tree	<a href="#">auto-reply</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## neighbor-solicitation *boolean*

Synopsis	Enable auto-reply for NS
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">auto-reply</a> <a href="#">neighbor-solicitation</a> <i>boolean</i>
Tree	<a href="#">neighbor-solicitation</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-solicitation** *boolean*

Synopsis	Enable auto-reply for RS
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">auto-reply</a> <a href="#">router-solicitation</a> <i>boolean</i>
Tree	<a href="#">router-solicitation</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">echo-receive</a> <i>number</i>

Tree	<a href="#">echo-receive</a>
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **multiplier number**

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 bfd multiplier number</a>
Tree	<a href="#">multiplier</a>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive number**

Synopsis	BFD receive interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 bfd receive number</a>
Tree	<a href="#">receive</a>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**transmit-interval** *number*

Synopsis	BFD transmit interval over this interface
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>transmit-interval</b> <i>number</i>
Tree	<b>transmit-interval</b>
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Local termination point for the BFD session
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>bfd</b> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## dhcp6

Synopsis	Enter the <b>dhcp6</b> context
Context	<b>configure service vpn</b> <i>string subscriber-interface string group-interface string ipv6 dhcp6</i>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## allow-client-id-change *boolean*

Synopsis	Allow changes to the client ID
Context	<b>configure service vpn</b> <i>string subscriber-interface string group-interface string ipv6 dhcp6 allow-client-id-change boolean</i>
Tree	<a href="#">allow-client-id-change</a>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter *reference*

Synopsis	DHCPv6 filter
Context	<b>configure service vpn</b> <i>string subscriber-interface string group-interface string ipv6 dhcp6 filter reference</i>
Tree	<a href="#">filter</a>
Reference	<b>configure filter dhcp6-filter</b> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option

Synopsis	Enter the <b>option</b> context
Context	<b>configure service vpn</b> <i>string subscriber-interface string group-interface string ipv6 dhcp6 option</i>
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## interface-id

Synopsis	Enter the <b>interface-id</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option interface-id</b>
Tree	<b>interface-id</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-tuple

Synopsis	Use ASCII-encoded concatenated tuple
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option interface-id ascii-tuple</b>
Tree	<b>ascii-tuple</b>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## if-index

Synopsis	Use interface index in the DHCPv6 relay packet
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option interface-id if-index</b>
Tree	<b>if-index</b>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-id

Synopsis	Use SAP ID in interface ID option in relay packet
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 option interface-id sap-id</b>
Tree	<b>sap-id</b>
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	String for interface ID option in DHCPv6 relay packet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 option interface-id</a> <i>string</i> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 80
Notes	The following elements are part of a choice: <b>ascii-tuple</b> , <b>if-index</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-id** *boolean*

Synopsis	Send remote ID option in the DHCPv6 relay packet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 option remote-id</a> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**override-slaac** *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 override-slaac</a> <i>boolean</i>
Tree	<a href="#">override-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pd-managed-route

Synopsis	Enable the <b>pd-managed-route</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 pd-managed-route</b>
Tree	<b>pd-managed-route</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## next-hop *keyword*

Synopsis	Next hop type
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 pd-managed-route next-hop</b> <i>keyword</i>
Tree	<b>next-hop</b>
Options	ipv4, ipv6
Default	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## proxy-server

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server</b>
Tree	<b>proxy-server</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis Enter the **client-applications** context  
 Context **configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications**  
 Tree [client-applications](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp boolean

Synopsis Enable IPoE clients to use DHCP relay or proxy server  
 Context **configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean**  
 Tree [dhcp](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp boolean

Synopsis Allow PPPoE clients to use DHCP relay functionality  
 Context **configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server client-applications ppp boolean**  
 Tree [ppp](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## preferred-lifetime (*number* | *keyword*)

Synopsis Time for prefix to remain preferred on this interface  
 Context **configure service vprn string subscriber-interface string group-interface string ipv6 dhcp6 proxy-server preferred-lifetime (*number* | *keyword*)**

Tree	<a href="#">preferred-lifetime</a>
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rebind-timer** *number*

Synopsis	Rebind timer (T2) for this interface
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>rebind-timer</b> <i>number</i>
Tree	<a href="#">rebind-timer</a>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **renew-timer** *number*

Synopsis	Renew timer (T1)
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>proxy-server</b> <b>renew-timer</b> <i>number</i>
Tree	<a href="#">renew-timer</a>
Range	0 to 604800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server-id**

Synopsis	Enter the <b>server-id</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id</b>
Tree	<b>server-id</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duid-en-ascii** *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id</b> <b>duid-en-ascii</b> <i>string</i>
Tree	<b>duid-en-ascii</b>
String Length	1 to 58
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duid-en-hex** *string*

Synopsis	DUID system ID in hexadecimal format
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id</b> <b>duid-en-hex</b> <i>string</i>
Tree	<b>duid-en-hex</b>
String Length	1 to 118
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duid-ll**

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 proxy-server server-id</b> <b>duid-ll</b>
Tree	<b>duid-ll</b>
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** (*number* | *keyword*)

Synopsis Time for prefix to remain valid on this interface

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 proxy-server valid-lifetime** (*number* | *keyword*)

Tree [valid-lifetime](#)

Range 300 to 4294967294

Units seconds

Options infinite

Default 86400

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python policy

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 python-policy** *reference*

Tree [python-policy](#)

Reference **configure python python-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **relay**

Synopsis Enter the **relay** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **ipv6 dhcp6 relay**

Tree [relay](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**advertise-selection**

Synopsis	Enter the <b>advertise-selection</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <b>advertise-selection</b>
Tree	<a href="#">advertise-selection</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-mac**

Synopsis	Enter the <b>client-mac</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">advertise-selection</a> <b>client-mac</b>
Tree	<a href="#">client-mac</a>
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac-address** *keyword*

Synopsis	Designated client MAC addresses for Advertise selection
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">dhcp6</a> <a href="#">relay</a> <a href="#">advertise-selection</a> <a href="#">client-mac</a> <b>mac-address</b> <i>keyword</i>
Tree	<a href="#">mac-address</a>
Options	odd, even

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### preference-option

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection client-mac preference-option</a>
Tree	<a href="#">preference-option</a>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### value number

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection client-mac preference-option value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### solicit-delay number

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection client-mac solicit-delay</a> <i>number</i>
Tree	<a href="#">solicit-delay</a>
Description	This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference-option**

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection preference-option</a>
Tree	<a href="#">preference-option</a>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value** *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection preference-option value</a> <i>number</i>
Tree	<a href="#">value</a>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server** [[ipv6-address](#)] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection server</a> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	8
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ipv6-address]** *string*

Synopsis	IP address of the DHCPv6 server
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i>
Tree	<b>server</b>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### preference-option

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option</b>
Tree	<b>preference-option</b>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option value</b> <i>number</i>
Tree	<b>value</b>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### solicit-delay *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>solicit-delay</b> <i>number</i>
Tree	<b>solicit-delay</b>
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100



Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **solicit-delay** *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>advertise-selection</b> <b>solicit-delay</b> <i>number</i>
Tree	<a href="#">solicit-delay</a>
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the <b>server</b> instance or the <b>client-mac</b> context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **client-applications**

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>client-applications</b>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp** *boolean*

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>dhcp6</b> <b>relay</b> <b>client-applications</b> <b>dhcp</b> <i>boolean</i>
Tree	<a href="#">dhcp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp boolean**

Synopsis	Allow the PPP application to use DHCP relay functionality
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay client-applications</a> <a href="#">ppp boolean</a>
Tree	<a href="#">ppp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lease-split**

Synopsis	Enter the <b>lease-split</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay lease-split</a>
Tree	<a href="#">lease-split</a>
Description	<p>Commands in this context configure DHCPv6 lease split.</p> <p>DHCPv6 lease split is active when administratively enabled and for all IA_NA and IA_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:</p> <ul style="list-style-type: none"> <li>the renew time T1 committed by the server (long renew time)</li> <li>half of the preferred lifetime committed by the server when T1 committed by the server equals zero</li> </ul>
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of DHCPv6 lease split
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay lease-split admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** *number*

Synopsis	DHCPv6 lease split valid lifetime (short lease time)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay lease-split valid-lifetime</a> <i>number</i>
Tree	<a href="#">valid-lifetime</a>
Range	300 to 315446399
Units	seconds
Default	3600
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**link-address** *string*

Synopsis	Link address for the DHCPv6 relay messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay link-address</a> <i>string</i>
Tree	<a href="#">link-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server** *string*

Synopsis	DHCP6 servers to which the DHCP6 requests are forwarded
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay server</a> <i>string</i>

Tree	<a href="#">server</a>
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-address** *string*

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **snooping**

Synopsis	Enter the <b>snooping</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 snooping</a>
Tree	<a href="#">snooping</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **admin-state** *keyword*

Synopsis	Administrative state of DHCPv6 snooping
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 snooping admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**user-db** *reference*

Synopsis	Local user database used for authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6</a> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-ident** *keyword*

Synopsis	DHCP6 user identification for this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 dhcp6</a> <a href="#">user-ident</a> <i>keyword</i>
Tree	<a href="#">user-ident</a>
Options	mac, mac-interface-id
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe-bridged-mode** *boolean*

Synopsis	Enable IPv6 IPoE bridged mode
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 ipoe-bridged-mode</a> <i>boolean</i>
Tree	<a href="#">ipoe-bridged-mode</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**neighbor-discovery**

Synopsis	Enter the <b>neighbor-discovery</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dad-snooping** *boolean*

Synopsis	Populate table via duplicate address detection packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <b>dad-snooping</b> <i>boolean</i>
Tree	<a href="#">dad-snooping</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **neighbor-limit** *number*

Synopsis	Maximum neighbor entries learned per SLAAC host
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">neighbor-discovery</a> <b>neighbor-limit</b> <i>number</i>
Tree	<a href="#">neighbor-limit</a>
Range	1 to 8
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **qos-route-lookup** *keyword*

Synopsis	QoS route lookup
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">qos-route-lookup</a> <i>keyword</i>
Tree	<a href="#">qos-route-lookup</a>
Options	destination
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**router-advertisements**

Synopsis	Enter the <b>router-advertisements</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements</b>
Tree	<b>router-advertisements</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of router advertisements
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**force-mcast** *keyword*

Synopsis	Protocol with forced multicast
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements force-mcast</b> <i>keyword</i>
Tree	<b>force-mcast</b>
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-advertisement-interval** *number*

Synopsis	Maximum advertisement interval
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements max-advertisement-interval</b> <i>number</i>
Tree	<b>max-advertisement-interval</b>
Range	900 to 1800

Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-advertisement-interval** *number*

Synopsis	Minimum advertisement interval
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <b>min-advertisement-interval</b> <i>number</i>
Tree	<a href="#">min-advertisement-interval</a>
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <b>options</b>
Tree	<a href="#">options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **current-hop-limit** *number*

Synopsis	Hop limit to be advertised
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6 router-advertisements</a> <b>options</b> <b>current-hop-limit</b> <i>number</i>
Tree	<a href="#">current-hop-limit</a>
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**dns**

Synopsis	Enter the <b>dns</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements options dns</b>
Tree	<b>dns</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**include-rdnss** *boolean*

Synopsis	Include the RDNSS server option 25
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements options dns include-rdnss</b> <i>boolean</i>
Tree	<b>include-rdnss</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rdnss-lifetime** (*number* | *keyword*)

Synopsis	Maximum time for the RDNSS address to remain valid
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements options dns rdnss-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>rdnss-lifetime</b>
Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**managed-configuration** *boolean*

Synopsis	Managed address configuration flag
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements options managed-configuration</b> <i>boolean</i>
Tree	<a href="#">managed-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mtu** (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements options mtu</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mtu</a>
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **other-stateful-configuration** *boolean*

Synopsis	Other stateful configuration flag
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements options other-stateful-configuration</b> <i>boolean</i>
Tree	<a href="#">other-stateful-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reachable-time** *number*

Synopsis	Reachable time for advertisements
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-advertisements options reachable-time</b> <i>number</i>
Tree	<a href="#">reachable-time</a>

Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retransmit-timer** *number*

Synopsis	Retransmit time in router advertisements from interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options</a> <b>retransmit-timer</b> <i>number</i>
Tree	<a href="#">retransmit-timer</a>
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-lifetime** (*number* | *keyword*)

Synopsis	Router lifetime
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options</a> <b>router-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">router-lifetime</a>
Range	2700 to 9000
Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-options**

Synopsis	Enter the <b>prefix-options</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <b>prefix-options</b>

Tree	<a href="#">prefix-options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**autonomous** *boolean*

Synopsis	Value of the autonomous flag
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">prefix-options</a> <b>autonomous</b> <i>boolean</i>
Tree	<a href="#">autonomous</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**on-link** *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">prefix-options</a> <b>on-link</b> <i>boolean</i>
Tree	<a href="#">on-link</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain preferred
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">prefix-options</a> <b>preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements prefix-options valid-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-solicit**

Synopsis	Enter the <b>router-solicit</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-solicit</a>
Tree	<a href="#">router-solicit</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of router-solicit authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-solicit admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**inactivity-timer** (*number* | *keyword*)

Synopsis	Time before an inactive host is removed
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-solicit inactivity-timer</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">inactivity-timer</a>
Range	1 to 31536000
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-auth-interval** *number*

Synopsis	Minimum time between successive authentication attempts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-solicit min-auth-interval</b> <i>number</i>
Tree	<a href="#">min-auth-interval</a>
Range	1 to 360000
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis	Local user database used for authentication
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 router-solicit user-db</b> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure subscriber-mgmt local-user-db</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 urpf-check</b>
Tree	<b>urpf-check</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mode** *keyword*

Synopsis	Unicast RPF check mode
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>ipv6 urpf-check mode</b> <i>keyword</i>
Tree	<b>mode</b>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-address-assignment**

Synopsis	Enter the <b>local-address-assignment</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment</b>
Tree	<b>local-address-assignment</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv4</b>
Tree	<b>ipv4</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-applications**

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv4 client-applications</b>
Tree	<b>client-applications</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe boolean**

Synopsis	Request local addresses for non-DHCP/managed IPoE hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv4 client-applications ipoe boolean</b>
Tree	<b>ipoe</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp boolean**

Synopsis	Request local addresses for PPP IPCP hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv4 client-applications ppp boolean</b>
Tree	<b>ppp</b>
Default	false
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-pool** *string*

Synopsis Default pools

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment ipv4](#) **default-pool** *string*

Tree [default-pool](#)

String Length 1 to 32

Max. Instances 2

Notes This element is ordered by the user.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *reference*

Synopsis Local DHCPv4 server for local pools management

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment ipv4](#) **server** *reference*

Tree [server](#)

Reference **configure** [service vprn](#) *string* [dhcp-server dhcpv4](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6**

Synopsis Enter the **ipv6** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [local-address-assignment ipv6](#)

Tree [ipv6](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications</b>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ipoe-slaac</b> <i>boolean</i>
Tree	<a href="#">ipoe-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ipoe-wan</b> <i>boolean</i>
Tree	<a href="#">ipoe-wan</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ppp-slaac</b> <i>boolean</i>
Tree	<a href="#">ppp-slaac</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server reference**

Synopsis Local DHCPv6 server for local pools management

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **local-address-assignment ipv6 server** *reference*

Tree [server](#)

Reference **configure service vprn** *string* **dhcp-server dhcpv6** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac string**

Synopsis MAC address for the interface

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **mac** *string*

Tree [mac](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nasreq-auth-policy reference**

Synopsis Diameter NASREQ application policy to use for authentication

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **nasreq-auth-policy** *reference*

Tree [nasreq-auth-policy](#)

Reference **configure subscriber-mgmt diameter-nasreq-policy** *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **oper-up-while-empty boolean**

Synopsis Enable this group interface without any active SAPs

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **oper-up-while-empty** *boolean*

Tree	<a href="#">oper-up-while-empty</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pppoe

Synopsis	Enter the <b>pppoe</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of PPPoE
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## anti-spoof *keyword*

Synopsis	PPPoE anti-spoof filtering
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">anti-spoof</a> <i>keyword</i>
Tree	<a href="#">anti-spoof</a>
Options	mac-sid, mac-sid-ip
Default	mac-sid
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure service vprn string subscriber-interface string group-interface string pppoe description string</b>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp-client**

Synopsis	Enter the <b>dhcp-client</b> context
Context	<b>configure service vprn string subscriber-interface string group-interface string pppoe dhcp-client</b>
Tree	<b>dhcp-client</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-id keyword**

Synopsis	Type of information that DHCP option 61 contains
Context	<b>configure service vprn string subscriber-interface string group-interface string pppoe dhcp-client client-id keyword</b>
Tree	<b>client-id</b>
Options	mac-pppoe-session-id
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy reference**

Synopsis	PPPoE policy
Context	<b>configure service vprn string subscriber-interface string group-interface string pppoe policy reference</b>
Tree	<b>policy</b>
Reference	<b>configure subscriber-mgmt ppp-policy string</b>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis Python policy used to modify PPPoE packets

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe python-policy](#) *reference*

Tree [python-policy](#)

Reference **configure** [python python-policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-session-limit** *number*

Synopsis Maximum PPPoE sessions per SAP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe sap-session-limit](#) *number*

Tree [sap-session-limit](#)

Range 1 to 131071

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limit** *number*

Synopsis Maximum PPPoE sessions

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [pppoe session-limit](#) *number*

Tree [session-limit](#)

Range 1 to 333823

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-db** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Local user database for authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">pppoe user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-auth-policy** *reference*

Synopsis	RADIUS authentication policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">radius-auth-policy</a> <i>reference</i>
Tree	<a href="#">radius-auth-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**redundant-interface** *reference*

Synopsis	Redundant interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">redundant-interface</a> <i>reference</i>
Tree	<a href="#">redundant-interface</a>
Reference	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">redundant-interface</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap** [[sap-id](#)] *string*

Synopsis	Enter the <b>sap</b> list instance
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Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string</i>
Tree	<a href="#">sap</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[sap-id]** *string*

Synopsis	SAP ID
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**accounting-policy** *reference*

Synopsis	Accounting policy
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string accounting-policy reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure log accounting-policy</b> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the SAP
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**anti-spoof** *keyword*

Synopsis	Type of anti-spoof filtering
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>anti-spoof</b> <i>keyword</i>
Tree	<a href="#">anti-spoof</a>
Options	source-ip-addr, source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>app-profile</b> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**calling-station-id** *string*

Synopsis	Calling station ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>calling-station-id</b> <i>string</i>
Tree	<a href="#">calling-station-id</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**collect-stats** *boolean*

Synopsis	Collect accounting statistics
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<a href="#">collect-stats</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## cpu-protection

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection</b>
Tree	<b>cpu-protection</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## eth-cfm-monitoring

Synopsis	Enable the <b>eth-cfm-monitoring</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection eth-cfm-monitoring</b>
Tree	<b>eth-cfm-monitoring</b>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## aggregate

Synopsis	Apply rate limit to the sum of the per peer packet rates
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection eth-cfm-monitoring aggregate</b>
Tree	<b>aggregate</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## car

Synopsis	Ignore Ethernet CFM packets when enforcing overall rate
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection eth-cfm-monitoring car</b>
Tree	<b>car</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## ip-src-monitoring

Synopsis	Enable IP source monitoring for CPU protection
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection ip-src-monitoring</b>
Tree	<b>ip-src-monitoring</b>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## mac-monitoring

Synopsis	Monitor MAC for CPU protection
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection mac-monitoring</b>
Tree	<b>mac-monitoring</b>
Notes	The following elements are part of a choice: <b>eth-cfm-monitoring</b> , <b>ip-src-monitoring</b> , or <b>mac-monitoring</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## policy-id *reference*

Synopsis	CPM protection policy
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>cpu-protection policy-id</b> <i>reference</i>
Tree	<b>policy-id</b>
Reference	<b>configure system security cpu-protection</b> <i>policy number</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## default-host

Synopsis Enter the **default-host** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host**

Tree **default-host**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## ipv4 [**address**] *reference* **prefix-length** *number*

Synopsis Enter the **ipv4** list instance

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host ipv4** *reference* **prefix-length** *number*

Tree **ipv4**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## [**address**] *reference*

Synopsis IPv4 default host address

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host ipv4** *reference* **prefix-length** *number*

Tree **ipv4**

Reference **configure service vprn** *string* **subscriber-interface** *string* **ipv4** **address** *string*

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## **prefix-length** *number*

Synopsis IPv4 address prefix length

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **default-host ipv4** *reference* **prefix-length** *number*

Tree	<a href="#">ipv4</a>
Range	0 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **next-hop** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next-hop IP address used to forward traffic on the SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">default-host</a> <a href="#">ipv4</a> <i>reference</i> <a href="#">prefix-length</a> <i>number</i> <b>next-hop</b> <i>string</i>
Tree	<a href="#">next-hop</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **ipv6** [[address](#)] *string* [prefix-length](#) *number*

Synopsis	Enter the <b>ipv6</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">default-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **[address]** *string*

Synopsis	IPv6 default host address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">default-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">ipv6</a>
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **prefix-length** *number*

Synopsis	IPv6 prefix length
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host ipv6</b> <i>string</i> <b>prefix-length</b> <i>number</i>
Tree	<b>ipv6</b>
Range	0 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **next-hop** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Next-hop IP address used to forward traffic on the SAP
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>default-host ipv6</b> <i>string</i> <b>prefix-length</b> <i>number</i> <b>next-hop</b> <i>string</i>
Tree	<b>next-hop</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 160
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dist-cpu-protection** *reference*

Synopsis Distributed CPU protection policy for SAP

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [dist-cpu-protection](#) *reference*

Tree [dist-cpu-protection](#)

Reference **configure** [system security dist-cpu-protection policy](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **egress**

Synopsis Enter the **egress** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress](#)

Tree [egress](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **agg-rate**

Synopsis Enter the **agg-rate** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress agg-rate](#)

Tree [agg-rate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **adaptation-rule** *keyword*

Synopsis Adaptation rule to compute the operational PIR value when an aggregate shaper is used

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress agg-rate adaptation-rule](#) *keyword*

Tree [adaptation-rule](#)

Options	max, min, closest
Default	closest
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

### **burst-limit** (*number* | *keyword*)

Synopsis	Shaping burst size when an aggregate shaper is used
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <b>burst-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	22.10.R1
Platforms	7750 SR-1, 7750 SR-s

### **limit-unused-bandwidth** *boolean*

Synopsis	Enable aggregate rate overrun protection
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <b>limit-unused-bandwidth</b> <i>boolean</i>
Tree	<a href="#">limit-unused-bandwidth</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **queue-frame-based-accounting** *boolean*

Synopsis	Enable frame based accounting on policers and queues
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">agg-rate</a> <b>queue-frame-based-accounting</b> <i>boolean</i>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate number**

Synopsis Enforced aggregate rate for all queues

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress agg-rate](#) [rate](#) *number*

Tree [rate](#)

Range 1 to 6400000000

Units kilobps

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **filter**

Synopsis Enter the **filter** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress filter](#)

Tree [filter](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip reference**

Synopsis IPv4 filter policy name

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [sap](#) *string* [egress filter ip](#) *reference*

Tree [ip](#)

Reference **configure** [filter ip-filter](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6 reference**

Synopsis IPv6 filter policy name

Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress filter ipv6</b> <i>reference</i>
Tree	<a href="#">ipv6</a>
Reference	<b>configure filter ipv6-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos</b>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policer-control-policy

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy</b>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policy-name *reference*

Synopsis	Policer control policy name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>egress qos policer-control-policy policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos policer-control-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**qinq-mark-top-only** *boolean*

Synopsis	Mark top Q-tags
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <b>qinq-mark-top-only</b> <i>boolean</i>
Tree	<a href="#">qinq-mark-top-only</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <b>sap-egress</b>
Tree	<a href="#">sap-egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	Policy ID to associate with SAP for mirrored service
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <b>policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <b>scheduler-policy</b>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress qos scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**virtual-port**

Synopsis	Enter the <b>virtual-port</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress virtual-port</a>
Tree	<a href="#">virtual-port</a>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vport-name** *reference*

Synopsis	Virtual port assigned to the SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">egress virtual-port vport-name</a> <i>reference</i>
Tree	<a href="#">vport-name</a>
Reference	<b>configure</b> <a href="#">port</a> <i>string</i> <a href="#">ethernet access egress virtual-port</a> <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**eth-cfm**

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### collect-lmm-fc-stats

Synopsis Enter the **collect-lmm-fc-stats** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm collect-lmm-fc-stats**

Tree **collect-lmm-fc-stats**

Description Commands in this context configure per forwarding class (FC) LMM information collection.

The commands **fc-in-profile** and **fc** in this context are mutually exclusive. The commands apply to either profile-aware or profile-unaware FCs respectively.

This command and the **collect-lmm-stats** command are mutually exclusive when there is entity resource contention.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### fc keyword

Synopsis Forwarding class name for profile-unaware counter

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **eth-cfm collect-lmm-fc-stats fc** *keyword*

Tree **fc**

Description This command configures individual counters for the specified FCs without regard for profile. The system includes all countable packets that match a configured FC, regardless of profile, in this counter.

An FC specified as part of this command and for this specific context cannot be specified as a profile-aware FC using the **fc-in-profile** command under the **collect-lmm-fc-stats** context.

When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.

Options be, l2, af, l1, h2, ef, h1, nc

Max. Instances 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**fc-in-profile** *keyword*

Synopsis	Forwarding class name for profile-aware counter
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm collect-lmm-fc-stats</a> <b>fc-in-profile</b> <i>keyword</i>
Tree	<a href="#">fc-in-profile</a>
Description	<p>This command configures individual counters for the specified FCs with regard to profile. The system includes all countable packets that match a configured FC and that are deemed to be in-profile in this counter.</p> <p>An FC specified as part of this command and for this specific context cannot be specified as a profile-unaware FC using the <b>fc</b> command under the <b>collect-lmm-fc-stats</b> context.</p> <p>When this command is reentered, a differential is performed. Omitted FCs stop counting, newly added FCs start counting, and unchanged FCs continue to count.</p>
Options	be, l2, af, l1, h2, ef, h1, nc
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**collect-lmm-stats** *boolean*

Synopsis	Collect statistics for loss measurement message tests
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm collect-lmm-stats</a> <i>boolean</i>
Tree	<a href="#">collect-lmm-stats</a>
Description	<p>When configured to <b>true</b>, the router instantiates the statistical counter to transmit and receive packets for the LAG facility MEP bindings.</p> <p>The <b>show eth-cfm collect-lmm-stats</b> command displays entities that have been enabled to collect transit and receive counters.</p> <p>When configured to <b>false</b>, the router does not instantiate the counter and the LMM PDU associated with the MEP does not populate the counters in the packet.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**mep** [md-admin-name](#) *reference* [ma-admin-name](#) *reference* [mep-id](#) *number*

Synopsis	Enter the <b>mep</b> list instance
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<a href="#">mep</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **md-admin-name** *reference*

Synopsis	Maintenance Domain (MD) name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure eth-cfm domain</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **ma-admin-name** *reference*

Synopsis	Maintenance Association (MA) name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<a href="#">mep</a>
Reference	<b>configure eth-cfm domain</b> <i>string</i> <b>association</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **mep-id** *number*

Synopsis	Maintenance Endpoint (MEP) ID
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i>
Tree	<a href="#">mep</a>
Range	1 to 8191
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **admin-state** *keyword*

Synopsis	Administrative state of the MEP
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **ais** *boolean*

Synopsis	Enable the generation and the reception of AIS messages
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>ais</b> <i>boolean</i>
Tree	<b>ais</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **alarm-notification**

Synopsis	Enter the <b>alarm-notification</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm</b> <b>mep</b> <b>md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>alarm-notification</b>
Tree	<b>alarm-notification</b>
Description	<p>Commands in this context configure the Fault Notification Generator (FNG) time values to raise an alarm or reset the CCM defect alarm.</p> <p>Use these timers for network management processes. The timers are not tied into delaying the notification to the fault management system on the network element and do not affect fault propagation mechanisms.</p>



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fng-alarm-time** *number*

Synopsis	Time that must expire before an FNG alarm is raised
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-alarm-time</a> <i>number</i>
Tree	<a href="#">fng-alarm-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **fng-reset-time** *number*

Synopsis	Time that must expire before an FNG alarm is reset
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">alarm-notification</a> <a href="#">fng-reset-time</a> <i>number</i>
Tree	<a href="#">fng-reset-time</a>
Range	250   500   1000
Units	centiseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **ccm** *boolean*

Synopsis	Generate CCM messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">ccm</a> <i>boolean</i>
Tree	<a href="#">ccm</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**ccm-ltm-priority** *number*

Synopsis	Priority of CCM and LTM messages transmitted by the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-ltm-priority</b> <i>number</i>
Tree	<a href="#">ccm-ltm-priority</a>
Range	0 to 7
Default	7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**ccm-padding-size** *number*

Synopsis	Number of octets of padding to insert in CCM packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>ccm-padding-size</b> <i>number</i>
Tree	<a href="#">ccm-padding-size</a>
Description	This command sets the byte size of the optional Data TLV to be included in the ETH-CC PDU.  This command increases the size of the ETH-CC PDU by the configured value. The base size of the ETH-CC PDU, including the Interface Status TLV and Port Status TLV, is 83 bytes not including the Layer 2 encapsulation. CCM padding is not supported when the CCM interval (configured through <b>configure eth-cfm domain association ccm-interval</b> ) is less than 1 second.
Range	3 to 1500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**csf**

Synopsis	Enable the <b>csf</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>csf</b>
Tree	<a href="#">csf</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**multiplier** *decimal-number*

Synopsis	Multiplication factor used to clear the CSF condition
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">csf</a> <b>multiplier</b> <i>decimal-number</i>
Tree	<a href="#">multiplier</a>
Range	0.0   2.0 to 30.0
Default	3.5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**eth-test**

Synopsis	Enable the <b>eth-test</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>eth-test</b>
Tree	<a href="#">eth-test</a>
Description	Commands in this context configure information used by the Ethernet Test (ETH-TST) packet. The commands must be configured on both the sender and the receiver nodes. The test packets are used with the <b>oam eth-cfm eth-test</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**bit-error-threshold** *number*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test bit-error-threshold</a> <i>number</i>
Tree	<a href="#">bit-error-threshold</a>
Range	0 to 11840
Units	bit errors
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**test-pattern**

Synopsis	Enter the <b>test-pattern</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a>
Tree	<a href="#">test-pattern</a>
Description	Commands in this context specify the test pattern for the ETH-TST frames. The pattern does not have to be the same on the sender and the receiver.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**crc-tlv** *boolean*

Synopsis	Generate a CRC checksum
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test test-pattern</a> <a href="#">crc-tlv</a> <i>boolean</i>
Tree	<a href="#">crc-tlv</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**pattern** *keyword*

Synopsis	Test pattern for Ethernet Test frames
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">eth-test</a> <a href="#">test-pattern</a> <a href="#">pattern</a> <i>keyword</i>
Tree	<a href="#">pattern</a>
Description	This command specifies the test pattern of the Ethernet Test (ETH-TST) frames. This does not have to be configured the same on the sender and the receiver.
Options	all-zeros, all-ones
Default	all-zeros
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**fault-propagation** *keyword*

Synopsis	Fault propagation for the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">fault-propagation</a> <i>keyword</i>
Tree	<a href="#">fault-propagation</a>
Options	use-if-status-tlv, suspend-ccm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**grace**

Synopsis	Enter the <b>grace</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm</a> <a href="#">mep</a> <a href="#">md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace</a>
Tree	<a href="#">grace</a>
Description	Commands in this context configure the Nokia ETH-CFM Grace function and the ITU-T Y.1731 Ethernet Expected Default (ETH-ED) function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**eth-ed**

Synopsis	Enter the <b>eth-ed</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">grace eth-ed</a>
Tree	<a href="#">eth-ed</a>
Description	Commands in this context configure the ITU-T Y.1731 ETH-ED function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**max-rx-defect-window** *number*

Synopsis	Maximum received ETH-ED expected defect window duration
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">grace eth-ed max-rx-defect-window number</a>
Tree	<a href="#">max-rx-defect-window</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**priority** *number*

Synopsis	Transmission priority for ETH-ED PDUs
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">eth-cfm mep md-admin-name reference</a> <a href="#">ma-admin-name reference</a> <a href="#">mep-id number</a> <a href="#">grace eth-ed priority number</a>
Tree	<a href="#">priority</a>
Range	0 to 7
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**rx-eth-ed** *boolean*

Synopsis	Receive and process ETH-ED ITU-T Y.1731 PDUs on the MEP
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed rx-eth-ed</b> <i>boolean</i>
Tree	<b>rx-eth-ed</b>
Description	This command enables the reception and processing of the ITU-T Y.1731 ETH-ED PDU on the MEP.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **tx-eth-ed** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-ed tx-eth-ed</b> <i>boolean</i>
Tree	<b>tx-eth-ed</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **eth-vsm-grace**

Synopsis	Enter the <b>eth-vsm-grace</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace</b>
Tree	<b>eth-vsm-grace</b>
Description	Commands in this context configure the Nokia ETH-CFM Grace function.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **rx-eth-vsm-grace** *boolean*

Synopsis	Receive and process Nokia ETH-CFM Grace PDU on the MEP
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>eth-cfm mep md-admin-name</b> <i>reference</i> <b>ma-admin-name</b> <i>reference</i> <b>mep-id</b> <i>number</i> <b>grace eth-vsm-grace rx-eth-vsm-grace</b> <i>boolean</i>

Tree	<a href="#">rx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router enables the Nokia Grace function, which is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>When configured to <b>false</b>, the router disables the Nokia Grace function.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **tx-eth-vsm-grace** *boolean*

Synopsis	Transmit ETH-ED PDUs from the MEP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">grace eth-vsm-grace tx-eth-vsm-grace</a> <i>boolean</i>
Tree	<a href="#">tx-eth-vsm-grace</a>
Description	<p>When configured to <b>true</b>, the router can transmit the Nokia ETH-CFM Grace PDU from the MEP when a system soft reset notification is received for one or more cards.</p> <p>The Nokia Grace function is a vendor-specific PDU that informs MEP peers that the local node may be entering a period of expected defect.</p> <p>The operator must configure the <b>configure system eth-cfm grace</b> command to instruct the system that the node is capable of transmitting expected-defect windows to peers. The system can only transmit one form of ETH-CFM grace (Nokia ETH-CFM Grace or ITU-T Y.1731 ETH-ED).</p> <p>When configured to <b>false</b>, the router disables the transmission of the Nokia ETH-CFM Grace PDU from the MEP.</p>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **low-priority-defect** *keyword*

Synopsis	Lowest priority defect allowed to generate fault alarm
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <a href="#">low-priority-defect</a> <i>keyword</i>
Tree	<a href="#">low-priority-defect</a>
Options	all-def, mac-rem-err-xcon, rem-err-xcon, err-xcon, xcon, no-xcon
Default	mac-rem-err-xcon



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **one-way-delay-threshold** *number*

Synopsis	Threshold time limit for the one-way delay test
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm mep md-admin-name</a> <i>reference</i> <a href="#">ma-admin-name</a> <i>reference</i> <a href="#">mep-id</a> <i>number</i> <b>one-way-delay-threshold</b> <i>number</i>
Tree	<a href="#">one-way-delay-threshold</a>
Range	0 to 600
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **squelch-ingress-levels** *number*

Synopsis	Levels for which ETH-CFM packets are silently discarded
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">eth-cfm squelch-ingress-levels</a> <i>number</i>
Tree	<a href="#">squelch-ingress-levels</a>
Description	<p>This command defines the levels of the ETH-CFM packets that are silently discarded on ingress into the SAP or SDP binding from the wire that matches the service delineation of the SAP or SDP binding. All ETH-CFM packets inbound to the SAP or SDP binding that match the configured levels are dropped without regard for any other ETH-CFM criteria. No statistical information or drop count is available for any ETH-CFM packet that is silently discarded by this option.</p> <p>The list of levels must be a complete contiguous list from 0 up to the highest level that will be dropped.</p>
Range	0 to 7
Max.	8
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**fwd-wholesale**

Synopsis	Enter the <b>fwd-wholesale</b> context
Context	<b>configure service vprn string subscriber-interface string group-interface string sap string fwd-wholesale</b>
Tree	<a href="#">fwd-wholesale</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe-service reference**

Synopsis	PPPoE service name
Context	<b>configure service vprn string subscriber-interface string group-interface string sap string fwd-wholesale pppoe-service reference</b>
Tree	<a href="#">pppoe-service</a>
Reference	<b>configure service epipe string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-admin-state keyword**

Synopsis	Administrative state of the hosts
Context	<b>configure service vprn string subscriber-interface string group-interface string sap string host-admin-state keyword</b>
Tree	<a href="#">host-admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-lockout-policy reference**

Synopsis	Host lockout policy
Context	<b>configure service vprn string subscriber-interface string group-interface string sap string host-lockout-policy reference</b>
Tree	<a href="#">host-lockout-policy</a>
Reference	<b>configure subscriber-mgmt host-lockout-policy string</b>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## igmp-host-tracking

Synopsis	Enter the <b>igmp-host-tracking</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a>
Tree	<a href="#">igmp-host-tracking</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">expiry-time</a> <i>number</i>
Tree	<a href="#">expiry-time</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## maximum-number-group-sources *number*

Synopsis	Maximum number of multicast groups to track per group
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-host-tracking maximum-number-group-sources</b> <i>number</i>
Tree	<b>maximum-number-group-sources</b>
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-host-tracking maximum-number-groups</b> <i>number</i>
Tree	<b>maximum-number-groups</b>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-host-tracking maximum-number-sources</b> <i>number</i>
Tree	<b>maximum-number-sources</b>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis	Enable IGMP router alert check option
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>igmp-host-tracking router-alert-check</b> <i>boolean</i>
Tree	<b>router-alert-check</b>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress</b>
Tree	<b>ingress</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress filter</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress filter ip reference</b>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6 reference

Synopsis	IPv6 filter policy name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress filter ipv6 reference</b>
Tree	<b>ipv6</b>
Reference	<b>configure filter ipv6-filter</b> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis Enter the **qos** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **ingress qos**

Tree **qos**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## match-qinq-dot1p *keyword*

Synopsis Ingress match QinQ Dot1p

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **ingress qos match-qinq-dot1p** *keyword*

Tree **match-qinq-dot1p**

Options top, bottom

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policer-control-policy

Synopsis Enter the **policer-control-policy** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **ingress qos policer-control-policy**

Tree **policer-control-policy**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policy-name *reference*

Synopsis Policer control policy name

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **ingress qos policer-control-policy** *policy-name* *reference*

Tree **policy-name**

Reference	<b>configure qos policer-control-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sap-ingress

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress</b>
Tree	<b>sap-ingress</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policy-name *reference*

Synopsis	Policy ID
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress policy-name</b> <i>reference</i>
Tree	<b>policy-name</b>
Reference	<b>configure qos sap-ingress</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## queuing-type *keyword*

Synopsis	Queuing type
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos sap-ingress queuing-type</b> <i>keyword</i>
Tree	<b>queuing-type</b>
Options	shared, multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-a, 7750 SR-e, VSR

## scheduler-policy

Synopsis	Enter the <b>scheduler-policy</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>ingress qos scheduler-policy</b> <b>policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure qos scheduler-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lag**

Synopsis	Enter the <b>lag</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag</b>
Tree	<a href="#">lag</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **link-map-profile** *number*

Synopsis	LAG link map profile for a SAP or network interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag link-map-profile</b> <i>number</i>
Tree	<a href="#">link-map-profile</a>
Description	<p>This command assigns a preconfigured LAG link map profile to a SAP or network interface configured on a LAG or a PW port that exists on a LAG. After an operator assigns a LAG link map profile, the system rehashes the SAP or network interface egress traffic over the LAG as required by the new configuration.</p> <p>If the LAG link map profile for a SAP or network interface is deleted, the system reverts back to per-flow hashing.</p>



Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## per-link-hash

Synopsis	Enter the <b>per-link-hash</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag per-link-hash</b>
Tree	<b>per-link-hash</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## class *number*

Synopsis	Class used on LAG egress using weighted per-link-hash
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag per-link-hash class</b> <i>number</i>
Tree	<b>class</b>
Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## weight *number*

Synopsis	Weight used on LAG egress using weighted per-link-hash
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>lag per-link-hash weight</b> <i>number</i>
Tree	<b>weight</b>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**monitor-oper-group** *reference*

Synopsis	Monitor operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">monitor-oper-group</a> <i>reference</i>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**multi-service-site** *reference*

Synopsis	Multi service site name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">multi-service-site</a> <i>reference</i>
Tree	<a href="#">multi-service-site</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**oper-group** *reference*

Synopsis	Operational group
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">oper-group</a> <i>reference</i>
Tree	<a href="#">oper-group</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>
Notes	The following elements are part of a choice: <b>monitor-oper-group</b> or <b>oper-group</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**static-host**

Synopsis	Enter the <b>static-host</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a>

Tree	<a href="#">static-host</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4** [[ip](#)] *string* [mac](#) *string*

Synopsis	Enter the <b>ipv4</b> list instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ip]** *string*

Synopsis	IPv4 address used by the static host
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv4</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac** *string*

Synopsis	MAC address used by the static host
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv4</a>
MD-CLI Default	00:00:00:00:00:00
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the static host
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ancp-string** *string*

Synopsis	ANCP string
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>ancp-string</b> <i>string</i>
Tree	<a href="#">ancp-string</a>
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile**

Synopsis	Enter the <b>app-profile</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>app-profile</b>
Tree	<a href="#">app-profile</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**profile** *reference*

Synopsis	Application profile used by the static host
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>app-profile</b> <i>profile reference</i>
Tree	<a href="#">profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <b>app-profile</b> <i>string</i>

Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scope** *keyword*

Synopsis	Scope of the static host application profile
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a> <a href="#">scope</a> <i>keyword</i>
Tree	<a href="#">scope</a>
Options	subscriber, mac
Default	subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id** *string*

Synopsis	Intermediate destination ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">int-dest-id</a> <i>string</i>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-route** [[prefix](#)] *string*

Synopsis	Enter the <b>managed-route</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i>
Tree	<a href="#">managed-route</a>
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[prefix] string**

Synopsis	Managed route prefix associated with IPv4 static host
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">managed-route string</a>
Tree	<a href="#">managed-route</a>
Description	This command configures the managed route prefix. The prefix length must be in the range of 1 to 32.
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cpe-check**

Synopsis	Enable the <b>cpe-check</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">managed-route string</a> <a href="#">cpe-check</a>
Tree	<a href="#">cpe-check</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destination-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap string</a> <a href="#">static-host ipv4 string</a> <a href="#">mac string</a> <a href="#">managed-route string</a> <a href="#">cpe-check</a> <a href="#">destination-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">destination-ip-address</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**drop-count number**

Synopsis	Consecutive ping replies missed before CPE deemed down
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **failed-action**

Synopsis	Enter the <b>failed-action</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action</b>
Tree	<b>failed-action</b>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric number**

Synopsis	Metric associated with the provisioned managed route
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action metric</b> <i>number</i>
Tree	<b>metric</b>
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference number**

Synopsis	Preference associated to the provisioned managed route
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv4</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action preference</b> <i>number</i>
Tree	<b>preference</b>

Range	0 to 255
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tag number**

Synopsis	Route tag used if CPE check fails
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">tag number</a>
Tree	<a href="#">tag</a>
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**withdraw boolean**

Synopsis	Withdraw the route when the CPE check fails
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <a href="#">withdraw boolean</a>
Tree	<a href="#">withdraw</a>
Default	false
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interval number**

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">interval number</a>
Tree	<a href="#">interval</a>



Range	1 to 255
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">log</a> <i>boolean</i>
Tree	<a href="#">log</a>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">padding-size</a> <i>number</i>
Tree	<a href="#">padding-size</a>
Range	0 to 16384
Units	bytes
Default	56
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address used in the ICMP messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">source-ip-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis Time interval determining that a ping is missed

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv4** *string* **mac** *string* **managed-route** *string* **cpe-check** **timeout** *number*

Tree **timeout**

Range 1 to 10

Units seconds

Default 1

Introduced 22.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric** *number*

Synopsis Metric associated with the managed route

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv4** *string* **mac** *string* **managed-route** *string* **metric** *number*

Tree **metric**

Max. Range 0 to 4294967295

Default 0

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference** *number*

Synopsis Preference associated with the managed route

Context **configure** **service** **vpn** *string* **subscriber-interface** *string* **group-interface** *string* **sap** *string* **static-host** **ipv4** *string* **mac** *string* **managed-route** *string* **preference** *number*

Tree **preference**

Range 0 to 255

Default 0

Introduced 22.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tag number**

Synopsis	Route tag associated with the managed route
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">tag number</a>
Tree	<a href="#">tag</a>
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rip-policy reference**

Synopsis	RIP policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">rip-policy</a> <i>reference</i>
Tree	<a href="#">rip-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">rip-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**shcv**

Synopsis	Enter the <b>shcv</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">shcv</a>
Tree	<a href="#">shcv</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sla-profile reference**

Synopsis	SLA profile name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>

Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Sub-profile name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id**

Synopsis	Enter the <b>subscriber-id</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a>
Tree	<a href="#">subscriber-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis	Subscriber identification
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a> <i>string</i> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**use-sap-id**

Synopsis	Use the SAP id as subscriber ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv4</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">subscriber-id</a> <a href="#">use-sap-id</a>
Tree	<a href="#">use-sap-id</a>
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6** [[prefix](#)] *string* [mac](#) *string*

Synopsis	Enter the <b>ipv6</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[prefix]** *string*

Synopsis	IPv6 prefix
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv6</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac** *string*

Synopsis	MAC address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">ipv6</a>
MD-CLI	00:00:00:00:00:00
Default	

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the static host
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ancp-string** *string*

Synopsis	ANCP string
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>ancp-string</b> <i>string</i>
Tree	<a href="#">ancp-string</a>
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **app-profile**

Synopsis	Enter the <b>app-profile</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <b>app-profile</b>
Tree	<a href="#">app-profile</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**profile** *reference*

Synopsis	Application profile used by the static host
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a> <a href="#">profile</a> <i>reference</i>
Tree	<a href="#">profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**scope** *keyword*

Synopsis	Scope of the static host application profile
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">app-profile</a> <a href="#">scope</a> <i>keyword</i>
Tree	<a href="#">scope</a>
Options	subscriber, mac
Default	subscriber
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**int-dest-id** *string*

Synopsis	Intermediate destination ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">int-dest-id</a> <i>string</i>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac-linking** *string*

Synopsis	IPv6 host linked with IPv4 host via learned MAC address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">mac-linking</a> <i>string</i>
Tree	<a href="#">mac-linking</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-route** [ipv6-prefix] string

Synopsis	Enter the <b>managed-route</b> list instance
Context	<b>configure</b> service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string
Tree	managed-route
Description	Commands in this context configure managed route parameters.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv6-prefix]** string

Synopsis	Managed route prefix associated with IPv6 static host
Context	<b>configure</b> service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string
Tree	managed-route
Description	This command configures the managed route prefix. The prefix length must be in the range of 1 to 128.
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cpe-check**

Synopsis	Enable the <b>cpe-check</b> context
Context	<b>configure</b> service vprn string subscriber-interface string group-interface string sap string static-host ipv6 string mac string managed-route string cpe-check
Tree	cpe-check
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**destination-ip-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the target CPE device
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>destination-ip-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>destination-ip-address</b>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**drop-count** *number*

Synopsis	Consecutive ping replies missed before CPE deemed down
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>drop-count</b> <i>number</i>
Tree	<b>drop-count</b>
Range	1 to 255
Default	3
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failed-action**

Synopsis	Enter the <b>failed-action</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host</b> <b>ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check</b> <b>failed-action</b>
Tree	<b>failed-action</b>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**metric** *number*

Synopsis	Metric associated with the provisioned managed route
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action</b> <b>metric</b> <i>number</i>
Tree	<b>metric</b>
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference** *number*

Synopsis	Preference associated to the provisioned managed route
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action</b> <b>preference</b> <i>number</i>
Tree	<b>preference</b>
Range	0 to 255
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tag** *number*

Synopsis	Route tag used if CPE check fails
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check failed-action</b> <b>tag</b> <i>number</i>
Tree	<b>tag</b>
Max. Range	0 to 4294967295
Default	0
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**withdraw** *boolean*

Synopsis	Withdraw the route when the CPE check fails
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <a href="#">failed-action</a> <b>withdraw</b> <i>boolean</i>
Tree	<a href="#">withdraw</a>
Default	false
Notes	The following elements are part of a choice: ( <b>metric</b> , <b>preference</b> , and <b>tag</b> ) or <b>withdraw</b> .
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interval** *number*

Synopsis	Interval between ICMP pings to target CPE IP address
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <b>interval</b> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 255
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**log** *boolean*

Synopsis	Log CPE connectivity checks transitions
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">cpe-check</a> <b>log</b> <i>boolean</i>
Tree	<a href="#">log</a>
Default	false
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**padding-size** *number*

Synopsis	Padding size for CPE connectivity checks
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check padding-size</b> <i>number</i>
Tree	<a href="#">padding-size</a>
Range	0 to 16384
Units	bytes
Default	56
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source-ip-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address used in the ICMP messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check source-ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-ip-address</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Time interval determining that a ping is missed
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>cpe-check timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **metric** *number*

Synopsis	Metric associated with the managed route
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>managed-route</b> <i>string</i> <b>metric</b> <i>number</i>
Tree	<a href="#">metric</a>

Max. Range	0 to 4294967295
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference number**

Synopsis	Preference associated with the managed route
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	0 to 255
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tag number**

Synopsis	Route tag associated with the managed route
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">managed-route</a> <i>string</i> <a href="#">tag</a> <i>number</i>
Tree	<a href="#">tag</a>
Max. Range	0 to 4294967295
Default	0
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retail-svc-id number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Retail service ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host ipv6</a> <i>string</i> <a href="#">mac</a> <i>string</i> <a href="#">retail-svc-id</a> <i>number</i>
Tree	<a href="#">retail-svc-id</a>

Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## shcv

Synopsis	Enter the <b>shcv</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>shcv</b>
Tree	<b>shcv</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sla-profile *reference*

Synopsis	SLA profile name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>sla-profile</b> <i>reference</i>
Tree	<b>sla-profile</b>
Reference	<b>configure subscriber-mgmt sla-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-profile *reference*

Synopsis	Sub-profile name
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>static-host ipv6</b> <i>string</i> <b>mac</b> <i>string</i> <b>sub-profile</b> <i>reference</i>
Tree	<b>sub-profile</b>
Reference	<b>configure subscriber-mgmt sub-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis	Enter the <b>subscriber-id</b> context
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Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string subscriber-id</i>
Tree	<i>subscriber-id</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string string**

Synopsis	Subscriber identification
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string subscriber-id string string</i>
Tree	<i>string</i>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-sap-id**

Synopsis	Use the SAP id as subscriber ID
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string static-host ipv6 string mac string subscriber-id use-sap-id</i>
Tree	<i>use-sap-id</i>
Notes	The following elements are part of a choice: <b>string</b> or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac-learning**

Synopsis	Enter the <b>mac-learning</b> context
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string sap string static-host mac-learning</i>
Tree	<i>mac-learning</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**data-triggered** *boolean*

Synopsis	Enable learning of MAC addresses from data packets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">mac-learning</a> <a href="#">data-triggered</a> <i>boolean</i>
Tree	<a href="#">data-triggered</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**single-mac** *boolean*

Synopsis	Enforce single MAC address and subscriber for the SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">static-host</a> <a href="#">mac-learning</a> <a href="#">single-mac</a> <i>boolean</i>
Tree	<a href="#">single-mac</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-sla-mgmt**

Synopsis	Enter the <b>sub-sla-mgmt</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a>
Tree	<a href="#">sub-sla-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of SAP subscriber management
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable



Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## defaults

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <b>defaults</b>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## app-profile *reference*

Synopsis	Default application profile name for this SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <b>defaults</b> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## int-dest-id

Synopsis	Enter the <b>int-dest-id</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <b>defaults</b> <a href="#">int-dest-id</a>
Tree	<a href="#">int-dest-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string *string*

Synopsis	Use the configured string
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults int-dest-id</b> <i>string</i> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### top-q-tag

Synopsis	Use the top Q-tag of this SAP
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults int-dest-id top-q-tag</b>
Tree	<a href="#">top-q-tag</a>
Notes	The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sla-profile *reference*

Synopsis	Default SLA profile for hosts on this SAP
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults sla-profile</b> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure subscriber-mgmt sla-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sub-profile *reference*

Synopsis	Default subscriber profile for the SAP
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap</b> <i>string</i> <b>sub-sla-mgmt defaults sub-profile</b> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure subscriber-mgmt sub-profile</b> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis Enter the **subscriber-id** context

Context **configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults subscriber-id**

Tree [subscriber-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-id

Synopsis Use auto-generated subscriber identification string

Context **configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults subscriber-id auto-id**

Tree [auto-id](#)

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-id

Synopsis Use SAP ID as default subscriber identification string

Context **configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults subscriber-id sap-id**

Tree [sap-id](#)

Notes The following elements are part of a choice: **auto-id**, **sap-id**, or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string string

Synopsis Default subscriber identification string for the SAP

Context **configure service vprn string subscriber-interface string group-interface string sap string sub-sla-mgmt defaults subscriber-id string string**

Tree	<a href="#">string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### single-sub-parameters

Synopsis	Enter the <b>single-sub-parameters</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a>
Tree	<a href="#">single-sub-parameters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### non-sub-traffic

Synopsis	Enable the <b>non-sub-traffic</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a>
Tree	<a href="#">non-sub-traffic</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### app-profile *reference*

Synopsis	Application profile name for all non-subscriber traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	SLA profile applicable for all non-subscriber traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-profile** *reference*

Synopsis	Subscriber profile all non-subscriber traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-id** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Subscriber ID applied for all non-subscriber traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">non-sub-traffic</a> <a href="#">subscriber-id</a> <i>string</i>
Tree	<a href="#">subscriber-id</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**profiled-traffic-only** *boolean*

Synopsis	Include all traffic in subscriber profile
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">single-sub-parameters</a> <a href="#">profiled-traffic-only</a> <i>boolean</i>
Tree	<a href="#">profiled-traffic-only</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-ident-policy** *reference*

Synopsis	Subscriber identification policy used on this SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">sub-ident-policy</a> <i>reference</i>
Tree	<a href="#">sub-ident-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-limit** (*keyword* | *number*)

Synopsis	Maximum number of subscribers on this SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">subscriber-limit</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">subscriber-limit</a>
Range	1 to 131071
Options	no-limit
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-parameters**

Synopsis	Enter the <b>sap-parameters</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a>

Tree	<a href="#">sap-parameters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **anti-spoof** *keyword*

Synopsis	Anti-spoof type of the SAP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a> <b>anti-spoof</b> <i>keyword</i>
Tree	<a href="#">anti-spoof</a>
Options	ip-mac, nh-mac
Default	ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-sla-mgmt**

Synopsis	Enter the <b>sub-sla-mgmt</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap-parameters</a> <b>sub-sla-mgmt</b>
Tree	<a href="#">sub-sla-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**defaults**

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap-parameters sub-sla-mgmt defaults</a>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Default application profile name
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap-parameters sub-sla-mgmt defaults app-profile reference</a>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance group number partition number policy app-profile string</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	Default SLA profile
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap-parameters sub-sla-mgmt defaults sla-profile reference</a>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sla-profile string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-profile** *reference*

Synopsis	Default subscriber profile
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">sap-parameters sub-sla-mgmt defaults sub-profile reference</a>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a>
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis Enter the **subscriber-id** context

Context **configure service vprn string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults subscriber-id**

Tree [subscriber-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-id

Synopsis Subscriber ID that is autogenerated

Context **configure service vprn string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults subscriber-id auto-id**

Tree [auto-id](#)

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string *string*

Synopsis String to be used as default subscriber ID

Context **configure service vprn string subscriber-interface string group-interface string sap-parameters sub-sla-mgmt defaults subscriber-id string string**

Tree [string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **auto-id** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sub-ident-policy *reference*

Synopsis Subscriber identification policy

Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>sap-parameters sub-sla-mgmt sub-ident-policy</b> <i>reference</i>
Tree	<a href="#">sub-ident-policy</a>
Reference	<b>configure subscriber-mgmt sub-ident-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy** *reference*

Synopsis	SHCV policy for IPv4 and IPv6 subscriber hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>shcv-policy</b> <i>reference</i>
Tree	<a href="#">shcv-policy</a>
Reference	<b>configure subscriber-mgmt shcv-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy-ipv4** *reference*

Synopsis	SHCV for IPv4 subscriber hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>shcv-policy-ipv4</b> <i>reference</i>
Tree	<a href="#">shcv-policy-ipv4</a>
Reference	<b>configure subscriber-mgmt shcv-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **shcv-policy-ipv6** *reference*

Synopsis	SHCV for IPv6 subscriber hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>shcv-policy-ipv6</b> <i>reference</i>
Tree	<a href="#">shcv-policy-ipv6</a>
Reference	<b>configure subscriber-mgmt shcv-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**srrp** [**srrp-id**] *number*

Synopsis	Enter the <b>srrp</b> list instance
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i>
Tree	<b>srrp</b>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[srrp-id]** *number*

Synopsis	SRRP instance ID
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i>
Tree	<b>srrp</b>
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of SRRP
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srrp</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bfd-liveness**

Synopsis	Enable the <b>bfd-liveness</b> context
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Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srp</b> <i>number</i> <b>bfd-liveness</b>
Tree	<b>bfd-liveness</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dest-ip** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Destination IPv4 prefix
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srp</b> <i>number</i> <b>bfd-liveness</b> <b>dest-ip</b> <i>string</i>
Tree	<b>dest-ip</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interface-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Name of the interface running BFD
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>srp</b> <i>number</i> <b>bfd-liveness</b> <b>interface-name</b> <i>string</i>
Tree	<b>interface-name</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-name** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">bfd-liveness</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gw-mac** *string*

Synopsis	Gateway MAC address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">gw-mac</a> <i>string</i>
Tree	<a href="#">gw-mac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**keep-alive-interval** *number*

Synopsis	Interval between SRRP advertisements
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">keep-alive-interval</a> <i>number</i>

Tree	<a href="#">keep-alive-interval</a>
Range	1 to 100
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### message-path *reference*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP to use as the SRRP message path
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">message-path</a> <i>reference</i>
Tree	<a href="#">message-path</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">sap</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### monitor-oper-group

Synopsis	Enter the <b>monitor-oper-group</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a>
Tree	<a href="#">monitor-oper-group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### group-name *reference*

Synopsis	Operational group name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> <a href="#">group-name</a> <i>reference</i>
Tree	<a href="#">group-name</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">oper-group</a> <i>string</i>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **priority-step** *number*

Synopsis	Step value to change priority of SRRP instance
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">monitor-oper-group</a> <a href="#">priority-step</a> <i>number</i>
Tree	<a href="#">priority-step</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **one-garp-per-sap** *boolean*

Synopsis	Send one gratuitous ARP to each SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">one-garp-per-sap</a> <i>boolean</i>
Tree	<a href="#">one-garp-per-sap</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	VRRP priority control policy associated with the SRRP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">vrrp</a> <a href="#">policy</a> <i>number</i>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preempt** *boolean*

Synopsis	Allow the SRRP instance to override an existing master
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">preempt</a> <i>boolean</i>
Tree	<a href="#">preempt</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**priority** *number*

Synopsis	Priority for this interface at this level
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 254
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**send-fib-population-packets** *keyword*

Synopsis	Mode used to send FIB population packets on switchover
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">srrp</a> <i>number</i> <a href="#">send-fib-population-packets</a> <i>keyword</i>
Tree	<a href="#">send-fib-population-packets</a>
Options	all, outer-tag-only
Default	all
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**suppress-aa-sub** *boolean*

Synopsis	Enable application assurance suppression for ESM subscribers
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>suppress-aa-sub</b> <i>boolean</i>
Tree	<b>suppress-aa-sub</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tos-marking-state** *keyword*

Synopsis	TOS marking state
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>tos-marking-state</b> <i>keyword</i>
Tree	<b>tos-marking-state</b>
Options	trusted, untrusted
Default	trusted
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Group interface type
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	plain, lns, wlan-gw, gtp, bonding
Default	plain
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw**

Synopsis	Enter the <b>wlan-gw</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b>

Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of WLAN Gateway
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gateway-address** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>gateway-address</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">gateway-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">gateway-address</a>
Max. Instances	10
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Gateway endpoint address of the WLAN Gateway tunnel
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">gateway-address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">gateway-address</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**purpose**

Synopsis	Enter the <b>purpose</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>purpose</b>
Tree	<b>purpose</b>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**xconnect boolean**

Synopsis	Use tunnel IP address for crosse-connect traffic
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw gateway-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>purpose xconnect boolean</b>
Tree	<b>xconnect</b>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gateway-router string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Routing instance the WLAN-GW endpoint resides in
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw gateway-router</b> <i>string</i>
Tree	<b>gateway-router</b>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**group-encryption**

Synopsis	Enter the <b>group-encryption</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw group-encryption</b>

Tree	<a href="#">group-encryption</a>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encryption-keygroup-inbound** *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">group-encryption</a> <a href="#">encryption-keygroup-inbound</a> <i>reference</i>
Tree	<a href="#">encryption-keygroup-inbound</a>
Reference	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encryption-keygroup-outbound** *reference*

Synopsis	Encryption keygroup for inbound traffic
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">group-encryption</a> <a href="#">encryption-keygroup-outbound</a> <i>reference</i>
Tree	<a href="#">encryption-keygroup-outbound</a>
Reference	<b>configure</b> <a href="#">group-encryption</a> <a href="#">encryption-keygroup</a> <i>number</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **l2-ap**

Synopsis	Enter the <b>l2-ap</b> context
Context	<b>configure</b> <a href="#">service vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">l2-ap</a>
Tree	<a href="#">l2-ap</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **access-point** [[sap-id](#)] *string*

Synopsis	Enter the <b>access-point</b> list instance
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Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string wlan-gw l2-ap access-point string</i>
Tree	<a href="#">access-point</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[sap-id]** *string*

Synopsis	SAP ID for the Layer 2 access point
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string wlan-gw l2-ap access-point string</i>
Tree	<a href="#">access-point</a>
String Length	1 to 45
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the L2 access points
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string wlan-gw l2-ap access-point string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**encap-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service encapsulation type of this access point
Context	<b>configure service vprn</b> <i>string subscriber-interface string group-interface string wlan-gw l2-ap access-point string encap-type keyword</i>

Tree	<a href="#">encap-type</a>
Options	null, dot1q, qinq
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **epipe-sap-template** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Parameters template for the L2 access point SAP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">l2-ap</a> <a href="#">access-point</a> <i>string</i> <a href="#">epipe-sap-template</a> <i>reference</i>
Tree	<a href="#">epipe-sap-template</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">template</a> <a href="#">epipe-sap-template</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **auto-sub-id-fmt** *keyword*

Synopsis	Format of the auto-generated subscriber ID
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">l2-ap</a> <a href="#">auto-sub-id-fmt</a> <i>keyword</i>
Tree	<a href="#">auto-sub-id-fmt</a>
Options	include-ap-tags, sap-only
Default	include-ap-tags
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-encap-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default encapsulation type for Layer 2 access points
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw l2-ap default-encap-type</b> <i>keyword</i>
Tree	<b>default-encap-type</b>
Options	null, dot1q, qinq
Default	null
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## lanext



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable the <b>lanext</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw lanext</b>
Tree	<b>lanext</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-bd *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of bridge domains
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw lanext max-bd</b> <i>number</i>
Tree	<b>max-bd</b>
Range	1 to 131071
Default	131071
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## learn-ap-mac

Synopsis	Enable the <b>learn-ap-mac</b> context
Context	<b>configure service vprn string subscriber-interface string group-interface string wlan-gw learn-ap-mac</b>
Tree	<a href="#">learn-ap-mac</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## delay-auth *boolean*

Synopsis	Delay AP-MAC until after ARP/ND authentication response
Context	<b>configure service vprn string subscriber-interface string group-interface string wlan-gw learn-ap-mac delay-auth boolean</b>
Tree	<a href="#">delay-auth</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mcs-peer

Synopsis	Enable the <b>mcs-peer</b> context
Context	<b>configure service vprn string subscriber-interface string group-interface string wlan-gw mcs-peer</b>
Tree	<a href="#">mcs-peer</a>
Description	Commands in this context configure a multi-chassis synchronization peer.
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	IP address of the MCS peer
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mcs-peer</b> <b>address</b> <i>reference</i>
Tree	<b>address</b>
Description	This command configures the IPv4 address or the global IPv6 unicast address for a multi-chassis synchronization peer.
Reference	<b>configure</b> <b>redundancy</b> <b>multi-chassis</b> <b>peer</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sync-tag** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Synchronization tag shared by MCS peers
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mcs-peer</b> <b>sync-tag</b> <i>string</i>
Tree	<b>sync-tag</b>
Description	This command configures the synchronization tag for synchronization of ESM and the tunnel state for ESM over soft-GRE with an MCS peer.
String Length	1 to 32
Notes	This element is mandatory.
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mobility

Synopsis	Enter the <b>mobility</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">mobility</a>
Tree	<a href="#">mobility</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## hold-time *number*

Synopsis	Minimum time between two mobility events for single UE
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">mobility hold-time</a> <i>number</i>
Tree	<a href="#">hold-time</a>
Range	0 to 255
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inter-tunnel-type *boolean*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable mobility between terminating tunnel types
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">mobility inter-tunnel-type</a> <i>boolean</i>
Tree	<a href="#">inter-tunnel-type</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## inter-vlan *boolean*

Synopsis	Allow mobility within different VLANs of the same range
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mobility inter-vlan</b> <i>boolean</i>
Tree	<b>inter-vlan</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## trigger

Synopsis	Enter the <b>trigger</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mobility trigger</b>
Tree	<b>trigger</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## control *boolean*

Synopsis	Use control traffic as a mobility trigger
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mobility trigger control</b> <i>boolean</i>
Tree	<b>control</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## data *boolean*

Synopsis	Use data traffic as mobility trigger
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>mobility trigger data</b> <i>boolean</i>
Tree	<b>data</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**iapp** *boolean*

Synopsis	Use IAPP messages as a mobility trigger
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">mobility trigger iapp</a> <i>boolean</i>
Tree	<a href="#">iapp</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**oper-down-on-group-degrade** *boolean*

Synopsis	Bring interface down when the ISA WLAN Gateway degraded
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">oper-down-on-group-degrade</a> <i>boolean</i>
Tree	<a href="#">oper-down-on-group-degrade</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**promiscuous-mode** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable promiscuous mode for this group interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">promiscuous-mode</a> <i>boolean</i>
Tree	<a href="#">promiscuous-mode</a>
Description	When configured to <b>true</b> , the router accepts all traffic, including traffic that is not destined for a WLAN gateway group interface MAC or virtual MAC address for ESM processing.  When configured to <b>false</b> , the router only accepts traffic that is destined for a WLAN gateway group interface MAC or virtual MAC address for ESM processing.
Default	false
Introduced	23.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tcp-mss-adjust** *number*

Synopsis	TCP Maximum Segment Size (MSS) adjustment for gateway
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tcp-mss-adjust</b> <i>number</i>
Tree	<b>tcp-mss-adjust</b>
Range	160 to 10240
Units	bytes
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tunnel-egress-qos**

Synopsis	Enter the <b>tunnel-egress-qos</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tunnel-egress-qos</b>
Tree	<b>tunnel-egress-qos</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of egress QoS for WLAN-GW tunnels
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>tunnel-egress-qos</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**agg-rate-limit** (*number* | *keyword*)

Synopsis	HQoS aggregate rate limit
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <b>agg-rate-limit</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">agg-rate-limit</a>
Range	1 to 100000000
Options	max
Default	max
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**granularity** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Granularity of the egress shaping for WLAN Gateway
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <b>granularity</b> <i>keyword</i>
Tree	<a href="#">granularity</a>
Options	per-tunnel – Applied to each tunnel per-retailer – Applied to each retailer Mobile Network Operator's fraction of the tunnel payload
Default	per-tunnel
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hold-time** (*number* | *keyword*)

Synopsis	Minimum time to hold egress shaping resources
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">tunnel-egress-qos</a> <b>hold-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hold-time</a>
Range	1 to 86400
Units	seconds
Options	infinite

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **multi-client-only** *boolean*

Synopsis Allow shaping for tunnel traffic for multiple UEs  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)  
[tunnel-egress-qos](#) **multi-client-only** *boolean*  
 Tree [multi-client-only](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qos** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Egress QoS policy linked with each interface tunnel  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)  
[tunnel-egress-qos](#) **qos** *reference*  
 Tree [qos](#)  
 Reference **configure** [qos sap-egress](#) *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler-policy** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Egress scheduler policy linked with each tunnel  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#)  
[tunnel-egress-qos](#) **scheduler-policy** *reference*  
 Tree [scheduler-policy](#)

Reference	<b>configure qos scheduler-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tunnel-encaps

Synopsis	Enter the <b>tunnel-encaps</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw tunnel-encaps</b>
Tree	<b>tunnel-encaps</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## learn-l2tp-cookie (*keyword* | *hex-string*)

Synopsis	System that learns the cookie from L2TP tunnels terminating on this interface
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw tunnel-encaps learn-l2tp-cookie</b> ( <i>keyword</i>   <i>hex-string</i> )
Tree	<b>learn-l2tp-cookie</b>
String Length	6
Options	never – Never interpret the cookie always – Interpret cookie regardless of first two octets value
Default	never
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## vlan-range [*range*] *string*

Synopsis	Enter the <b>vlan-range</b> list instance
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw vlan-range</b> <i>string</i>
Tree	<b>vlan-range</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



**[range] string**

Synopsis	IEEE 802.1q VLAN tag range
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a>
Tree	<a href="#">vlan-range</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**authentication**

Synopsis	Enter the <b>authentication</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">authentication</a>
Tree	<a href="#">authentication</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hold-time number**

Synopsis	Minimum time UE held down after failed authentication
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">authentication hold-time number</a>
Tree	<a href="#">hold-time</a>
Range	0 to 3600
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local**

Synopsis	Enable the <b>local</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">authentication local</a>
Tree	<a href="#">local</a>

Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **coa-policy** *reference*

Synopsis RADIUS ISA policy applied to CoA or disconnect messages  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication local coa-policy](#) *reference*  
 Tree [coa-policy](#)  
 Reference **configure** [aaa radius isa-policy](#) *string*  
 Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-ue-state** *keyword*

Synopsis UE state accepted for immediate authentication  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication local default-ue-state](#) *keyword*  
 Tree [default-ue-state](#)  
 Options portal – Portal redirect UE using the http-redirect-policy  
 dsm – DSM UE using DSM parameters  
 Notes This element is mandatory.  
 Introduced 22.2.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **on-control-plane** *boolean*

Synopsis Allow authentication on first control plane packet  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [authentication on-control-plane](#) *boolean*  
 Tree [on-control-plane](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policy reference**

Synopsis	RADIUS policy for authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">authentication</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">isa-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vlan-mismatch-timeout** *number*

Synopsis	Timeout if packet received with a non-matching VLAN tag
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">authentication</a> <a href="#">vlan-mismatch-timeout</a> <i>number</i>
Tree	<a href="#">vlan-mismatch-timeout</a>
Range	5 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**data-triggered-ue-creation**

Synopsis	Enter the <b>data-triggered-ue-creation</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a>
Tree	<a href="#">data-triggered-ue-creation</a>
Description	Commands in this context configure data-triggered subscriber creation for Wi-Fi subscribers. Data-triggered UE creation only works upon receipt of TCP and UDP packets.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of data-triggered UE creation
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**arp** *boolean*

Synopsis	Authenticate ARP packets received from an unknown UE
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <b>arp</b> <i>boolean</i>
Tree	<a href="#">arp</a>
Default	false
Introduced	22.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**create-proxy-cache-entry**

Synopsis	Enter the <b>create-proxy-cache-entry</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <b>create-proxy-cache-entry</b>
Tree	<a href="#">create-proxy-cache-entry</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mac-format** *string*

Synopsis	MAC address format
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <b>mac-format</b> <i>string</i>
Tree	<a href="#">mac-format</a>
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**proxy-server**

Synopsis	Enable the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">proxy-server</a>
Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**name string**

Synopsis	RADIUS Proxy server name
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">proxy-server name string</a>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance string**

Synopsis	Router instance of the RADIUS proxy server
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">create-proxy-cache-entry</a> <a href="#">proxy-server router-instance string</a>
Tree	<a href="#">router-instance</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ospf boolean**

Synopsis	Authenticate OSPF packets received from an unknown UE
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">data-triggered-ue-creation</a> <a href="#">ospf boolean</a>

Tree	<a href="#">ospf</a>
Description	When configured to <b>true</b> , the system triggers UE authentication based on OSPFv2 or OSPFv3 packets. These packets are used with the dynamic VPLS service.
Default	false
Introduced	23.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp4

Synopsis	Enter the <b>dhcp4</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>dhcp4</b>
Tree	<a href="#">dhcp4</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of DHCPv4
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>dhcp4</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dns *string*

Synopsis	DNS servers signaled in DHCP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>dhcp4</b> <b>dns</b> <i>string</i>
Tree	<a href="#">dns</a>
Max. Instances	2
Notes	This element is ordered by the user.

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2-aware-ip-address** (*ipv4-unicast-address* | *keyword*)

Synopsis L2-Aware NAT inside IP address  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dhcp4](#) **I2-aware-ip-address** (*ipv4-unicast-address* | *keyword*)  
 Tree [I2-aware-ip-address](#)  
 Options from-pool – IP address allocated from a pool  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lease-time**

Synopsis Enter the **lease-time** context  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dhcp4](#) **lease-time**  
 Tree [lease-time](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active number**

Synopsis Lease time an authenticated user  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [dhcp4](#) **lease-time** **active** *number*  
 Tree [active](#)  
 Range 300 to 3600  
 Units seconds  
 Default 600  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**initial number**

Synopsis	Lease time for migrant user (unauthenticated)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4 lease-time initial</a> <i>number</i>
Tree	<a href="#">initial</a>
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nbns string**

Synopsis	NetBIOS servers signaled in DHCP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp4 nbns</a> <i>string</i>
Tree	<a href="#">nbns</a>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dhcp6**

Synopsis	Enter the <b>dhcp6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of the protocol
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6 admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### preferred-lifetime

Synopsis	Enter the <b>preferred-lifetime</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6 preferred-lifetime</b>
Tree	<b>preferred-lifetime</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### active number

Synopsis	Preferred signaled lifetime after full authentication
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6 preferred-lifetime active</b> <i>number</i>
Tree	<b>active</b>
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### initial number

Synopsis	Signaled preferred lifetime after full authentication
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>dhcp6 preferred-lifetime initial</b> <i>number</i>
Tree	<b>initial</b>
Range	300 to 3600

Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime**

Synopsis	Enter the <b>valid-lifetime</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <b>valid-lifetime</b>
Tree	<a href="#">valid-lifetime</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **active number**

Synopsis	Signaled valid lifetime after full authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">valid-lifetime</a> <b>active</b> <i>number</i>
Tree	<a href="#">active</a>
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial number**

Synopsis	Valid signaled lifetime UE is not fully authenticated
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dhcp6</a> <a href="#">valid-lifetime</a> <b>initial</b> <i>number</i>
Tree	<a href="#">initial</a>
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dsm

Synopsis Enter the **dsm** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **dsm**

Tree **dsm**

Description Commands in this context configure distributed subscriber management (DSM) per VLAN range.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-policy *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis ISA Radius Policy for accounting

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **dsm accounting-policy** *reference*

Tree **accounting-policy**

Reference **configure aaa radius isa-policy** *string*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## accounting-update

Synopsis Enable the **accounting-update** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **dsm accounting-update**

Tree **accounting-update**

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interval** *number*

Synopsis	Interim accounting update messages interval
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">accounting-update</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	5 to 259200
Units	minutes
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of DSM
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**application-assurance**

Synopsis	Enter the <b>application-assurance</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">application-assurance</a>
Tree	<a href="#">application-assurance</a>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**accounting-statistics** *boolean*

Synopsis	Collect AA statistics
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">application-assurance</a> <a href="#">accounting-statistics</a> <i>boolean</i>

Tree	<a href="#">accounting-statistics</a>
Default	false
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **profile** *reference*

Synopsis	AA application profile used for portal authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">application-assurance</a> <a href="#">profile</a> <i>reference</i>
Tree	<a href="#">profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **url-parameter** *string*

Synopsis	AA URL parameter included for HTTP portal redirect
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">application-assurance</a> <a href="#">url-parameter</a> <i>string</i>
Tree	<a href="#">url-parameter</a>
String Length	1 to 247
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer reference**

Synopsis	Policer for egress traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">egress</a> <a href="#">policer</a> <a href="#">reference</a>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-filter reference**

Synopsis	Filter for ingress traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">reference</a>
Tree	<a href="#">ip-filter</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer reference**

Synopsis	Policer for ingress traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">dsm</a> <a href="#">ingress</a> <a href="#">policer</a> <a href="#">reference</a>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **soft-quota-exhausted-filter** *reference*

Synopsis Filter applied when soft volume quota is reached

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **dsm ingress soft-quota-exhausted-filter** *reference*

Tree [soft-quota-exhausted-filter](#)

Description This command applies a filter when a soft volume quota is reached. The filter replaces the currently applied filter (which can be preconfigured using the **ip-filter** command in the **configure service vprn subscriber-interface group-interface wlan-gw vlan-range dsm ingress ip-filter** context or be set using a RADIUS CoA message) for the UE upon quota exhaustion. If the quota is extended using a RADIUS CoA message, the filter is automatically reverted. Configuration changes apply only to new DSM UEs and not to existing UEs.

Reference **configure subscriber-mgmt isa-filter** *string*

Introduced 21.7.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **one-time-redirect**

Synopsis Enter the **one-time-redirect** context

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **dsm one-time-redirect**

Tree [one-time-redirect](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port** *number*

Synopsis Destination port of packets for HTTP redirect

Context **configure service vprn** *string* **subscriber-interface** *string* **group-interface** *string* **wlan-gw** **vlan-range** *string* **dsm one-time-redirect port** *number*

Tree [port](#)

Range 1 to 65535

Default 80

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**url string**

Synopsis	URL for redirected HTTP protocol packets
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">dsm one-time-redirect url string</a>
Tree	<a href="#">url</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**volume-quota-direction keyword**

Synopsis	Volume quota direction for WLAN GW
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">dsm volume-quota-direction keyword</a>
Tree	<a href="#">volume-quota-direction</a>
Description	This command specifies the direction that volume quotas are applied. Configuration changes apply only to new DSM UEs and not to existing UEs.
Options	both – Both directions ingress – Ingress direction (upstream) egress – Egress direction (downstream)
Default	both
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dynamic-service boolean**

Synopsis	Dynamically assign WLAN-GW subscriber to a VPLS service
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">group-interface string</a> <a href="#">wlan-gw vlan-range string</a> <a href="#">dynamic-service boolean</a>
Tree	<a href="#">dynamic-service</a>
Description	When configured to <b>true</b> , the WLAN-GW subscriber is dynamically assigned to a VPLS service, based on RADIUS authentication reply attributes. This feature is used in conjunction with the <b>configure service vpls wlan-gw wlan-gw-group</b> command.  See "Dynamic VPLS service" in the <i>7450 ESS, 7750 SR, and VSR Triple Play Service Delivery Architecture Guide</i> for more information about the dynamic VPLS service feature.
Default	false



Introduced 23.3.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **extension** [[extension-range](#)] *string*

Synopsis Add a list entry for **extension**  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **extension** *string*  
 Tree [extension](#)  
 Introduced 21.7.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[extension-range]** *string*

Synopsis VLAN tag range used for matching  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **extension** *string*  
 Tree [extension](#)  
 Description This command configures the additional VLAN range that is used for matching. Any traffic within the extension range is considered part of the same VLAN range for purposes of intra-SSID mobility.  
 Notes This element is part of a list key.  
 Introduced 21.7.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **http-redirect-policy** *reference*

Synopsis Default HTTP redirect policy for portal authentication  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* **http-redirect-policy** *reference*  
 Tree [http-redirect-policy](#)  
 Reference **configure** [subscriber-mgmt](#) **http-redirect-policy** *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**idle-timeout-action** *keyword*

Synopsis	Action to perform when the idle timeout expires
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>idle-timeout-action</b> <i>keyword</i>
Tree	<b>idle-timeout-action</b>
Options	remove, shcv
Default	remove
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**I2-service**

Synopsis	Enable the <b>I2-service</b> context
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b>
Tree	<b>I2-service</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of Layer 2 service for VLAN range
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>I2-service</b> <b>description</b> <i>string</i>
Tree	<b>description</b>

String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service** *reference*

Synopsis Layer 2 service associated with the range  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [l2-service](#) [service](#) *reference*  
 Tree [service](#)  
 Reference **configure** [service vpls](#) *string*  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-policy** *reference*

Synopsis NAT policy for DSM and ISA portal authentication  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [nat-policy](#) *reference*  
 Tree [nat-policy](#)  
 Reference **configure** [service nat](#) [nat-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **retail-service** *string*

Synopsis Default retail service for new UEs in this range  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [retail-service](#) *string*  
 Tree [retail-service](#)  
 String Length 1 to 64  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**slaac**

Synopsis	Enter the <b>slaac</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>slaac</b>
Tree	<a href="#">slaac</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the protocol
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>slaac</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime**

Synopsis	Enter the <b>preferred-lifetime</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>slaac</b> <b>preferred-lifetime</b>
Tree	<a href="#">preferred-lifetime</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**active** *number*

Synopsis	Preferred signaled lifetime after full authentication
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>slaac</b> <b>preferred-lifetime</b> <b>active</b> <i>number</i>
Tree	<a href="#">active</a>
Range	300 to 3600
Units	seconds

Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**initial number**

Synopsis	Signaled preferred lifetime after full authentication
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac preferred-lifetime initial number</b>
Tree	<b>initial</b>
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime**

Synopsis	Enter the <b>valid-lifetime</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac valid-lifetime</b>
Tree	<b>valid-lifetime</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**active number**

Synopsis	Signaled valid lifetime after full authentication
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>slaac valid-lifetime active number</b>
Tree	<b>active</b>
Range	300 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**initial number**

Synopsis	Valid signaled lifetime UE is not fully authenticated
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">slaac valid-lifetime</a> <b>initial</b> <i>number</i>
Tree	<a href="#">initial</a>
Range	300 to 3600
Units	seconds
Default	300
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vrgw**

Synopsis	Enter the <b>vrgw</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <b>vrgw</b>
Tree	<a href="#">vrgw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of vRGW
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**brg**

Synopsis	Enter the <b>brg</b> context
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Context	<b>configure service vpn</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw brg</i>
Tree	<a href="#">brg</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authenticated-brg-only** *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Only allow hosts from BRGs pre-authenticated using the radius-proxy
Context	<b>configure service vpn</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw brg authenticated-brg-only boolean</i>
Tree	<a href="#">authenticated-brg-only</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **default-brg-profile** *reference*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Default BRG profile to use if the AAA server does not specify one
Context	<b>configure service vpn</b> <i>string subscriber-interface string group-interface string wlan-gw vlan-range string vrgw brg default-brg-profile reference</i>
Tree	<a href="#">default-brg-profile</a>
Reference	<b>configure subscriber-mgmt vrgw brg-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext**

Synopsis	Enter the <b>lanext</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw lanext</b>
Tree	<b>lanext</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## access



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>access</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw lanext access</b>
Tree	<b>access</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-mac number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on access side
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw lanext access max-mac number</b>
Tree	<b>max-mac</b>
Range	1 to 256
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



**multi-access** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow multiple access points
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">access multi-access</a> <i>boolean</i>
Tree	<a href="#">multi-access</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**policer** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress home traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">access policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of HLE
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**assistive-address-resolution** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA assists in address resolution
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>lanext</b> <b>assistive-address-resolution</b> <i>boolean</i>
Tree	<a href="#">assistive-address-resolution</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bd-mac-prefix** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Prefix of the HLE BD MAC address
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>lanext</b> <b>bd-mac-prefix</b> <i>string</i>
Tree	<a href="#">bd-mac-prefix</a>
String Length	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mac-translation** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Allow MAC address translation for HLE services
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wlan-gw</b> <b>vlan-range</b> <i>string</i> <b>vrgw</b> <b>lanext</b> <b>mac-translation</b> <i>boolean</i>
Tree	<a href="#">mac-translation</a>

Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## network



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw</a> <a href="#">lanext</a> <b>network</b>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative state of the HLE network
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw</a> <a href="#">lanext</a> <b>network</b> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-mac *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of allowed MAC entries on network side
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">network max-mac</a> <i>number</i>
Tree	<a href="#">max-mac</a>
Range	1 to 64
Default	20
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policer for ingress data center traffic
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">vrgw lanext</a> <a href="#">network policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i>
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect**

Synopsis	Enter the <b>xconnect</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a>
Tree	<a href="#">xconnect</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **accounting**

Synopsis	Enter the <b>accounting</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">accounting</a>

Tree	<a href="#">accounting</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mobility-updates** *boolean*

Synopsis	Accounting updates triggered by mobility
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">mobility-updates</a> <i>boolean</i>
Tree	<a href="#">mobility-updates</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA RADIUS accounting policy for cross-connected UEs
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">aaa radius isa-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **update-interval** *number*

Synopsis	Time between successive interim accounting updates
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">vlan-range</a> <i>string</i> <a href="#">xconnect</a> <a href="#">accounting</a> <a href="#">update-interval</a> <i>number</i>
Tree	<a href="#">update-interval</a>
Range	5 to 259200
Units	minutes
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the cross-connect

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [vlan-range](#) *string* [xconnect](#) **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis ID of WLAN Gateway ISA group that gateway binds to

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wlan-gw](#) [wlan-gw-group](#) *reference*

Tree [wlan-gw-group](#)

Reference **configure** [isa wlan-gw-group](#) *number*

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wpp**

Synopsis Enable the **wpp** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* **wpp**

Tree [wpp](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of WPP
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**initial**

Synopsis	Enter the <b>initial</b> context
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <b>initial</b>
Tree	<a href="#">initial</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Initial application profile name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <b>initial</b> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	Initial SLA profile
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp</a> <b>initial</b> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis Initial subscriber profile

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp initial sub-profile](#) *reference*

Tree [sub-profile](#)

Reference **configure** [subscriber-mgmt sub-profile](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-time** *number*

Synopsis Lease time

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp lease-time](#) *number*

Tree [lease-time](#)

Range 10 to 315446399

Units seconds

Default 600

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **portal**

Synopsis Enter the **portal** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [group-interface](#) *string* [wpp portal](#)

Tree [portal](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis Web portal server name



Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp portal name</b> <i>string</i>
Tree	<b>name</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **portal-group** *reference*

Synopsis	WPP portal group for this interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp portal portal-group</b> <i>reference</i>
Tree	<b>portal-group</b>
Reference	<b>configure aaa wpp portal-group</b> <i>string</i>
Notes	The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Virtual router instance of WPP portal for interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp portal router-instance</b> <i>string</i>
Tree	<b>router-instance</b>
Notes	The following elements are part of a choice: <b>portal-group</b> or ( <b>name</b> and <b>router-instance</b> ).
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **restore-to-initial-on-disconnect** *boolean*

Synopsis	Restore initial profiles after a host has disconnected
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>group-interface</b> <i>string</i> <b>wpp restore-to-initial-on-disconnect</b> <i>boolean</i>

Tree	<a href="#">restore-to-initial-on-disconnect</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **triggered-hosts** *boolean*

Synopsis	Enable/disable triggered hosts
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp triggered-hosts</a> <i>boolean</i>
Tree	<a href="#">triggered-hosts</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis	User database
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">group-interface</a> <i>string</i> <a href="#">wpp user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-time**

Synopsis	Enter the <b>hold-time</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time</a>
Tree	<a href="#">hold-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4**

Synopsis	Enter the <b>ipv4</b> context
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Context	<b>configure service vprn string subscriber-interface string hold-time ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## down

Synopsis	Enter the <b>down</b> context
Context	<b>configure service vprn string subscriber-interface string hold-time ipv4 down</b>
Tree	<a href="#">down</a>
Description	Commands in this context configure the down hold timer, which specifies the delay before activating the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## init-only *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure service vprn string subscriber-interface string hold-time ipv4 down init-only boolean</b>
Tree	<a href="#">init-only</a>
Description	This command applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## seconds *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure service vprn string subscriber-interface string hold-time ipv4 down seconds number</b>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## up

Synopsis	Enter the <b>up</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv4 up</a>
Tree	<a href="#">up</a>
Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## seconds *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv4 up seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## down

Synopsis	Enter the <b>down</b> context
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Context	<b>configure service vprn string subscriber-interface string hold-time ipv6 down</b>
Tree	<b>down</b>
Description	Commands in this context configure the down hold timer, which specifies the delay before activation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface up, unless an operator configures the <b>init-only</b> command.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **init-only** *boolean*

Synopsis	Apply delay only at interface configuration or reboot
Context	<b>configure service vprn string subscriber-interface string hold-time ipv6 down init-only boolean</b>
Tree	<b>init-only</b>
Description	When configured to <b>true</b> , the system applies a delay only when the IP interface is first configured or after a system reboot.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis	Down hold time for the IP interface
Context	<b>configure service vprn string subscriber-interface string hold-time ipv6 down seconds number</b>
Tree	<b>seconds</b>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **up**

Synopsis	Enter the <b>up</b> context
Context	<b>configure service vprn string subscriber-interface string hold-time ipv6 up</b>
Tree	<b>up</b>

Description	Commands in this context configure the up hold timer, which specifies the delay before deactivation of the associated interface. The delay is invoked whenever the system attempts to bring the associated IP interface down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis	Up hold time for the IP interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">hold-time ipv6 up</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 1200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-linking**

Synopsis	Enter the <b>ipoe-linking</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <b>ipoe-linking</b>
Tree	<a href="#">ipoe-linking</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gratuitous-router-advertisement** *boolean*

Synopsis	Send unsolicited router advertisement after DHCP setup
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipoe-linking</a> <b>gratuitous-router-advertisement</b> <i>boolean</i>
Tree	<a href="#">gratuitous-router-advertisement</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-session

Synopsis	Enter the <b>ipoe-session</b> context
Context	<b>configure service vprn string subscriber-interface string ipoe-session</b>
Tree	<a href="#">ipoe-session</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## session-limit *number*

Synopsis	Maximum number of sessions on this group interface
Context	<b>configure service vprn string subscriber-interface string ipoe-session session-limit number</b>
Tree	<a href="#">session-limit</a>
Range	1 to 500000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service vprn string subscriber-interface string ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address [[ipv4-address](#)] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure service vprn string subscriber-interface string ipv4 address string</b>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ipv4-address] string**

Synopsis	IP address associated with the subscriber subnet
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">ipv4 address string</a>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gateway string**

Synopsis	Gateway IP address within the subnet for SRRP routing
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">ipv4 address string</a> <a href="#">gateway string</a>
Tree	<a href="#">gateway</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**holdup-time number**

Synopsis	Wait time before accepting new state attribute
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">ipv4 address string</a> <a href="#">holdup-time number</a>
Tree	<a href="#">holdup-time</a>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**populate-host-routes boolean**

Synopsis	Populate subscriber host routes in local FIB
Context	<b>configure</b> <a href="#">service vprn string</a> <a href="#">subscriber-interface string</a> <a href="#">ipv4 address string</a> <a href="#">populate-host-routes boolean</a>
Tree	<a href="#">populate-host-routes</a>
Default	false
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length** *number*

Synopsis IPv4 address prefix length

Context **configure service vprn** *string subscriber-interface string ipv4 address string prefix-length number*

Tree [prefix-length](#)

Range 0 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **track-srrp** *number*

Synopsis SRRP instance whose state is tracked on this IP address

Context **configure service vprn** *string subscriber-interface string ipv4 address string track-srrp number*

Tree [track-srrp](#)

Range 1 to 4294967295

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-unmatching-subnets** *boolean*

Synopsis Allow subscriber hosts without a matching subnet

Context **configure service vprn** *string subscriber-interface string ipv4 allow-unmatching-subnets boolean*

Tree [allow-unmatching-subnets](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **arp-host**

Synopsis Enter the **arp-host** context

Context	<b>configure service vprn string subscriber-interface string ipv4 arp-host</b>
Tree	<a href="#">arp-host</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of ARP hosts
Context	<b>configure service vprn string subscriber-interface string ipv4 arp-host admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-limit** *number*

Synopsis	Maximum number of ARP hosts
Context	<b>configure service vprn string subscriber-interface string ipv4 arp-host host-limit number</b>
Tree	<a href="#">host-limit</a>
Range	1 to 524287
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure service vprn string subscriber-interface string ipv4 bfd</b>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>echo-receive</b> <i>number</i>
Tree	<b>echo-receive</b>
Range	100 to 100000
Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4</b> <b>bfd</b> <b>multiplier</b> <i>number</i>
Tree	<b>multiplier</b>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**receive** *number*

Synopsis	BFD receive interval over this interface
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 bfd receive</b> <i>number</i>
Tree	<b>receive</b>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **transmit-interval** *number*

Synopsis	BFD transmit interval over this interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 bfd transmit-interval</b> <i>number</i>
Tree	<b>transmit-interval</b>
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis	Local termination point for the BFD session
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 bfd type</b> <i>keyword</i>
Tree	<b>type</b>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> </ul>

- **cpm-np** – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.
- **fp** – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.

Options	cpm-np, auto, fp
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **default-dns** *string*

Synopsis	Default DNS server addresses
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>default-dns</b> <i>string</i>
Tree	<a href="#">default-dns</a>
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp**

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>dhcp</b>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of DHCP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>dhcp</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service vprn string subscriber-interface string ipv4 dhcp client-applications</b>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp boolean

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure service vprn string subscriber-interface string ipv4 dhcp client-applications dhcp boolean</b>
Tree	<a href="#">dhcp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp boolean

Synopsis	Enable PPPoE clients to use DHCP relay or proxy server
Context	<b>configure service vprn string subscriber-interface string ipv4 dhcp client-applications ppp boolean</b>
Tree	<a href="#">ppp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
Context	<b>configure service vprn string subscriber-interface string ipv4 dhcp description string</b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **gi-address** *string*

Synopsis	GI address for the DHCP relay
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp gi-address</a> <i>string</i>
Tree	<a href="#">gi-address</a>
Description	<p>This command configures the GI address to distinguish between the different subscriber interfaces (and potentially group interfaces) defined when the router functions as a DHCP relay.</p> <p>By default, the GI address used in the relayed DHCP packet is the primary IP address of a normal IES interface. Specifying the GI address allows the user to choose a secondary address. For group interfaces, a GI address must be specified under the group interface DHCP context or subscriber interface DHCP context for DHCP to function.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **lease-populate**

Synopsis	Enter the <b>lease-populate</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp lease-populate</a>
Tree	<a href="#">lease-populate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **max-leases** *number*

Synopsis	Maximum number of DHCPv4 leases
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp lease-populate max-leases</a> <i>number</i>
Tree	<a href="#">max-leases</a>
Range	0 to 511999
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **offer-selection**

Synopsis	Enter the <b>offer-selection</b> context
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection</b>
Tree	<a href="#">offer-selection</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-mac

Synopsis	Enter the <b>client-mac</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection</b> <b>client-mac</b>
Tree	<a href="#">client-mac</a>
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## discover-delay *number*

Synopsis	Delay before sending DHCP Discover messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection</b> <b>client-mac</b> <b>discover-delay</b> <i>number</i>
Tree	<a href="#">discover-delay</a>
Description	This command configures the time to delay sending DHCP Discover messages from the specified MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mac-address *keyword*

Synopsis	Designated client MAC addresses for Offer selection
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp offer-selection</b> <b>client-mac</b> <b>mac-address</b> <i>keyword</i>
Tree	<a href="#">mac-address</a>
Description	This command specifies the client MAC addresses for which the Discover delay applies.
Options	odd, even



Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **discover-delay** *number*

Synopsis	Delay before sending DHCP Discover messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <b>discover-delay</b> <i>number</i>
Tree	<a href="#">discover-delay</a>
Description	This command configures the time to delay sending DHCP Discover messages. The delay is applied to all DHCP Discover messages for which no per DHCP server or per client MAC delay is configured.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** [[ipv4-address](#)] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <b>server</b> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	8
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv4-address]** *string*

Synopsis	IP address of the DHCP server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp offer-selection</a> <b>server</b> <i>string</i>
Tree	<a href="#">server</a>
Notes	This element is part of a list key.
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **discover-delay** *number*

Synopsis Delay before sending DHCP Discover messages

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp offer-selection server](#) *string* **discover-delay** *number*

Tree [discover-delay](#)

Description This command configures the time to delay DHCP Discover messages sent to the server.

Range 1 to 100

Units deciseconds

Introduced 20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option-82**

Synopsis Enter the **option-82** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp option-82](#)

Tree [option-82](#)

Description Commands in this context configure the processing required when the router receives a DHCP request that already has an Option 82 field in the packet.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor-specific-option**

Synopsis Enter the **vendor-specific-option** context

Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option](#)

Tree [vendor-specific-option](#)

Description Commands in this context configure the Nokia Vendor-Specific Option (VSO) of the DHCP packet.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-mac-address** *boolean*

Synopsis	Send the MAC address in the VSO
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">client-mac-address</a> <i>boolean</i>
Tree	<a href="#">client-mac-address</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-id** *boolean*

Synopsis	Send SAP ID in the sub-option of the DHCP relay packet
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">sap-id</a> <i>boolean</i>
Tree	<a href="#">sap-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-id** *boolean*

Synopsis	Send the service ID in the Vendor Specific Option
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">service-id</a> <i>boolean</i>
Tree	<a href="#">service-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	User-defined ASCII string for the VSO
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp option-82 vendor-specific-option</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 32

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **system-id** *boolean*

Synopsis Send the system ID in the VSO  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp option-82 vendor-specific-option](#) [system-id](#) *boolean*  
 Tree [system-id](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy-server**

Synopsis Enter the **proxy-server** context  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp proxy-server](#)  
 Tree [proxy-server](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of the DHCP proxy server  
 Context **configure** [service vprn](#) *string* [subscriber-interface](#) *string* [ipv4 dhcp proxy-server admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **emulated-server** *string*

Synopsis IP address used as DHCP server address in SAP context

Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server emulated-server</b> <i>string</i>
Tree	<b>emulated-server</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-time**

Synopsis	Enter the <b>lease-time</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time</b>
Tree	<b>lease-time</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-override** *boolean*

Synopsis	Use lease time information provided by RADIUS server
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time radius-override</b> <i>boolean</i>
Tree	<b>radius-override</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **value** *number*

Synopsis	DHCP lease time
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 dhcp proxy-server lease-time value</b> <i>number</i>
Tree	<b>value</b>
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">python-policy reference</a>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **relay-proxy**

Synopsis	Enable the <b>relay-proxy</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">relay-proxy</a>
Tree	<a href="#">relay-proxy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **release-update-src-ip** *boolean*

Synopsis	Update the source IP address of a DHCP RELEASE message
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">relay-proxy</a> <a href="#">release-update-src-ip</a> <i>boolean</i>
Tree	<a href="#">release-update-src-ip</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **siaddr-override** *string*

Synopsis	DHCP server IP address for address hiding function
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">relay-proxy</a> <a href="#">siaddr-override</a> <i>string</i>
Tree	<a href="#">siaddr-override</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**release-include-gi-address** *boolean*

Synopsis	Include the GI address in DHCP relay messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">release-include-gi-address</a> <i>boolean</i>
Tree	<a href="#">release-include-gi-address</a>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server** *string*

Synopsis	DHCP server IP addresses
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">server</a> <i>string</i>
Tree	<a href="#">server</a>
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**src-ip-addr** *keyword*

Synopsis	Type of source address to use for DHCP relay
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">src-ip-addr</a> <i>keyword</i>
Tree	<a href="#">src-ip-addr</a>
Options	auto, gi-address
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**virtual-subnet** *boolean*

Synopsis	Enable a virtual subnet for DHCPv4 hosts
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4 dhcp</a> <a href="#">virtual-subnet</a> <i>boolean</i>

Tree	<a href="#">virtual-subnet</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **export-host-routes** *boolean*

Synopsis	Allow export of subscriber management host routes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>export-host-routes</b> <i>boolean</i>
Tree	<a href="#">export-host-routes</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **unnumbered**

Synopsis	Enter the <b>unnumbered</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b>
Tree	<a href="#">unnumbered</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-address** *string*

Synopsis	IP address for the subscriber interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv4</a> <b>unnumbered</b> <b>ip-address</b> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-int-name** *string*

Synopsis	Interface name from which an IPv4 address is borrowed
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv4 unnumbered ip-int-name</b> <i>string</i>
Tree	<a href="#">ip-int-name</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ip-address</b> or <b>ip-int-name</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address [[ipv6-address](#)] *string*

Synopsis	Enter the <b>address</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 address</b> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[ipv6-address](#)] *string*

Synopsis	IPv6 address for the subscriber interface
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 address</b> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <a href="#">host-type</a> <i>keyword</i>
Tree	<a href="#">host-type</a>
Options	pd – IPv6 ESM hosts for DHCPv6 prefix-delegation wan – ESM hosts for DHCPv6 addresses or by WAN interface pd-wan – Both prefix-delegation and ESM hosts
Default	pd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-length** *number*

Synopsis	IPv6 address prefix length
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">address</a> <i>string</i> <a href="#">prefix-length</a> <i>number</i>
Tree	<a href="#">prefix-length</a>
Range	0 to 128
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**allow-multiple-wan-addresses** *boolean*

Synopsis	Allow multiple WAN addresses
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">allow-multiple-wan-addresses</a> <i>boolean</i>
Tree	<a href="#">allow-multiple-wan-addresses</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**allow-unmatching-prefixes** *boolean*

Synopsis	Allow subscriber hosts without a matching prefix
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">allow-unmatching-prefixes</a> <i>boolean</i>
Tree	<a href="#">allow-unmatching-prefixes</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bfd**

Synopsis	Enter the <b>bfd</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a>
Tree	<a href="#">bfd</a>
Description	Commands in this context configure the attributes of bidirectional forwarding detection (BFD) sessions that control the state of ESM dynamic BGP peers.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of BFD sessions
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**echo-receive** *number*

Synopsis	Minimum echo interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">bfd</a> <a href="#">echo-receive</a> <i>number</i>
Tree	<a href="#">echo-receive</a>
Range	100 to 100000

Units	milliseconds
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **multiplier** *number*

Synopsis	Number of consecutive BFD messages missed from the peer
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 bfd multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Description	This command configures the number of missed messages before the BFD session state is changed to down and the upper-level protocol is notified of the fault. A multiplier of less than 3 should not be used in production environments.
Range	1 to 20
Default	3
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **receive** *number*

Synopsis	BFD receive interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 bfd receive</a> <i>number</i>
Tree	<a href="#">receive</a>
Description	This command specifies the receive interval for the BFD session. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **transmit-interval** *number*

Synopsis	BFD transmit interval over this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 bfd transmit-interval</a> <i>number</i>

Tree	<a href="#">transmit-interval</a>
Description	This command configures the transmit intervals. On the 7750 SR, this command can only be configured to a value less than 100 when the <b>type</b> command is configured to <b>cpm-np</b> .
Range	10 to 100000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis	Local termination point for the BFD session
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 bfd</a> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Description	This command sets the local termination point for the BFD session to allow for fast timers down to 10 ms granularity. The options to specify where the BFD session runs are: <ul style="list-style-type: none"> <li>• <b>auto</b> (default) – the system chooses and uses the line card CPU only for single-hop BFD sessions with timer intervals equal to or greater than 100ms. All others are placed on the <b>cpm-np</b>.</li> <li>• <b>cpm-np</b> – BFD session runs on the FP complex associated with the CPM. This is either the FP on the CPM or the one elected on smaller systems.</li> <li>• <b>fp</b> – BFD session runs on the line card CPU. This option can only be used for single-hop BFD sessions with timers equal to or greater than 100ms.</li> </ul>
Options	cpm-np, auto, fp
Default	auto
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **default-dns** *string*

Synopsis	Default DNS server addresses
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 default-dns</a> <i>string</i>
Tree	<a href="#">default-dns</a>
Max. Instances	2

Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix-length** (*number* | *keyword*)

Synopsis	IPv6 delegated prefix length
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 delegated-prefix-length</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">delegated-prefix-length</a>
Range	48 to 64
Options	variable
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp6**

Synopsis	Enter the <b>dhcp6</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6</a>
Tree	<a href="#">dhcp6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-client-id-change** *boolean*

Synopsis	Allow changes to the client ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 allow-client-id-change</a> <i>boolean</i>
Tree	<a href="#">allow-client-id-change</a>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**override-slaac** *boolean*

Synopsis	Allow WAN address offered by DHCP to overwrite the WAN address acquired from SLAAC
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 override-slaac</a> <i>boolean</i>
Tree	<a href="#">override-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pd-managed-route**

Synopsis	Enable the <b>pd-managed-route</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 pd-managed-route</a>
Tree	<a href="#">pd-managed-route</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**next-hop** *keyword*

Synopsis	Next hop type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 pd-managed-route</a> <a href="#">next-hop</a> <i>keyword</i>
Tree	<a href="#">next-hop</a>
Options	ipv4, ipv6
Default	ipv6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**proxy-server**

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a>
Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCPv6 proxy server
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 proxy-server admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-applications**

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 proxy-server client-applications</a>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp** *boolean*

Synopsis	Enable IPE clients to use DHCP relay or proxy server
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 proxy-server client-applications dhcp boolean</a>
Tree	<a href="#">dhcp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp** *boolean*

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 proxy-server client-applications ppp boolean</a>
Tree	<a href="#">ppp</a>



Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** (*number* | *keyword*)

Synopsis	Time for prefix to remain preferred on this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server preferred-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rebind-timer** *number*

Synopsis	Rebind timer (T2) for this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server rebind-timer</a> <i>number</i>
Tree	<a href="#">rebind-timer</a>
Range	0 to 1209600
Units	seconds
Default	2880
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **renew-timer** *number*

Synopsis	Renew timer (T1)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server renew-timer</a> <i>number</i>
Tree	<a href="#">renew-timer</a>
Range	0 to 604800

Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### server-id

Synopsis	Enter the <b>server-id</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a> <a href="#">server-id</a>
Tree	<a href="#">server-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### duid-en-ascii *string*

Synopsis	Vendor-assigned ID based on Enterprise Number (DUID-EN)
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a> <a href="#">server-id</a> <a href="#">duid-en-ascii</a> <i>string</i>
Tree	<a href="#">duid-en-ascii</a>
String Length	1 to 58
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### duid-en-hex *string*

Synopsis	DUID system ID in hexadecimal format
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server</a> <a href="#">server-id</a> <a href="#">duid-en-hex</a> <i>string</i>
Tree	<a href="#">duid-en-hex</a>
String Length	1 to 118
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duid-ll**

Synopsis	Use link-layer address (DUID-LL) as DUID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server server-id</a> <a href="#">duid-ll</a>
Tree	<a href="#">duid-ll</a>
Notes	The following elements are part of a choice: <b>duid-en-ascii</b> , <b>duid-en-hex</b> , or <b>duid-ll</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** (*number* | *keyword*)

Synopsis	Time for prefix to remain valid on this interface
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 proxy-server valid-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	300 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**python-policy** *reference*

Synopsis	Python policy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**relay**

Synopsis	Enter the <b>relay</b> context
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Context	<b>configure service vprn string subscriber-interface string ipv6 dhcp6 relay</b>
Tree	<b>relay</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of DHCPv6 Relay
Context	<b>configure service vprn string subscriber-interface string ipv6 dhcp6 relay admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **advertise-selection**

Synopsis	Enter the <b>advertise-selection</b> context
Context	<b>configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection</b>
Tree	<b>advertise-selection</b>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **client-mac**

Synopsis	Enter the <b>client-mac</b> context
Context	<b>configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection client-mac</b>
Tree	<b>client-mac</b>
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac-address** *keyword*

Synopsis	Designated client MAC addresses for Advertise selection
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac mac-address</b> <i>keyword</i>
Tree	<b>mac-address</b>
Options	odd, even
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference-option**

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac preference-option</b>
Tree	<b>preference-option</b>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value** *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac preference-option value</b> <i>number</i>
Tree	<b>value</b>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**solicit-delay** *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection client-mac solicit-delay</b> <i>number</i>
Tree	<b>solicit-delay</b>

Description	This command configures the time to delay DHCPv6 Solicit messages sent from the designated client MAC addresses.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## preference-option

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection preference-option</b>
Tree	<a href="#">preference-option</a>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## value *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection preference-option value <i>number</i></b>
Tree	<a href="#">value</a>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## server [[ipv6-address](#)] *string*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure service vprn string subscriber-interface string ipv6 dhcp6 relay advertise-selection server <i>string</i></b>
Tree	<a href="#">server</a>
Max. Instances	8
Notes	The following elements are part of a choice: <b>client-mac</b> or <b>server</b> .

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[ipv6-address]** *string*

Synopsis	IP address of the DHCPv6 server
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i>
Tree	<b>server</b>
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference-option**

Synopsis	Enter the <b>preference-option</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option</b>
Tree	<b>preference-option</b>
Description	Commands in this context configure the DHCPv6 preference option that is inserted in the DHCPv6 Advertise message.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **value** *number*

Synopsis	Preference option value for DHCPv6 Advertise messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 dhcp6 relay advertise-selection server</b> <i>string</i> <b>preference-option</b> <b>value</b> <i>number</i>
Tree	<b>value</b>
Range	0 to 255
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**solicit-delay** *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection server</a> <i>string</i> <b>solicit-delay</b> <i>number</i>
Tree	<a href="#">solicit-delay</a>
Description	This command configures the time to delay DHCPv6 Solicit messages sent to the server.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**solicit-delay** *number*

Synopsis	Delay before sending DHCPv6 Solicit messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay advertise-selection</a> <b>solicit-delay</b> <i>number</i>
Tree	<a href="#">solicit-delay</a>
Description	This command configures the time to delay DHCPv6 Solicit messages. The delay is applied to DHCPv6 Solicit messages for which no overriding value is configured in the <b>server</b> instance or the <b>client-mac</b> context.
Range	1 to 100
Units	deciseconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-applications**

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay</a> <b>client-applications</b>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**dhcp boolean**

Synopsis	Enable IPoE clients to use DHCP relay or proxy server
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay client-applications dhcp</a> <i>boolean</i>
Tree	<a href="#">dhcp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp boolean**

Synopsis	Allow PPPoE clients to use DHCP relay functionality
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay client-applications ppp</a> <i>boolean</i>
Tree	<a href="#">ppp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lease-split**

Synopsis	Enter the <b>lease-split</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6 dhcp6 relay lease-split</a>
Tree	<a href="#">lease-split</a>
Description	Commands in this context configure DHCPv6 lease split.

DHCPv6 lease split is active when administratively enabled and for all IA\_NA and IA\_PD options in the transaction, the configured lease split valid lifetime (short lease time) is less than or equal to one of the following:

- the renew time T1 committed by the server (long renew time)
- half of the preferred lifetime committed by the server when T1 committed by the server equals zero

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of DHCPv6 lease split

Context **configure** *service vprn string subscriber-interface string ipv6 dhcp6 relay lease-split admin-state keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** *number*

Synopsis DHCPv6 lease split valid lifetime (short lease time)

Context **configure** *service vprn string subscriber-interface string ipv6 dhcp6 relay lease-split valid-lifetime number*

Tree [valid-lifetime](#)

Range 300 to 315446399

Units seconds

Default 3600

Introduced 21.2.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **link-address** *string*

Synopsis Link address for the DHCPv6 relay messages

Context **configure** *service vprn string subscriber-interface string ipv6 dhcp6 relay link-address string*

Tree	<a href="#">link-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server string**

Synopsis	DHCP6 servers to which the DHCP6 requests are forwarded
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 relay server string</a>
Tree	<a href="#">server</a>
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**source-address string**

Synopsis	Source IPv6 address for the DHCPv6 relay messages
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 dhcp6 relay source-address string</a>
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe-bridged-mode boolean**

Synopsis	Enable IPv6 IPoE bridged mode
Context	<b>configure</b> <a href="#">service vprn string subscriber-interface string ipv6 ipoe-bridged-mode boolean</a>
Tree	<a href="#">ipoe-bridged-mode</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## link-local-address

Synopsis	Enter the <b>link-local-address</b> context
Context	<b>configure service vprn string subscriber-interface string ipv6 link-local-address</b>
Tree	<a href="#">link-local-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address string

Synopsis	IPv6 link local address
Context	<b>configure service vprn string subscriber-interface string ipv6 link-local-address address string</b>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix [ipv6-prefix] string

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure service vprn string subscriber-interface string ipv6 prefix string</b>
Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [ipv6-prefix] string

Synopsis	IPv6 address for a router interface
Context	<b>configure service vprn string subscriber-interface string ipv6 prefix string</b>
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**holdup-time** *number*

Synopsis	Time to wait before route accepts new state attribute
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">prefix</a> <i>string</i> <b>holdup-time</b> <i>number</i>
Tree	<a href="#">holdup-time</a>
Range	100 to 5000
Units	milliseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Host type for subscriber interface prefixes
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">prefix</a> <i>string</i> <b>host-type</b> <i>keyword</i>
Tree	<a href="#">host-type</a>
Options	pd – IPv6 ESM hosts for DHCPv6 prefix-delegation wan – ESM hosts for DHCPv6 addresses or by WAN interface pd-wan – Both prefix-delegation and ESM hosts
Default	pd
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**track-srrp** *number*

Synopsis	SRRP instance whose state is tracked on this IP address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">prefix</a> <i>string</i> <b>track-srrp</b> <i>number</i>
Tree	<a href="#">track-srrp</a>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## router-advertisements

Synopsis	Enter the <b>router-advertisements</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b>
Tree	<b>router-advertisements</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of router advertisements
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## force-mcast *keyword*

Synopsis	Protocol with forced multicast
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>force-mcast</b> <i>keyword</i>
Tree	<b>force-mcast</b>
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## max-advertisement-interval *number*

Synopsis	Maximum advertisement interval
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>max-advertisement-interval</b> <i>number</i>
Tree	<b>max-advertisement-interval</b>
Range	900 to 1800

Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-advertisement-interval** *number*

Synopsis	Minimum advertisement interval
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">min-advertisement-interval</a> <i>number</i>
Tree	<a href="#">min-advertisement-interval</a>
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options</a>
Tree	<a href="#">options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **current-hop-limit** *number*

Synopsis	Hop limit to be advertised
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">options</a> <a href="#">current-hop-limit</a> <i>number</i>
Tree	<a href="#">current-hop-limit</a>
Range	0 to 255
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dns**

Synopsis	Enter the <b>dns</b> context
Context	<b>configure service vprn</b> <i>string subscriber-interface string ipv6 router-advertisements options dns</i>
Tree	<a href="#">dns</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**include-rdnss** *boolean*

Synopsis	Include the RDNSS server option 25
Context	<b>configure service vprn</b> <i>string subscriber-interface string ipv6 router-advertisements options dns include-rdnss boolean</i>
Tree	<a href="#">include-rdnss</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rdnss-lifetime** (*number | keyword*)

Synopsis	Maximum time for the RDNSS address to remain valid
Context	<b>configure service vprn</b> <i>string subscriber-interface string ipv6 router-advertisements options dns rdnss-lifetime (number   keyword)</i>
Tree	<a href="#">rdnss-lifetime</a>
Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**managed-configuration** *boolean*

Synopsis	Managed address configuration flag
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements options managed-configuration</b> <i>boolean</i>
Tree	<a href="#">managed-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mtu** (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements options mtu</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mtu</a>
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **other-stateful-configuration** *boolean*

Synopsis	Other stateful configuration flag
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements options other-stateful-configuration</b> <i>boolean</i>
Tree	<a href="#">other-stateful-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reachable-time** *number*

Synopsis	Reachable time for advertisements
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6 router-advertisements options reachable-time</b> <i>number</i>
Tree	<a href="#">reachable-time</a>

Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retransmit-timer** *number*

Synopsis	Retransmit time in router advertisements from interface
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>retransmit-timer</b> <i>number</i>
Tree	<a href="#">retransmit-timer</a>
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-lifetime** (*number* | *keyword*)

Synopsis	Router lifetime
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>options</b> <b>router-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">router-lifetime</a>
Range	2700 to 9000
Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-options**

Synopsis	Enter the <b>prefix-options</b> context
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <b>prefix-options</b>

Tree	<a href="#">prefix-options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**autonomous** *boolean*

Synopsis	Value of the autonomous flag
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <a href="#">prefix-options</a> <b>autonomous</b> <i>boolean</i>
Tree	<a href="#">autonomous</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**on-link** *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <a href="#">prefix-options</a> <b>on-link</b> <i>boolean</i>
Tree	<a href="#">on-link</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain preferred
Context	<b>configure</b> <b>service</b> <b>vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>ipv6</b> <b>router-advertisements</b> <a href="#">prefix-options</a> <b>preferred-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisements</a> <a href="#">prefix-options</a> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**router-solicit**

Synopsis	Enter the <b>router-solicit</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <b>router-solicit</b>
Tree	<a href="#">router-solicit</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**inactivity-timer** (*number* | *keyword*)

Synopsis	Time before an inactive host is removed
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-solicit</a> <b>inactivity-timer</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">inactivity-timer</a>
Range	1 to 31536000
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-address-assignment

Synopsis	Enter the <b>local-address-assignment</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment</b>
Tree	<a href="#">local-address-assignment</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of Local Address Assignment
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment</b> <b>ipv4</b>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment</b> <b>ipv4</b> <b>client-applications</b>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp boolean**

Synopsis	Request local addresses for PPP IPCP hosts
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv4 client-applications ppp</b> <i>boolean</i>
Tree	<b>ppp</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-pool string**

Synopsis	Default pools
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv4 default-pool</b> <i>string</i>
Tree	<b>default-pool</b>
String Length	1 to 32
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server reference**

Synopsis	Local DHCPv4 server for local pools management
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv4 server</b> <i>reference</i>
Tree	<b>server</b>
Reference	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv4</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6</b>

Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## client-applications

Synopsis	Enter the <b>client-applications</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">client-applications</a>
Tree	<a href="#">client-applications</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-slaac *boolean*

Synopsis	Request local addresses for IPoE SLAAC hosts
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">client-applications</a> <a href="#">ipoe-slaac</a> <i>boolean</i>
Tree	<a href="#">ipoe-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe-wan *boolean*

Synopsis	Request local addresses for IPoE IA NA hosts
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">local-address-assignment</a> <a href="#">ipv6</a> <a href="#">client-applications</a> <a href="#">ipoe-wan</a> <i>boolean</i>
Tree	<a href="#">ipoe-wan</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp-slaac *boolean*

Synopsis	Request local addresses for PPP SLAAC hosts
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 client-applications ppp-slaac</b> <i>boolean</i>
Tree	<a href="#">ppp-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server reference**

Synopsis	Local DHCPv6 server for local pools management
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>local-address-assignment ipv6 server reference</b>
Tree	<a href="#">server</a>
Reference	<b>configure service vprn</b> <i>string</i> <b>dhcp-server dhcpv6</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe**

Synopsis	Enter the <b>pppoe</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>pppoe</b>
Tree	<a href="#">pppoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description string**

Synopsis	Text description
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>pppoe description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**session-limit** *number*

Synopsis	Maximum PPPoE sessions
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">pppoe</a> <a href="#">session-limit</a> <i>number</i>
Tree	<a href="#">session-limit</a>
Range	1 to 333823
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**private-retail-subnets** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Export subnets to the forwarding service
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">private-retail-subnets</a> <i>boolean</i>
Tree	<a href="#">private-retail-subnets</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**wan-mode** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Mode of operation for hosts with /128 WAN IPv6 address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wan-mode</a> <i>keyword</i>
Tree	<a href="#">wan-mode</a>
Options	mode64, mode128
Default	mode64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## wlan-gw

Synopsis	Enable the <b>wlan-gw</b> context
Context	<b>configure service vprn string subscriber-interface string wlan-gw</b>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pool-manager

Synopsis	Enter the <b>pool-manager</b> context
Context	<b>configure service vprn string subscriber-interface string wlan-gw pool-manager</b>
Tree	<a href="#">pool-manager</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp6-client

Synopsis	Enter the <b>dhcp6-client</b> context
Context	<b>configure service vprn string subscriber-interface string wlan-gw pool-manager dhcp6-client</b>
Tree	<a href="#">dhcp6-client</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcpv4-nat

Synopsis	Enter the <b>dhcpv4-nat</b> context
Context	<b>configure service vprn string subscriber-interface string wlan-gw pool-manager dhcp6-client dhcpv4-nat</b>
Tree	<a href="#">dhcpv4-nat</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client dhcpv4-nat admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **link-address** *string*

Synopsis	IPv6 address in the link address field of relay header
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client dhcpv4-nat link-address</b> <i>string</i>
Tree	<a href="#">link-address</a>
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pool-name** *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client dhcpv4-nat pool-name</b> <i>string</i>
Tree	<a href="#">pool-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ia-na**

Synopsis	Enter the <b>ia-na</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw pool-manager dhcp6-client ia-na</b>
Tree	<a href="#">ia-na</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client ia-na</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**link-address** *string*

Synopsis	IPv6 address in the link address field of relay header
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client ia-na</a> <b>link-address</b> <i>string</i>
Tree	<a href="#">link-address</a>
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pool-name** *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client ia-na</a> <b>pool-name</b> <i>string</i>
Tree	<a href="#">pool-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**lease-query**

Synopsis	Enable the <b>lease-query</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <b>lease-query</b>

Tree	<a href="#">lease-query</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-retries** *number*

Synopsis	Retries before lease query assumes no allocated subnets
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <a href="#">lease-query</a> <b>max-retries</b> <i>number</i>
Tree	<a href="#">max-retries</a>
Range	0 to 10
Default	2
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **servers** *string*

Synopsis	DHCPv6 servers that are used for requesting addresses
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <b>servers</b> <i>string</i>
Tree	<a href="#">servers</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **slaac**

Synopsis	Enter the <b>slaac</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager dhcp6-client</a> <b>slaac</b>
Tree	<a href="#">slaac</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the DHCPv6 client entity
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">slaac</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**link-address** *string*

Synopsis	IPv6 address in the link address field of relay header
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">slaac</a> <b>link-address</b> <i>string</i>
Tree	<a href="#">link-address</a>
Default	::
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pool-name** *string*

Synopsis	Pool name to be sent in the DHCPv6 messages
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <a href="#">slaac</a> <b>pool-name</b> <i>string</i>
Tree	<a href="#">pool-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**source-ip** (*keyword* | *ipv6-address*)

Synopsis	Source IP address that is used by the DHCPv6 client
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw</a> <a href="#">pool-manager</a> <a href="#">dhcp6-client</a> <b>source-ip</b> ( <i>keyword</i>   <i>ipv6-address</i> )
Tree	<a href="#">source-ip</a>

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Options	use-interface-ip
Default	use-interface-ip
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## watermarks

Synopsis	Enter the <b>watermarks</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager</a> <a href="#">watermarks</a>
Tree	<a href="#">watermarks</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high number

Synopsis	High watermark when new prefix is allocated
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager</a> <a href="#">watermarks</a> <a href="#">high</a> <i>number</i>
Tree	<a href="#">high</a>
Range	51 to 99
Default	95
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## low number

Synopsis	Low watermark when unused prefix is released
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager</a> <a href="#">watermarks</a> <a href="#">low</a> <i>number</i>
Tree	<a href="#">low</a>
Range	50 to 98
Default	90
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wlan-gw-group** *reference*

Synopsis	ID of WLAN gateway group where prefixes are installed
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw pool-manager wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**redundancy**

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw redundancy</a>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of WLAN-GW redundancy
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-interface</a> <i>string</i> <a href="#">wlan-gw redundancy</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Route to export to peer
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Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw redundancy export</b> <i>string</i>
Tree	<b>export</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### monitor *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Peer route to monitor
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-interface</b> <i>string</i> <b>wlan-gw redundancy monitor</b> <i>string</i>
Tree	<b>monitor</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### subscriber-mgmt

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-mgmt</b>
Tree	<b>subscriber-mgmt</b>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### dhcpv4

Synopsis	Enter the <b>dhcpv4</b> context
Context	<b>configure service vpn</b> <i>string</i> <b>subscriber-mgmt dhcpv4</b>
Tree	<b>dhcpv4</b>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**routed-subnet-transparent-forward** *boolean*

Synopsis	Transparently forward DHCPv4 from CPE LAN over IPoE
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-mgmt dhcpv4 routed-subnet-transparent-forward</a> <i>boolean</i>
Tree	<a href="#">routed-subnet-transparent-forward</a>
Description	<p>When configured to <b>true</b>, the router transparently forwards DHCPv4 packets received on a subscriber interface with a source IP in a routed subnet that is associated with a routed IPoE session or host.</p> <p>Supported routed subnets are:</p> <ul style="list-style-type: none"> <li>• RADIUS and NASREQ framed routes</li> <li>• routes learned via an ESM dynamic BGP peer</li> <li>• managed routes that are associated with a static IPv4 host</li> </ul> <p>When configured to <b>false</b>, the system disables transparent forwarding of DHCPv4 packets.</p>
Default	false
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**multi-chassis-shunt-id** *number*

Synopsis	Shunt ID for a pair of resilient nodes
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-mgmt multi-chassis-shunt-id</a> <i>number</i>
Tree	<a href="#">multi-chassis-shunt-id</a>
Description	<p>This command configures the shunt ID that is used to shunt downstream traffic from a standby node to an active node. Because this ID identifies the traffic service on the standby node, the same ID must be configured per service on each node.</p> <p>This configuration is required for inter-BNG-UP resiliency shunting, but not for non-BNG-UP shunting. However, when configured, it is also used for shunting non-BNG-UP sessions in the same service.</p>
Range	1 to 8191
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**up-resiliency**

Synopsis	Enter the <b>up-resiliency</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">subscriber-mgmt up-resiliency</a>

Tree	<a href="#">up-resiliency</a>
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **monitor-oper-group** [[oper-group](#)] *reference*

Synopsis	Enter the <b>monitor-oper-group</b> list instance
Context	<b>configure service vprn</b> <i>string</i> <a href="#">subscriber-mgmt up-resiliency monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Description	Commands in this context define parameters to derive the service health based on monitored operational groups. The BNG UPF sends the health value to the BNG CPF. The BNG CPF uses the value to determine the need for a BNG UPF status change (active or standby).  <b>Note:</b> The following is only applicable for the <b>configure service vpls capture-sap</b> context. If the configured groups are not the same for all capture SAPs sharing the same underlying port or LAG, the configuration of a Layer 2 access ID alias is required, or else the system chooses arbitrarily one set of configured groups.
Max. Instances	2
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[oper-group]** *reference*

Synopsis	Operational group name
Context	<b>configure service vprn</b> <i>string</i> <a href="#">subscriber-mgmt up-resiliency monitor-oper-group reference</a>
Tree	<a href="#">monitor-oper-group</a>
Reference	<b>configure service oper-group</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **health-drop** *number*

Synopsis	Number subtracted from the health value per failure
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Context	<b>configure service vprn</b> <i>string</i> <b>subscriber-mgmt up-resiliency monitor-oper-group reference health-drop</b> <i>number</i>
Tree	<b>health-drop</b>
Description	This command configures the drop in the health value for every operational group member failure. Every failure of an operational group member decreases the base health value to a possible minimum of 0.
Range	1 to 100
Default	1
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ttl-propagate**

Synopsis	Enter the <b>ttl-propagate</b> context
Context	<b>configure service vprn</b> <i>string</i> <b>ttl-propagate</b>
Tree	<b>ttl-propagate</b>
Introduced	16.0.R1
Platforms	All

### **local** *keyword*

Synopsis	Local TTL propagation control for the VPRN
Context	<b>configure service vprn</b> <i>string</i> <b>ttl-propagate local</b> <i>keyword</i>
Tree	<b>local</b>
Description	This command specifies the local TTL propagation control for the VPRN and overrides the global configuration of the TTL propagation for locally generated packets that are forwarded over MPLS LSPs in a given VPRN service context.
Options	none, all, vc-only, use-base
Default	use-base
Introduced	16.0.R1
Platforms	All

### **transit** *keyword*

Synopsis	Transit TTL propagation control for the VPRN
Context	<b>configure service vprn</b> <i>string</i> <b>ttl-propagate transit</b> <i>keyword</i>

Tree	<a href="#">transit</a>
Description	This command overrides the global configuration of the TTL propagation for in transit packets that are forwarded over MPLS LSPs in a given VPRN service context.
Options	none, all, vc-only, use-base
Default	use-base
Introduced	16.0.R1
Platforms	All

## twamp-light

Synopsis	Enter the <b>twamp-light</b> context
Context	<b>configure</b> <a href="#">service vprn string twamp-light</a>
Tree	<a href="#">twamp-light</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## reflector

Synopsis	Enable the <b>reflector</b> context
Context	<b>configure</b> <a href="#">service vprn string twamp-light reflector</a>
Tree	<a href="#">reflector</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of TWAMP Light functionality
Context	<b>configure</b> <a href="#">service vprn string twamp-light reflector admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**allow-ipv6-udp-checksum-zero** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">twamp-light reflector allow-ipv6-udp-checksum-zero</a> <i>boolean</i>
Tree	<a href="#">allow-ipv6-udp-checksum-zero</a>
Description	<p>When configured to <b>true</b>, this command allows the processing of IPv6 packets that arrive with a UDP checksum of zero. The destination UDP ports that are registered as TWAMP Test packets as part of this template allow this behavior.</p> <p>When configured to <b>false</b>, IPv6 packets that arrive with a UDP checksum of zero are discarded.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">twamp-light reflector description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">twamp-light reflector prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Max. Instances	50
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Source prefix for the TWAMP-Light reflector
Context	<b>configure service vprn string twamp-light reflector prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure service vprn string twamp-light reflector prefix</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type keyword**

Synopsis	Processing behavior type for the reflector
Context	<b>configure service vprn string twamp-light reflector type keyword</b>
Tree	<a href="#">type</a>
Description	<p>This command configures the processing behavior of the TWAMP Light reflector. When the value is <b>twamp-light</b> the reflector does not check the received PDU as a traditional base TWAMP Light packet without TLV processing. When the value is <b>stamp</b>, the reflector attempts to find and process supported STAMP TLVs that follow the base STAMP packet.</p> <p>In mixed environments where different types of Session-Senders may be targeting a common TWAMP Light reflector, set the value to <b>stamp</b>. When the reflector is operating in <b>stamp</b> mode, the primary parsing is based on STAMP, checking and processing known TLVs, or determining if the arriving PDU is a TWAMP Light PDU. A Session-Sender launching a TWAMP Light-based packet must use all zeros padding pattern when the pad size is non zero.</p>
Options	stamp, twamp-light
Default	twamp-light
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### udp-port *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis UDP port on which the specified TWAMP-Light reflector listens for TWAMP PDUs

Context **configure service vprn string twamp-light reflector udp-port number**

Tree [udp-port](#)

Range 862 | 64364 to 64373

Notes This element is mandatory.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### video-interface [[interface-name](#)] *string*

Synopsis Enter the **video-interface** list instance

Context **configure service vprn string video-interface string**

Tree [video-interface](#)

Max. Instances 9

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### [\[interface-name\]](#) *string*

Synopsis Video interface name

Context **configure service vprn string video-interface string**

Tree [video-interface](#)

String Length 1 to 29

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s



**accounting-policy** *reference*

Synopsis	Accounting Policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <b>accounting-policy</b> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log</a> <a href="#">accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**address** [[ip-address](#)] *string*

Synopsis	Add a list entry for <b>address</b>
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <b>address</b> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[ip-address]** *string*

Synopsis	IPv4 address for the video interface within the service
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <b>address</b> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**admin-state** *keyword*

Synopsis	Administrative state of the video interface
Context	<b>configure</b> <a href="#">service</a> <a href="#">vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**channel** [*mcast-address*] *string* *source* *string*

Synopsis	Enter the <b>channel</b> list instance
Context	<b>configure</b> <i>service</i> <i>vprn</i> <i>string</i> <i>video-interface</i> <i>string</i> <b>channel</b> <i>string</i> <i>source</i> <i>string</i>
Tree	<b>channel</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**[mcast-address]** *string*

Synopsis	Multicast channel address
Context	<b>configure</b> <i>service</i> <i>vprn</i> <i>string</i> <i>video-interface</i> <i>string</i> <b>channel</b> <i>string</i> <i>source</i> <i>string</i>
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**source** *string*

Synopsis	Unicast source address
Context	<b>configure</b> <i>service</i> <i>vprn</i> <i>string</i> <i>video-interface</i> <i>string</i> <b>channel</b> <i>string</i> <i>source</i> <i>string</i>
Tree	<b>channel</b>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**channel-name** *string*

Synopsis	Channel name
Context	<b>configure</b> <i>service</i> <i>vprn</i> <i>string</i> <i>video-interface</i> <i>string</i> <b>channel</b> <i>string</i> <i>source</i> <i>string</i> <b>channel-name</b> <i>string</i>
Tree	<b>channel-name</b>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis Text description

Context **configure** *service vprn string video-interface string channel string source string description string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **scte35-action** *keyword*

Synopsis Enable downstream forwarding of SCTE 35 cue avails

Context **configure** *service vprn string video-interface string channel string source string scte35-action keyword*

Tree [scte35-action](#)

Options forward, drop

Default forward

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **zone-channel** [[zone-mcast-address](#)] *string zone-source string*

Synopsis Enter the **zone-channel** list instance

Context **configure** *service vprn string video-interface string channel string source string zone-channel string zone-source string*

Tree [zone-channel](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **[zone-mcast-address]** *string*

Synopsis Multicast zone channel address

Context **configure** *service vprn string video-interface string channel string source string zone-channel string zone-source string*

Tree	<a href="#">zone-channel</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **zone-source *string***

Synopsis	Unicast source address
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <a href="#">zone-source</a> <i>string</i>
Tree	<a href="#">zone-channel</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **adi-channel-name *string***

Synopsis	Zone channel name
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">channel</a> <i>string</i> <a href="#">source</a> <i>string</i> <a href="#">zone-channel</a> <i>string</i> <a href="#">zone-source</a> <i>string</i> <a href="#">adi-channel-name</a> <i>string</i>
Tree	<a href="#">adi-channel-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

### **cpu-protection *reference***

Synopsis	CPU protection policy
Context	<b>configure</b> <a href="#">service</a> <a href="#">vpn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">cpu-protection</a> <i>reference</i>
Tree	<a href="#">cpu-protection</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <i>policy</i> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**multicast-service** *number*

Synopsis	Associated multicast service ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">multicast-service</a> <i>number</i>
Tree	<a href="#">multicast-service</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**output-format** *keyword*

Synopsis	Output format
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">output-format</a> <i>keyword</i>
Tree	<a href="#">output-format</a>
Options	udp, rtp-udp
Default	rtp-udp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**video-sap**

Synopsis	Enable the <b>video-sap</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a>
Tree	<a href="#">video-sap</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure service vprn string video-interface string video-sap egress</b>
Tree	<b>egress</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## filter

Synopsis	Enter the <b>filter</b> context
Context	<b>configure service vprn string video-interface string video-sap egress filter</b>
Tree	<b>filter</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## ip reference

Synopsis	IPv4 filter policy name
Context	<b>configure service vprn string video-interface string video-sap egress filter ip reference</b>
Tree	<b>ip</b>
Reference	<b>configure filter ip-filter string</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure service vprn string video-interface string video-sap egress qos</b>
Tree	<b>qos</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**policy-name** *reference*

Synopsis	SAP egress QoS policy ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">egress qos</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**filter**

Synopsis	Enter the <b>filter</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">ingress</a> <a href="#">filter</a>
Tree	<a href="#">filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**ip** *reference*

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">ingress</a> <a href="#">filter</a> <a href="#">ip</a> <i>reference</i>
Tree	<a href="#">ip</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <i>ingress</i> <b>qos</b>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**policy-name** *reference*

Synopsis	SAP ingress QoS policy ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <i>ingress</i> <b>qos</b> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**video-group-id** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Video group ID
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">video-interface</a> <i>string</i> <a href="#">video-sap</a> <a href="#">video-group-id</a> <i>reference</i>
Tree	<a href="#">video-group-id</a>
Reference	<b>configure</b> <a href="#">isa video-group</a> <i>number</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-1s, 7750 SR-2s, 7750 SR-7s, 7750 SR-14s

**vprn-type** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	VPRN type
Context	<b>configure</b> <a href="#">service vprn</a> <i>string vprn-type keyword</i>
Tree	<a href="#">vprn-type</a>
Options	regular, hub, spoke, subscriber-split-horizon
Default	regular
Introduced	16.0.R1
Platforms	All

## vxlan

Synopsis	Enter the <b>vxlan</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string vxlan</i>
Tree	<a href="#">vxlan</a>
Introduced	16.0.R1
Platforms	All

## tunnel-termination [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>tunnel-termination</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string vxlan tunnel-termination (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">tunnel-termination</a>
Introduced	16.0.R1
Platforms	All

## [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Non-system IP address that terminates the VXLAN
Context	<b>configure</b> <a href="#">service vprn</a> <i>string vxlan tunnel-termination (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<a href="#">tunnel-termination</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## fpe-id reference

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	FPE id for this entry
Context	<b>configure service vprn string vxlan tunnel-termination</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>fpe-id reference</b>
Tree	<a href="#">fpe-id</a>
Reference	<b>configure fwd-path-ext fpe number</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## weighted-ecmp keyword

Synopsis	Weighted load-balancing capability for ECMP routes
Context	<b>configure service vprn string weighted-ecmp keyword</b>
Tree	<a href="#">weighted-ecmp</a>
Options	false, true, strict
Default	false
Introduced	16.0.R1
Platforms	All

## wlan-gw

Synopsis	Enable the <b>wlan-gw</b> context
Context	<b>configure service vprn string wlan-gw</b>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## distributed-subscriber-mgmt

Synopsis	Enter the <b>distributed-subscriber-mgmt</b> context
Context	<b>configure service vprn string wlan-gw distributed-subscriber-mgmt</b>

Tree [distributed-subscriber-mgmt](#)  
 Introduced 16.0.R4  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-tcp-mss-adjust** *number*

Synopsis TCP-MSS adjustment value in upstream direction for DSM  
 Context **configure** [service vprn](#) *string* [wlan-gw distributed-subscriber-mgmt ipv6-tcp-mss-adjust](#) *number*  
 Tree [ipv6-tcp-mss-adjust](#)  
 Range 160 to 10240  
 Introduced 16.0.R4  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mobility-triggered-accounting**

Synopsis Enter the **mobility-triggered-accounting** context  
 Context **configure** [service vprn](#) *string* [wlan-gw mobility-triggered-accounting](#)  
 Tree [mobility-triggered-accounting](#)  
 Introduced 16.0.R4  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of mobility triggered accounting  
 Context **configure** [service vprn](#) *string* [wlan-gw mobility-triggered-accounting admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R4  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **hold-down** *number*

Synopsis Hold additional mobility-triggered update until this timer expires

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Context	<b>configure service vprn</b> <i>string</i> wlan-gw mobility-triggered-accounting hold-down <i>number</i>
Tree	<a href="#">hold-down</a>
Range	60 to 86400
Units	seconds
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **include-counters** *boolean*

Synopsis	Include counters in interim updates
Context	<b>configure service vprn</b> <i>string</i> wlan-gw mobility-triggered-accounting include-counters <i>boolean</i>
Tree	<a href="#">include-counters</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect**

Synopsis	Enter the <b>xconnect</b> context
Context	<b>configure service vprn</b> <i>string</i> wlan-gw xconnect
Tree	<a href="#">xconnect</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the WLAN-GW cross-connect
Context	<b>configure service vprn</b> <i>string</i> wlan-gw xconnect admin-state <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**tunnel-source-ip** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPv6 address and prefix for the tunnel source
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wlan-gw xconnect tunnel-source-ip</a> <i>string</i>
Tree	<a href="#">tunnel-source-ip</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wlan-gw-group** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	ISA WLAN-GW Group
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wlan-gw xconnect wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**wpp**

Synopsis	Enable the <b>wpp</b> context
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp</a>
Tree	<a href="#">wpp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of WPP
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp admin-state</a> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**portal** [[name](#)] *string*

Synopsis	Enter the <b>portal</b> list instance
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i>
Tree	<a href="#">portal</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Web portal name
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i>
Tree	<a href="#">portal</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ack-auth-retry-count** *number*

Synopsis	Number of retransmissions of an ACK_OUT message
Context	<b>configure</b> <a href="#">service vprn</a> <i>string</i> <a href="#">wpp portal</a> <i>string</i> <b>ack-auth-retry-count</b> <i>number</i>
Tree	<a href="#">ack-auth-retry-count</a>
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**address** (*ipv4-address-no-zone | ipv6-address-no-zone*)**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	WPP portal address
Context	<b>configure service vprn</b> <i>string wpp portal string address</i> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the WPP portal server
Context	<b>configure service vprn</b> <i>string wpp portal string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ntf-logout-retry-count** *number*

Synopsis	Number of retransmissions of an NTF_LOGOUT message
Context	<b>configure service vprn</b> <i>string wpp portal string ntf-logout-retry-count number</i>
Tree	<a href="#">ntf-logout-retry-count</a>
Range	0 to 5
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**port-format** *keyword*

Synopsis	Format of the port in the ACK_INO message
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Context	<b>configure service vprn</b> <i>string wpp portal string port-format keyword</i>
Tree	<a href="#">port-format</a>
Options	standard, vendor-specific
Default	standard
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retry-interval** *number*

Synopsis	Time between two consecutive retransmissions
Context	<b>configure service vprn</b> <i>string wpp portal string retry-interval number</i>
Tree	<a href="#">retry-interval</a>
Range	10 to 2000
Units	milliseconds
Default	2000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secret** *string*

Synopsis	Message authentication between portal and BRAS by applying the secret used by WPPv2
Context	<b>configure service vprn</b> <i>string wpp portal string secret string</i>
Tree	<a href="#">secret</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **version** *number*

Synopsis	Protocol version to be expected by the WPP portal
Context	<b>configure service vprn</b> <i>string wpp portal string version number</i>
Tree	<a href="#">version</a>
Range	1   2
Default	1



Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## 3.44 sfm commands

```
configure
- sfm number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- sfm-type keyword
```

### 3.44.1 sfm command descriptions

#### **sfm** [**sfm-slot**] *number*

Synopsis	Enter the <b>sfm</b> list instance
Context	<b>configure sfm number</b>
Tree	<b>sfm</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

#### **[sfm-slot]** *number*

Synopsis	Unique value to identify this SFM slot within a chassis in the system
Context	<b>configure sfm number</b>
Tree	<b>sfm</b>
Range	1 to 16
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

#### **admin-state** *keyword*

Synopsis	Administrative state of SFM
Context	<b>configure sfm number admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**sfm-type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Provision the SFM type
Context	<b>configure</b> <i>sfm number sfm-type keyword</i>
Tree	<a href="#">sfm-type</a>
Options	sfm-x20, sfm-x20-b, m-sfm5-7, m-sfm5-12, m-sfm5-12e, sfm-x20s-b, sfm-ixr-6, sfm-ixr-10, sfm-s, m-sfm6-12e, sfm2-x20s, sfm-2s, m-sfm6-7/12, sfm-2se, sfm2-s
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## 3.45 subscriber-mgmt commands

```

configure
- subscriber-mgmt
- accu-stats-policy string
- apply-groups reference
- apply-groups-exclude reference
- description string
- egress keyword id number
- ingress keyword id number
- ancp
- ancp-policy string
- apply-groups reference
- apply-groups-exclude reference
- egress
- rate-adjustment number
- rate-modify
- agg-rate
- scheduler string
- rate-monitor
- alarm boolean
- rate number
- rate-reduction number
- ingress
- rate-adjustment number
- rate-modify
- scheduler string
- rate-monitor
- alarm boolean
- rate number
- rate-reduction number
- port-down
- suspend-shcv
- alarm boolean
- hold-time number
- ancp-static-map
- multi-service-site-entry string customer-name reference customer-site-
name reference
- ancp-policy reference
- apply-groups reference
- apply-groups-exclude reference
- sap-entry string sap-id string
- ancp-policy reference
- apply-groups reference
- apply-groups-exclude reference
- apply-groups reference
- apply-groups-exclude reference
- authentication-origin
- overrides
- priority number
- apply-groups reference
- apply-groups-exclude reference
- source keyword
- auto-sub-id
- apply-groups reference
- apply-groups-exclude reference
- implicit-generation boolean
- ipoe-key keyword
- ppp-key keyword

```

configure subscriber-mgmt bgp-peering-policy

```

- bgp-peering-policy string
  - advertise-inactive boolean
  - aggregator-id-zero boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - as-override boolean
  - asn-4-byte boolean
  - authentication-key string
  - authentication-keychain reference
  - bfd-liveness boolean
  - client-reflect boolean
  - cluster string
  - connect-retry number
  - damping boolean
  - description string
  - export reference
  - family
    - ipv4 boolean
    - ipv6 boolean
  - fast-external-failover boolean
  - hold-time number
  - import reference
  - keepalive number
  - local-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - local-as
    - as-number number
    - private boolean
  - local-preference number
  - loop-detect keyword
  - med-out (number | keyword)
  - min-route-advertisement number
  - multihop number
  - next-hop-self boolean
  - passive boolean
  - peer-as number
  - preference number
  - prefix-limits keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - idle-timeout number
    - log-only boolean
    - maximum number
    - post-import boolean
    - threshold number
  - remove-private
    - limited boolean
  - send-communities
    - extended boolean
    - standard boolean
  - ttl-security number
  - type keyword
- category-map string
  - activity-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - category string
    - apply-groups reference
    - apply-groups-exclude reference
    - credit-type-override keyword
    - default-credit
      - time number
      - volume
        - unit keyword
        - value number

```

configure subscriber-mgmt category-map category description

```

- description string
- egress
- policer number
- queue number
- exhausted-credit-service-level
- egress
  - ip-filter
    - entry number
      - action
        - drop
        - forward
        - http-redirect
          - allow-override boolean
          - url string
        - apply-groups reference
        - apply-groups-exclude reference
        - description string
        - match
          - dscp keyword
          - dst-port
            - eq number
            - gt number
            - lt number
            - range
              - end number
              - start number
          - fragment keyword
          - icmp
            - code number
            - type number
          - ip-option
            - mask number
            - type number
          - multiple-option boolean
          - option-present boolean
          - protocol (number | keyword)
          - src-ip string
          - src-port
            - eq number
            - gt number
            - lt number
            - range
              - end number
              - start number
          - tcp-flags
            - ack boolean
            - syn boolean
      - ipv6-filter
        - entry number
          - action
            - drop
            - forward
          - apply-groups reference
          - apply-groups-exclude reference
          - description string
          - match
            - dscp keyword
            - dst-port
              - eq number
              - gt number
              - lt number
              - range
                - end number
                - start number

```

configure subscriber-mgmt category-map category exhausted-credit-service-level egress ipv6-filter entry match icmp

```

- icmp
  - code number
  - type number
- next-header (number | keyword)
- src-ip string
- src-port
  - eq number
  - gt number
  - lt number
  - range
    - end number
    - start number
- tcp-flags
  - ack boolean
  - syn boolean
- ingress
  - ip-filter
    - entry number
    - action
      - drop
      - forward
      - http-redirect
        - allow-override boolean
        - url string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dscp keyword
      - dst-ip string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - fragment keyword
      - icmp
        - code number
        - type number
      - ip-option
        - mask number
        - type number
      - multiple-option boolean
      - option-present boolean
      - protocol (number | keyword)
      - src-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - tcp-flags
        - ack boolean
        - syn boolean
    - ipv6-filter
      - entry number
      - action
        - drop
        - forward
      - apply-groups reference
      - apply-groups-exclude reference

```



configure subscriber-mgmt category-map category exhausted-credit-service-level ingress ipv6-filter entry description

```

    - description string
    - match
      - dscp keyword
      - dst-ip string
      - dst-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - icmp
        - code number
        - type number
      - next-header (number | keyword)
      - src-port
        - eq number
        - gt number
        - lt number
        - range
          - end number
          - start number
      - tcp-flags
        - ack boolean
        - syn boolean
    - pir (number | keyword)
  - ingress
    - policer number
    - queue number
    - out-of-credit-action-override keyword
    - rating-group number
  - credit-exhaust-threshold number
  - credit-type keyword
  - description string
  - gx-session-level-usage boolean
- credit-control-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - default-category-map reference
  - description string
  - error-handling-action keyword
  - out-of-credit-action keyword
  - server
    - diameter reference
    - radius
- diameter-gx-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - gx
    - avp-subscription-id
      - origin keyword
      - type keyword
    - ccrt-replay
      - interval number
      - max-lifetime number
    - credit-mcs-interval number
    - destination-realm-learning boolean
    - features
      - extended-bandwidth boolean
    - include-avp
      - an-gw-address boolean
      - apn-ambr boolean
      - called-station-id boolean

```

configure subscriber-mgmt diameter-gx-policy gx include-avp calling-station-id

- **calling-station-id**
  - **type** *keyword*
- **ip-can-type** *boolean*
- **logical-access-id** *boolean*
- **nas-port**
  - **bit-spec** *string*
- **nas-port-id**
  - **prefix-string** *string*
  - **suffix**
    - **circuit-id**
    - **not-included**
    - **remote-id**
    - **user-string** *string*
- **nas-port-type**
  - **type** *number*
- **pdn-connection-id** *boolean*
- **physical-access-id** *boolean*
- **rai** *boolean*
- **rat-type** *boolean*
- **sgsn-mcc-mnc** *boolean*
- **supported-features** *boolean*
- **user-equipment-info**
  - **type** *keyword*
- **user-location-info** *boolean*
- **mac-format** *string*
- **report-ip-address-event** *boolean*
- **three-gpp-qos-mapping**
  - **apn-ambr-dl**
    - **aggregate-rate**
    - **arbiter** *string*
    - **hs-sla-agg-rate**
    - **ignore-override**
    - **policer** *number*
    - **queue** *number*
    - **scheduler** *string*
  - **apn-ambr-ul**
    - **arbiter** *string*
    - **ignore-override**
    - **policer** *number*
    - **queue** *number*
    - **scheduler** *string*
- **node**
  - **destination-realm** *string*
  - **origin-host** *reference*
- **on-failure**
  - **failover** *boolean*
  - **handling** *keyword*
- **tx-timer** *number*
- **diameter-gy-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **gy**
    - **avp-subscription-id**
      - **origin** *keyword*
      - **type** *keyword*
    - **ccrt-replay**
      - **interval** *number*
      - **max-lifetime** *number*
    - **destination-realm-learning** *boolean*
    - **extended-failure-handling**
      - **admin-state** *keyword*
      - **interim-credit**
        - **max-attempts** (*number* | *keyword*)

configure subscriber-mgmt diameter-gy-policy gy extended-failure-handling interim-credit reporting

```

    - reporting boolean
    - validity-time (number | keyword)
    - volume
      - credits number
      - units keyword
  - new-session-id boolean
- include-avp
  - aaa-user-name boolean
  - address-avp boolean
  - called-station-id
    - id string
  - charging-rule-base-name
    - category-map
    - not-included
    - user-string string
  - ggsn-address
    - type keyword
  - pdp-context-type boolean
  - ps-information boolean
  - service-context-id
    - id string
  - three-gpp-charging-characteristics boolean
  - three-gpp-charging-id keyword
  - three-gpp-ggsn-ipv4-address boolean
  - three-gpp-ggsn-ipv6-address boolean
  - three-gpp-gprs-negotiated-qos-profile boolean
  - three-gpp-imsi keyword
  - three-gpp-nsapi boolean
  - three-gpp-rat-type
    - type number
  - three-gpp-selection-mode boolean
  - three-gpp-session-stop-indicator boolean
  - three-gpp-user-location-info boolean
  - user-equipment-info-type
    - type keyword
- mac-format string
- out-of-credit-reporting keyword
- vendor-support keyword
- node
  - destination-realm string
  - origin-host reference
- on-failure
  - failover boolean
  - handling keyword
  - tx-timer number
- diameter-nasreq-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - nasreq
    - include-avp
      - called-station-id boolean
      - calling-station-id
        - type keyword
      - circuit-id boolean
      - imei boolean
      - nas-port
        - bit-spec string
    - nas-port-id
      - prefix-string string
      - suffix
        - circuit-id
        - not-included
        - remote-id

```

configure subscriber-mgmt diameter-nasreq-policy nasreq include-avp nas-port-id suffix user-string

```

    - user-string string
  - nas-port-type
    - type (keyword | number)
  - rat-type boolean
  - remote-id boolean
  - user-location-info boolean
  - mac-format string
  - password string
  - user-name
    - domain-name string
    - format keyword
    - operation keyword
  - node
    - destination-realm string
    - origin-host reference
  - on-failure
    - failover boolean
    - handling keyword
  - tx-timer number
- explicit-subscriber-map
  - entry string
    - alias string
    - app-profile reference
    - apply-groups reference
    - apply-groups-exclude reference
    - sla-profile reference
    - sub-profile reference
  - group-interface-statistics
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
  - group-interface-template string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - ip-mtu number
  - ipv4
    - icmp
      - mask-reply boolean
      - param-problem
        - admin-state keyword
        - number number
        - seconds number
      - redirects
        - admin-state keyword
        - number number
        - seconds number
      - ttl-expired
        - admin-state keyword
        - number number
        - seconds number
      - unreachables
        - admin-state keyword
        - number number
        - seconds number
    - neighbor-discovery
      - proxy-arp-policy reference
      - remote-proxy-arp boolean
    - urpf-check
      - mode keyword
  - ipv6
    - urpf-check
      - mode keyword
  - trigger-packet

```

configure subscriber-mgmt group-interface-template trigger-packet data

```

- data boolean
- gtp
  - apn-policy string
  - apn string
    - ambr-qos-mapping
      - apply-groups reference
      - apply-groups-exclude reference
      - downlink
        - aggregate-rate
        - arbiter string
        - policer number
        - queue number
        - scheduler string
      - uplink
        - arbiter string
        - policer number
        - queue number
        - scheduler string
    - apply-groups reference
    - apply-groups-exclude reference
    - defaults
      - group-interface
        - name string
        - svc-name string
      - diameter-nasreq-policy reference
      - radius-auth-policy reference
      - skip-gtp-ipv4-allocation boolean
      - user-db reference
  - apply-groups reference
  - apply-groups-exclude reference
- apply-groups reference
- apply-groups-exclude reference
- max-held-uplink-sessions number
- peer-profile string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - interface-type keyword
  - ip-ttl number
  - keep-alive
    - admin-state keyword
    - interval number
    - retry-count number
    - timeout number
  - message-retransmit
    - retry-count number
    - timeout number
  - python-policy reference
- sll
  - change-reporting-action (number | keyword)
  - end-marker-count number
  - ipv4-mtu number
  - qos
    - ambr
      - down-link number
      - up-link number
    - arp number
    - down-link
      - gbr number
      - mbr number
    - qci number
    - up-link
      - gbr number
      - mbr number

```

configure subscriber-mgmt gtp peer-profile uplink

```

- uplink
  - charging-characteristics
    - home
      - bit0 boolean
      - bit1 boolean
      - bit10 boolean
      - bit11 boolean
      - bit12 boolean
      - bit13 boolean
      - bit14 boolean
      - bit15 boolean
      - bit2 boolean
      - bit3 boolean
      - bit4 boolean
      - bit5 boolean
      - bit6 boolean
      - bit7 boolean
      - bit8 boolean
      - bit9 boolean
    - roaming
      - bit0 boolean
      - bit1 boolean
      - bit10 boolean
      - bit11 boolean
      - bit12 boolean
      - bit13 boolean
      - bit14 boolean
      - bit15 boolean
      - bit2 boolean
      - bit3 boolean
      - bit4 boolean
      - bit5 boolean
      - bit6 boolean
      - bit7 boolean
      - bit8 boolean
      - bit9 boolean
  - ggsn
    - qos
      - ambr
        - down-link number
        - up-link number
      - arp number
      - down-link
        - gbr number
        - mbr number
      - up-link
        - gbr number
        - mbr number
  - pgw
    - qos
      - ambr
        - down-link number
        - up-link number
      - arp number
      - down-link
        - gbr number
        - mbr number
      - qci number
      - up-link
        - gbr number
        - mbr number
  - protocol-configuration-options keyword
  - rat-type (number | keyword)
  - report-wlan-location boolean

```

configure subscriber-mgmt gtp peer-profile uplink session-hold-time

```

    - session-hold-time (number | keyword)
  - servicing-network
    - mcc string
    - mnc string
  - host-lockout-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - host-key keyword
    - lockout-reset-time number
    - lockout-time
      - max number
      - min number
    - max-lockout-hosts number
  - host-tracking-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress-rate-modify
      - agg-rate
      - scheduler string
  - http-redirect-policy string
    - aa-url-parameter string
    - application-assurance reference
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - dst-port number
    - forward-entry dst-ip (ipv4-prefix | ipv6-prefix) protocol keyword dst-port number
    - ignore-app-profile boolean
    - portal-hold-time number
    - url string
  - igmp-policy string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - egress-rate-modify
      - agg-rate
      - scheduler string
    - fast-leave boolean
    - import-policy reference
    - maximum-number-group-sources number
    - maximum-number-groups number
    - maximum-number-sources number
    - multicast-reporter
      - admin-state keyword
      - destination reference
      - optional-fields
        - host-mac boolean
        - pppoe-session-id boolean
        - sap-id boolean
        - svc-id boolean
    - query-interval number
    - query-last-member-interval number
    - query-response-interval number
    - redirection-policy reference
    - replication keyword
    - router-alert-check boolean
  - static
    - group string
      - apply-groups reference
      - apply-groups-exclude reference
      - source string
      - starg

```

configure subscriber-mgmt igmp-policy use-multicast-destination-mac

```

- use-multicast-destination-mac boolean
- version keyword
- ipoe-session-policy string
- apply-groups reference
- apply-groups-exclude reference
- circuit-id-from-auth boolean
- description string
- session-key
  - cid boolean
  - mac boolean
  - rid boolean
  - sap boolean
- session-timeout (number | keyword)
- isa-filter string
- apply-groups reference
- apply-groups-exclude reference
- description string
- ipv4
  - default-action keyword
  - entry number
    - action
      - drop
      - forward
      - http-redirect
        - url string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dst-ip string
      - dst-port
        - equals number
      - protocol keyword
- ipv6
  - default-action keyword
  - entry number
    - action
      - drop
      - forward
      - http-redirect
        - url string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - match
      - dst-ip string
      - dst-port
        - equals number
      - protocol keyword
- type keyword
- isa-policer string
- action keyword
- adaptation-rule
  - cir keyword
  - pir keyword
- apply-groups reference
- apply-groups-exclude reference
- cbs number
- description string
- mbs number
- rate
  - cir (number | keyword)
  - pir (number | keyword)
- type keyword

```



## configure subscriber-mgmt isa-service-chaining

- **isa-service-chaining**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **evpn** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **bgp**
      - **route-distinguisher**
        - **rd** (*keyword* | *vpn-route-distinguisher*)
      - **route-target**
        - **export** *string*
        - **import** *string*
    - **description** *string*
    - **export**
      - **advertise-pools**
        - **admin-state** *keyword*
        - **pool** *router-instance* *string* **name** *string*
      - **gateway-address-range**
        - **end** *string*
        - **start** *string*
      - **vxlان**
        - **vni** *number*
    - **import-mode** *keyword*
    - **prefix-route-resolution** *keyword*
  - **mac-prefix** *string*
  - **vas-filter** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **entry** *number*
      - **action** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **fail-action** *keyword*
        - **forward**
          - **esi** *string*
          - **sf-ip** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
          - **svc** *reference*
        - **insert-nsh**
          - **meta-data**
            - **insert-subscriber-id**
            - **opaque-data** *string*
          - **svc-path**
            - **path-id** *number*
            - **svc-index** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **match**
        - **foreign-ip** (*ipv4-unicast-prefix* | *ipv4-unicast-address*)
        - **foreign-port** *number*
        - **protocol** *keyword*
  - **local-user-db** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **ipoe**
      - **host** *string*
        - **admin-state** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*

configure subscriber-mgmt local-user-db ipoe host authentication

```

- authentication
  - auth-domain-name string
  - gx-policy string
  - nasreq-auth-policy string
  - radius-auth-policy string
- gtp-interface
  - name string
  - service-id number
- host-identification
  - circuit-id
    - ascii-string string
    - hex-string string
  - derived-id string
  - encap-tag-range
    - from string
    - to string
  - encap-tag-separate-range
    - inner
      - end number
      - start number
    - outer
      - end number
      - start number
  - ip-prefix (ipv4-prefix-with-host-bits | ipv6-prefix-with-host-bits)
  - mac string
  - option60
    - ascii-string string
    - hex-string string
  - remote-id
    - ascii-string string
    - hex-string string
  - sap-id string
  - service-id number
  - string string
  - system-id string
- identification
  - ancp-string string
  - app-profile-string string
  - category-map-name string
  - int-dest-id string
  - option-number number
  - sla-profile-string string
  - spi-sharing-group-id number
  - sub-profile-string string
  - subscriber-id string
- ipv4
  - address
    - gi-address keyword
    - ip-address string
    - pool
      - delimiter string
      - primary string
      - secondary string
    - use-pool-from-client
      - delimiter string
  - gi-address string
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string

```

configure subscriber-mgmt local-user-db ipoe host ipv4 option netbios-node-type

```

    - netbios-node-type keyword
    - server string
  - ipv6
    - address string
    - address-pool string
    - delegated-prefix string
    - delegated-prefix-length number
    - delegated-prefix-pool string
    - link-address string
    - option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - hex-string string
      - ipv6-address string
    - router-advertisement-policy string
    - server string
    - slaac-prefix string
    - slaac-prefix-pool string
    - timers
      - preferred-lifetime (number | keyword)
      - rebind number
      - renew number
      - valid-lifetime (number | keyword)
  - match-radius-proxy-cache
    - fail-action keyword
    - mac-format string
    - match
      - circuit-id boolean
      - ipv4-option number
      - ipv6-option number
      - mac boolean
      - remote-id boolean
    - server
      - name string
      - service number
  - mld-import string
  - msap-defaults
    - group-interface
      - name string
      - prefix keyword
      - suffix keyword
    - policy string
    - service number
  - radius-accounting-policy
    - duplicate string
    - name string
  - retail-service-id number
  - rip-policy string
  - to-client-options
    - ipv4-option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - duration number
      - empty
      - hex-string string
      - ipv4-address string
      - netbios-node-type keyword
    - ipv6-option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - domain-string string
      - empty

```

configure subscriber-mgmt local-user-db ipoe host to-client-options ipv6-option hex-string

```

    - hex-string string
    - ipv6-address string
  - to-server-options
    - ipv6-option (number | keyword)
      - apply-groups reference
      - apply-groups-exclude reference
      - ascii-string string
      - domain-string string
      - empty
      - hex-string string
      - ipv6-address string
  - wpp
    - initial
      - app-profile string
      - sla-profile string
      - sub-profile string
    - portal
      - name string
      - portal-group string
      - router-instance (keyword | number)
      - restore-to-initial-on-disconnect keyword
  - mask type keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - prefix
      - length number
      - string string
    - suffix
      - length number
      - string string
  - match-list keyword
- ppp
  - host string
    - access-loop-encapsulation
      - apply-groups reference
      - apply-groups-exclude reference
      - encap-offset
        - type keyword
      - rate-down number
    - access-loop-information
      - circuit-id
        - ascii-string string
        - use-sap-id
      - remote-id
        - ascii-string string
        - use-mac-address
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication
      - gx-policy string
      - nasreq-auth-policy string
      - padi-auth-policy string
      - pre-auth-policy string
      - radius-auth-policy string
      - user-db string
    - host-identification
      - circuit-id
        - ascii-string string
        - hex-string string
      - derived-id string
      - encap-tag-range
        - from string
        - to string

```

configure subscriber-mgmt local-user-db ppp host host-identification encap-tag-separate-range

```

- encap-tag-separate-range
  - inner
    - end number
    - start number
  - outer
    - end number
    - start number
- mac string
- remote-id
  - ascii-string string
  - hex-string string
- sap-id string
- service-name string
- user-name
  - format keyword
  - name string
- identification
  - ancp-string string
  - app-profile-string string
  - category-map-name string
  - int-dest-id string
  - option-number number
  - sla-profile-string string
  - spi-sharing-group-id number
  - sub-profile-string string
  - subscriber-id string
- ipv4
  - address
    - gi-address keyword
    - ip-address string
    - pool
      - delimiter string
      - primary string
      - secondary string
    - prefix-length number
    - use-pool-from-client
      - delimiter string
  - ignore-df-bit boolean
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - duration number
    - empty
    - hex-string string
    - ipv4-address string
    - netbios-node-type keyword
- ipv6
  - address string
  - address-pool string
  - delegated-prefix string
  - delegated-prefix-length number
  - delegated-prefix-pool string
  - force-ipv6cp boolean
  - option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - hex-string string
    - ipv6-address string
  - router-advertisement-policy string
  - slaac-prefix string
  - slaac-prefix-pool string
  - timers
    - preferred-lifetime (number | keyword)

```

configure subscriber-mgmt local-user-db ppp host ipv6 timers rebind

```

    - rebind number
    - renew number
    - valid-lifetime (number | keyword)
- l2tp
  - group
    - name string
    - service-id number
- lns-interface
  - name string
  - service-id number
- mld-import string
- msap-defaults
  - group-interface
    - name string
    - prefix keyword
    - suffix keyword
  - policy string
  - service number
- pado-delay number
- password
  - chap string
  - ignore
  - pap string
- ppp-policy-parameters
  - keepalive
    - hold-up-multiplier number
    - interval number
    - max-sessions-per-mac number
- radius-accounting-policy
  - duplicate string
  - name string
- retail-service-id number
- rip-policy string
- steering-profile string
- to-client-options
  - ipv6-option (number | keyword)
    - apply-groups reference
    - apply-groups-exclude reference
    - ascii-string string
    - domain-string string
    - empty
    - hex-string string
    - ipv6-address string
- mask type keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - prefix
    - length number
    - string string
  - suffix
    - length number
    - string string
  - match-list keyword
- mld-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - egress-rate-modify
    - agg-rate
    - scheduler string
  - fast-leave boolean
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number

```

configure subscriber-mgmt mld-policy maximum-number-sources

```

- maximum-number-sources number
- query-interval number
- query-last-member-interval number
- query-response-interval number
- redirection-policy reference
- replication keyword
- router-alert-check boolean
- static
  - group string
    - apply-groups reference
    - apply-groups-exclude reference
    - source string
    - starg
  - use-multicast-destination-mac boolean
- version keyword
- msap-policy string
- apply-groups reference
- apply-groups-exclude reference
- cpu-protection
  - ip-src-monitoring
  - mac-monitoring
  - policy-id reference
- description string
- dist-cpu-protection string
- ies-vprn-only-sap-parameters
  - anti-spoof keyword
  - apply-groups reference
  - apply-groups-exclude reference
- egress
  - qos
    - policy-name reference
- ingress
  - qos
    - policy-name reference
    - queuing-type keyword
- igmp-host-tracking
  - expiry-time number
  - import-policy reference
  - maximum-number-group-sources number
  - maximum-number-groups number
  - maximum-number-sources number
- lag-link-map-profile number
- sticky-msaps boolean
- sticky-msaps-idle-timeout number
- sub-sla-mgmt
  - defaults
    - app-profile reference
    - int-dest-id
      - string string
      - top-q-tag
    - sla-profile reference
    - sub-profile reference
    - subscriber-id
      - auto-id
      - sap-id
      - string string
  - single-sub-parameters
    - non-sub-traffic-profiles
      - app-profile reference
      - sla-profile reference
      - sub-profile reference
      - subscriber-id string
    - profiled-traffic-only boolean
  - sub-ident-policy reference

```

configure subscriber-mgmt msap-policy sub-sla-mgmt subscriber-limit

- **subscriber-limit** (*keyword | number*)
- **vpls-only-sap-parameters**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **arp-host**
    - **host-limit** *number*
    - **min-auth-interval** *number*
  - **arp-reply-agent** *keyword*
  - **dhcp**
    - **lease-populate** *number*
    - **option-82**
      - **action** *keyword*
      - **circuit-id** *keyword*
      - **remote-id**
        - **mac**
        - **string** *string*
    - **vendor-specific-option**
      - **client-mac-address** *boolean*
      - **sap-id** *boolean*
      - **service-id** *boolean*
      - **string** *string*
      - **system-id** *boolean*
    - **proxy-server**
      - **admin-state** *keyword*
      - **emulated-server** *string*
      - **lease-time**
        - **radius-override** *boolean*
        - **value** *number*
  - **egress**
    - **qos**
      - **policy-name** *reference*
  - **igmp-snooping**
    - **fast-leave** *boolean*
    - **import-policy** *reference*
    - **maximum-number-groups** (*keyword | number*)
  - **mcac**
    - **bandwidth**
      - **mandatory** (*number | keyword*)
      - **total** (*number | keyword*)
    - **interface-policy** *reference*
    - **mc-constraints**
      - **level** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **bandwidth** *number*
      - **number-down** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
      - **level** *number*
    - **use-lag-port-weight** *boolean*
    - **policy** *reference*
  - **mvr**
    - **from-vpls** *reference*
    - **query-interval** *number*
    - **query-last-member-interval** *number*
    - **query-response-interval** *number*
    - **robust-count** *number*
    - **send-queries** *boolean*
    - **version** *keyword*
  - **ingress**
    - **qos**
      - **policy-name** *reference*
      - **queuing-type** *keyword*
  - **mac-da-hashing** *boolean*



configure subscriber-mgmt msap-policy vpls-only-sap-parameters split-horizon-group

```

- split-horizon-group string
- pfc
  - association string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - association-release-timeout (keyword | number)
  - bfd-expedited-path-down boolean
  - description string
  - heartbeat
    - interval number
    - retries number
    - timeout number
  - interface
    - name string
    - router-instance string
  - nat
    - nat-group reference
    - wlan-gw-group reference
  - node-id
    - fqdn string
    - use-ip-address
  - path-restoration-time number
  - peer
    - ip-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - python-policy reference
  - tx
    - retries number
    - timeout number
    - ttl number
- pim-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
- ppp-policy string
  - allow-same-circuit-id-for-dhcp boolean
  - apply-groups reference
  - apply-groups-exclude reference
  - cookies boolean
  - default-pap-password string
  - default-user-name string
  - description string
  - force-ppp-mtu-gt-1492 boolean
  - ipcp-subnet-negotiation boolean
  - keepalive
    - hold-up-multiplier number
    - interval number
  - lcp-ignore-identifier boolean
  - lcp-ignore-magic-numbers boolean
  - max-sessions-per-cid
    - allow-sessions-without-cid boolean
    - limit number
  - max-sessions-per-mac number
  - mlppp
    - accept-mrru boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - endpoint
      - ip (ipv4-address | keyword)
      - mac (mac-address | keyword)
    - short-sequence-numbers boolean
  - ncp-renegotiation keyword
  - pado-ac-name string
  - pado-delay number

```

configure subscriber-mgmt ppp-policy ppp-authentication

- **ppp-authentication** *keyword*
- **ppp-chap-challenge-length**
  - **max** *number*
  - **min** *number*
- **ppp-initial-delay** *boolean*
- **ppp-mtu** *number*
- **ppp-options**
  - **custom-option protocol** *keyword option-number number*
  - **address** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ascii-string** *string*
  - **empty**
  - **hex-string** *string*
  - **re-establish-session** *boolean*
  - **reject-unconfigured-ncp** *boolean*
  - **reply-on-padt** *boolean*
  - **session-timeout** *number*
  - **sid-allocation** *keyword*
  - **unique-sid** *keyword*
- **pppoe-client-policy** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **keepalive**
    - **hold-up-multiplier** *number*
    - **interval** *number*
  - **mru** *number*
  - **mtu** *number*
  - **python-policy** *reference*
  - **restart-backoff**
    - **initial-time** *number*
    - **max-time** *number*
  - **stack**
    - **ipv4** *boolean*
    - **ipv6-slaac** *boolean*
- **radius-accounting-policy** *string*
  - **acct-tunnel-connection-fmt** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **custom-record**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **queue** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **e-counters**
      - **in-profile-octets-discarded-count** *boolean*
      - **in-profile-octets-forwarded-count** *boolean*
      - **in-profile-packets-discarded-count** *boolean*
      - **in-profile-packets-forwarded-count** *boolean*
      - **out-profile-octets-discarded-count** *boolean*
      - **out-profile-octets-forwarded-count** *boolean*
      - **out-profile-packets-discarded-count** *boolean*
      - **out-profile-packets-forwarded-count** *boolean*
    - **i-counters**
      - **all-octets-offered-count** *boolean*
      - **all-packets-offered-count** *boolean*
      - **high-octets-discarded-count** *boolean*
      - **high-octets-offered-count** *boolean*
      - **high-packets-discarded-count** *boolean*
      - **high-packets-offered-count** *boolean*
      - **in-profile-octets-forwarded-count** *boolean*
      - **in-profile-packets-forwarded-count** *boolean*

configure subscriber-mgmt radius-accounting-policy custom-record queue i-counters low-octets-discarded-count

- **low-octets-discarded-count** *boolean*
- **low-octets-offered-count** *boolean*
- **low-packets-discarded-count** *boolean*
- **low-packets-offered-count** *boolean*
- **out-profile-octets-forwarded-count** *boolean*
- **out-profile-packets-forwarded-count** *boolean*
- **uncoloured-octets-offered-count** *boolean*
- **uncoloured-packets-offered-count** *boolean*
- **ref-queue**
  - **all**
  - **e-counters**
    - **in-profile-octets-discarded-count** *boolean*
    - **in-profile-octets-forwarded-count** *boolean*
    - **in-profile-packets-discarded-count** *boolean*
    - **in-profile-packets-forwarded-count** *boolean*
    - **out-profile-octets-discarded-count** *boolean*
    - **out-profile-octets-forwarded-count** *boolean*
    - **out-profile-packets-discarded-count** *boolean*
    - **out-profile-packets-forwarded-count** *boolean*
  - **i-counters**
    - **all-octets-offered-count** *boolean*
    - **all-packets-offered-count** *boolean*
    - **high-octets-discarded-count** *boolean*
    - **high-octets-offered-count** *boolean*
    - **high-packets-discarded-count** *boolean*
    - **high-packets-offered-count** *boolean*
    - **in-profile-octets-forwarded-count** *boolean*
    - **in-profile-packets-forwarded-count** *boolean*
    - **low-octets-discarded-count** *boolean*
    - **low-octets-offered-count** *boolean*
    - **low-packets-discarded-count** *boolean*
    - **low-packets-offered-count** *boolean*
    - **out-profile-octets-forwarded-count** *boolean*
    - **out-profile-packets-forwarded-count** *boolean*
    - **uncoloured-octets-offered-count** *boolean*
    - **uncoloured-packets-offered-count** *boolean*
  - **id** *reference*
  - **significant-change** *number*
- **delay-start-time** *number*
- **description** *string*
- **host-accounting**
  - **admin-state** *keyword*
  - **interim-update** *boolean*
- **include-radius-attribute**
  - **access-loop-options** *boolean*
  - **acct-authentic** *boolean*
  - **acct-delay-time** *boolean*
  - **acct-triggered-reason** *boolean*
  - **all-authorized-session-addresses** *boolean*
  - **apn** *boolean*
  - **bearer-fteid** *boolean*
  - **bonding-active-connections** *boolean*
  - **bonding-id** *boolean*
  - **brg-num-active-sessions** *boolean*
  - **called-station-id** *boolean*
  - **calling-station-id**
    - **type** *keyword*
  - **circuit-id** *boolean*
  - **delegated-ipv6-prefix** *boolean*
  - **detailed-acct-attributes** *boolean*
  - **dhcp-vendor-class-id** *boolean*
  - **error-code** *boolean*
  - **firewall-info** *boolean*
  - **framed-interface-id** *boolean*

configure subscriber-mgmt radius-accounting-policy include-radius-attribute framed-ip-address

```

- framed-ip-address boolean
- framed-ip-netmask boolean
- framed-ipv6-prefix boolean
- framed-ipv6-route boolean
- framed-route boolean
- imei boolean
- imsi boolean
- ipv6-address boolean
- lanext-bridge-id boolean
- lanext-device-type boolean
- lanext-route-distinguisher boolean
- lanext-route-target boolean
- lanext-vni boolean
- mac-address boolean
- msisdn boolean
- nas-identifier boolean
- nas-port
  - bit-spec string
- nas-port-id
  - prefix-string string
  - suffix keyword
- nas-port-type
  - type (keyword | number)
- nat-port-range boolean
- remote-id boolean
- sla-profile boolean
- spi-sharing-id boolean
- std-acct-attributes boolean
- steering-profile boolean
- sub-profile boolean
- subscriber-id boolean
- tunnel-client-attrs boolean
- tunnel-server-attrs boolean
- uli boolean
- user-name boolean
- v6-aggregate-stats boolean
- wifi-num-attached-ues boolean
- wifi-rssi boolean
- wifi-ssid-vlan boolean
- xconnect-tunnel-home-address boolean
- mcs-interval
  - interval (keyword | number)
- queue-instance-accounting
  - admin-state keyword
  - interim-update boolean
- radius-server-policy reference
- session-accounting
  - admin-state keyword
  - host-update boolean
  - interim-update boolean
- session-id-format keyword
- triggered-updates
  - gtp-change
    - sl-release boolean
    - service-request boolean
    - teidc-change boolean
    - teidu-change boolean
    - uli-change boolean
  - gtp-mobility boolean
- update-interval
  - interval number
  - jitter (keyword | number)
- radius-authentication-policy string
- apply-groups reference

```

configure subscriber-mgmt radius-authentication-policy apply-groups-exclude

```

- apply-groups-exclude reference
- description string
- fallback
  - action
    - accept
    - user-db string
  - force-probing boolean
- include-radius-attribute
  - access-loop-options boolean
  - acct-session-id
    - type keyword
  - apn boolean
  - called-station-id boolean
  - calling-station-id
    - type keyword
  - circuit-id boolean
  - dhcp-options boolean
  - dhcp-vendor-class-id boolean
  - dhcp6-options boolean
  - gprs-negotiated-qos-profile boolean
  - imei boolean
  - imsi boolean
  - mac-address boolean
  - msisdn boolean
  - nas-identifier boolean
  - nas-port
    - bit-spec string
  - nas-port-id
    - prefix-string string
    - suffix keyword
  - nas-port-type
    - type (keyword | number)
  - pppoe-service-name boolean
  - rat-type boolean
  - remote-id boolean
  - sap-session-index boolean
  - tunnel-server-atrs boolean
  - uli boolean
  - wifi-num-attached-ues boolean
  - wifi-ssid-vlan boolean
  - xconnect-tunnel-home-address boolean
- password string
- ppp-user-name
  - domain-name string
  - domain-operation keyword
- pppoe-access-method keyword
- radius-server-policy reference
- re-authentication boolean
- send-acct-stop-on-fail
  - on-accept-failure boolean
  - on-reject boolean
  - on-request-failure boolean
- user-name
  - domain-name string
  - domain-operation keyword
  - format keyword
  - gtp-format keyword
  - mac-format string
- rip-policy string
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-key string
  - authentication-type keyword
  - description string

```

configure subscriber-mgmt router-advertisement-policy

- **router-advertisement-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **force-mcast** *keyword*
- **max-advertisement-interval** *number*
- **min-advertisement-interval** *number*
- **options**
  - **current-hop-limit** *number*
  - **dns**
    - **include-rdnss** *boolean*
    - **rdnss-lifetime** (*number* | *keyword*)
  - **managed-configuration** *boolean*
  - **mtu** (*number* | *keyword*)
  - **other-stateful-configuration** *boolean*
  - **reachable-time** *number*
  - **retransmit-timer** *number*
  - **router-lifetime** (*number* | *keyword*)
- **prefix-options**
  - **stateful**
    - **auto-lifetimes** *boolean*
    - **on-link** *boolean*
    - **preferred-lifetime** (*number* | *keyword*)
    - **valid-lifetime** (*number* | *keyword*)
  - **stateless**
    - **on-link** *boolean*
    - **preferred-lifetime** (*number* | *keyword*)
    - **valid-lifetime** (*number* | *keyword*)
- **sap-template** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **cpu-protection**
  - **ip-src-monitoring**
  - **mac-monitoring**
  - **policy-id** *reference*
- **description** *string*
- **dist-cpu-protection** *reference*
- **hold-time** (*number* | *keyword*)
- **shcv-policy** *string*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **layer-3**
  - **source-ip-origin** *keyword*
  - **unnumbered-source-ip** *string*
- **periodic**
  - **action** *keyword*
  - **admin-state** *keyword*
  - **interval** *number*
  - **retry-count** *number*
  - **timeout** *number*
- **trigger**
  - **host-limit-exceeded**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **retry-count** *number*
    - **timeout** *number*
  - **inactivity**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **retry-count** *number*
    - **timeout** *number*
  - **ip-conflict**

configure subscriber-mgmt shcv-policy trigger ip-conflict admin-state

- **admin-state** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **retry-count** *number*
- **timeout** *number*
- **mac-learning**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **retry-count** *number*
  - **timeout** *number*
- **mobility**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **retry-count** *number*
  - **timeout** *number*
- **vpls**
  - **source-ip** *string*
  - **source-mac** *string*
- **sla-profile** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **control**
    - **cups** *boolean*
    - **local** *boolean*
  - **credit-control-policy** *reference*
  - **def-instance-sharing** *keyword*
  - **description** *string*
  - **egress**
    - **bonding-selection**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **rate-thresholds**
        - **high** *number*
        - **low** *number*
      - **weight**
        - **change** *number*
        - **initial** *number*
    - **ip-filter** *reference*
    - **ipv6-filter** *reference*
    - **qos**
      - **hs-agg-rate** *number*
      - **qos-marking-from-sap** *boolean*
      - **sap-egress**
        - **overrides**
          - **hs-queue-stat-mode** *keyword*
          - **hs-wrr-group** *reference*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
            - **hs-class-weight** *number*
            - **rate** (*number* | *keyword*)
          - **policer** *reference*
            - **apply-groups** *reference*
            - **apply-groups-exclude** *reference*
            - **cbs** (*number* | *keyword*)
            - **mbs** (*number* | *keyword*)
            - **packet-byte-offset** *number*
            - **rate**
              - **cir** (*number* | *keyword*)
              - **pir** (*number* | *keyword*)
            - **stat-mode** *keyword*
          - **queue** *reference*
            - **apply-groups** *reference*

configure subscriber-mgmt sla-profile egress qos sap-egress overrides queue apply-groups-exclude

```

    - apply-groups-exclude reference
    - avg-frame-overhead decimal-number
    - cbs (number | keyword)
    - high-prio-only (number | keyword)
    - hs-class-weight number
    - hs-wred-queue
      - policy reference
    - hs-wrr-weight number
    - mbs (number | keyword)
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
      - stat-mode keyword
    - policy-name reference
    - port-parent-location keyword
  - scheduler-policy
  - overrides
    - scheduler reference
    - apply-groups reference
    - apply-groups-exclude reference
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
  - use-ingress-l2tp-dscp boolean
- report-rate
- agg-rate
- policer number
- pppoe-actual-rate
- rfc5515-actual-rate
- scheduler string
- host-limits
- ipv4
  - arp number
  - dhcp number
  - overall number
  - ppp number
- ipv6
  - overall number
  - pd-ipoe-dhcp number
  - pd-overall number
  - pd-ppp-dhcp number
  - wan-ipoe-dhcp number
  - wan-ipoe-slaac number
  - wan-overall number
  - wan-ppp-dhcp number
  - wan-ppp-slaac number
- lac-overall number
- overall number
- remove-oldest boolean
- idle-timeout
  - apply-groups reference
  - apply-groups-exclude reference
  - category reference
    - action keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - timeout number
  - category-map-name reference
- ingress
  - ip-filter reference
  - ipv6-filter reference
  - qos
    - sap-ingress

```



configure subscriber-mgmt sla-profile ingress qos sap-ingress overrides

```

- overrides
  - policer reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - mbs (number | keyword)
    - packet-byte-offset number
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - queue reference
    - apply-groups reference
    - apply-groups-exclude reference
    - cbs (number | keyword)
    - high-prio-only (number | keyword)
    - mbs (number | keyword)
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - stat-mode keyword
  - policy-name reference
  - queuing-type keyword
- report-rate
  - agg-rate
  - policer number
  - pppoe-actual-rate
  - rfc5515-actual-rate
  - scheduler string
- one-time-http-redirection
  - ip-filter reference
- pfc-mappings
  - session-qer
    - downlink
      - aggregate-rate
      - arbiter string
      - policer number
      - queue number
      - scheduler string
    - uplink
      - arbiter string
      - policer number
      - queue number
      - scheduler string
  - session-limits
    - ipoe number
  - l2tp
    - lns number
    - lts number
    - overall number
  - overall number
  - pppoe
    - lac number
    - local number
    - overall number
- steering-profile string
  - access
    - router-instance string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - network
    - next-hop string
    - router-instance string

```

## configure subscriber-mgmt sub-ident-policy

- **sub-ident-policy** *string*
- **app-profile-map**
  - **entry** *string*
    - **app-profile** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **use-direct-map-as-default** *boolean*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **primary**
  - **admin-state** *keyword*
  - **script-url** *string*
- **secondary**
  - **admin-state** *keyword*
  - **script-url** *string*
- **sla-profile-map**
  - **entry** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sla-profile** *reference*
  - **use-direct-map-as-default** *boolean*
- **strings-from-option** *number*
- **sub-profile-map**
  - **entry** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **sub-profile** *reference*
  - **use-direct-map-as-default** *boolean*
- **tertiary**
  - **admin-state** *keyword*
  - **script-url** *string*
- **sub-mcac-policy** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **bandwidth**
    - **mandatory** (*number* | *keyword*)
    - **total** (*number* | *keyword*)
  - **description** *string*
- **sub-profile** *string*
  - **accounting-policy** *reference*
  - **accu-stats-policy** *reference*
  - **ancp**
    - **ancp-policy** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **collect-stats** *boolean*
  - **control**
    - **cups** *boolean*
    - **local** *boolean*
  - **description** *string*
  - **egress**
    - **lag-per-link-hash**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **class** *number*
      - **weight** *number*
  - **qos**
    - **agg-rate**
      - **adaptation-rule** *keyword*
      - **burst-limit** (*number* | *keyword*)

configure subscriber-mgmt sub-profile egress qos agg-rate min-resv-bw

```

- min-resv-bw number
- queue-frame-based-accounting boolean
- rate number
- encap-offset
- type keyword
- hs-agg-rate number
- hs-low-burst-max-class number
- hs-min-resv-bw number
- policer-control-policy
- overrides
  - root
    - apply-groups reference
    - apply-groups-exclude reference
    - max-rate (number | keyword)
    - priority-mbs-thresholds
      - min-thresh-separation (number | keyword)
      - priority number
        - apply-groups reference
        - apply-groups-exclude reference
        - mbs-contribution (number | keyword)
    - policy-name reference
  - scheduler-policy
  - overrides
    - scheduler reference
    - apply-groups reference
    - apply-groups-exclude reference
    - rate
      - cir (number | keyword)
      - pir (number | keyword)
    - policy-name reference
- firewall-policy reference
- host-limits
- ipv4
  - arp number
  - dhcp number
  - overall number
  - ppp number
- ipv6
  - overall number
  - pd-ipoe-dhcp number
  - pd-overall number
  - pd-ppp-dhcp number
  - wan-ipoe-dhcp number
  - wan-ipoe-slaac number
  - wan-overall number
  - wan-ppp-dhcp number
  - wan-ppp-slaac number
- lac-overall number
- overall number
- host-tracking-policy reference
- hs-sla-mode keyword
- igmp-policy reference
- ingress
- qos
  - policer-control-policy
  - overrides
    - root
      - apply-groups reference
      - apply-groups-exclude reference
      - max-rate (number | keyword)
      - priority-mbs-thresholds
        - min-thresh-separation (number | keyword)
        - priority number
          - apply-groups reference

```

configure subscriber-mgmt sub-profile ingress qos policer-control-policy overrides root priority-mbs-thresholds priority apply-groups-exclude

```

    - apply-groups-exclude reference
    - mbs-contribution (number | keyword)
  - policy-name reference
- scheduler-policy
- overrides
  - scheduler reference
  - apply-groups reference
  - apply-groups-exclude reference
  - rate
    - cir (number | keyword)
    - pir (number | keyword)
  - policy-name reference
- mld-policy reference
- nat
  - access-mode keyword
  - allow-bypass boolean
  - policy reference
  - prefix-list reference
- pim-policy reference
- preference number
- radius-accounting
  - policy reference
  - session-optimized-stop boolean
- secondary-shaper-hashing boolean
- session-limits
  - ipoe number
- l2tp
  - lns number
  - lts number
  - overall number
- overall number
- pppoe
  - lac number
  - local number
  - overall number
- sla-profile-map
  - entry string
  - apply-groups reference
  - apply-groups-exclude reference
  - sla-profile reference
  - use-direct-map-as-default boolean
- sub-mcac-policy reference
- upnp-policy reference
- volume-stats-type keyword
- vport-hashing boolean
- subscriber-interface-statistics
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- svlan-statistics
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- system-behavior
  - apply-groups reference
  - apply-groups-exclude reference
  - legacy-dns-nbns boolean
- up-resiliency
  - apply-groups reference
  - apply-groups-exclude reference
  - fate-sharing-group-template string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string

```

configure subscriber-mgmt up-resiliency fate-sharing-group-template gratuitous-arp

- **gratuitous-arp** *keyword*
- **path-restoration-state** *keyword*
- **redundant-interface**
  - **name** *string*
  - **service** *string*
- **uplink-forwarding-while-standby** *boolean*
- **vrgw**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **brg-profile** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **connectivity-verification**
      - **admin-state** *keyword*
      - **count** *number*
      - **retry-time** *number*
      - **timeout** *number*
    - **description** *string*
    - **hold-time** *number*
    - **home-pool**
      - **lease-time** *number*
      - **option** (*number* | *keyword*)
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **ascii-string** *string*
        - **duration** *number*
        - **empty**
        - **hex-string** *string*
        - **ipv4-address** *string*
        - **netbios-node-type** *keyword*
      - **standby-ip-lifetime** *number*
    - **subnet**
      - **end** *string*
      - **prefix** *string*
      - **start** *string*
    - **initial-hold-time** *number*
    - **radius-authentication**
      - **password** *string*
      - **server-policy** *reference*
    - **radius-proxy-server** *string* **name** *string*
    - **sla-profile-string** *string*
    - **sub-profile-string** *string*
    - **uplink-initial-wait** *number*
  - **lanext**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **router-target-as-number** *number*
  - **wlan-gw**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **queries**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **tunnel** *string*
      - **access-point-mac-address-learning-status** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **calculate-counts** *boolean*
      - **encapsulation**
        - **gre** *boolean*
        - **l2** *boolean*
        - **l2tp** *boolean*
        - **vxlan** *boolean*
      - **l2**

configure subscriber-mgmt wlan-gw queries tunnel l2 inner-vlan

```

- inner-vlan number
- outer-vlan number
- sap string
- l3
- address-type keyword
- local-address (ipv4-address-no-zone | ipv6-address-no-zone)
- remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
- router-instance string
- ues
- maximum number
- minimum number
- state
- cross-connect boolean
- dsm boolean
- esm boolean
- l2 boolean
- migrant boolean
- ue string
- address
- dhcp6-na string
- ipv4 string
- slaac string
- type keyword
- apply-groups reference
- apply-groups-exclude reference
- bridge-domain number
- connection-state
- already-signed-in boolean
- authorized-only boolean
- cross-connect boolean
- data-triggered boolean
- delete-pending boolean
- dhcp-triggered boolean
- dsm boolean
- esm boolean
- gtp-authorized boolean
- ip-assigned boolean
- ip-assigned-authorized boolean
- l2 boolean
- portal boolean
- mac-address string
- soft-quota-exhausted boolean
- tunnel
- encapsulation keyword
- local-address (ipv4-address-no-zone | ipv6-address-no-zone)
- remote-address (ipv4-address-no-zone | ipv6-address-no-zone)
- router-instance string
- vlan number
- wlan-gw-group
- id number
- member number
- virtual-chassis-identifier string

```

### 3.45.1 subscriber-mgmt command descriptions

#### subscriber-mgmt

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a>
Tree	<a href="#">subscriber-mgmt</a>
Description	Commands in this context configure subscriber management attributes, policies, and profiles.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### accu-stats-policy [\[name\]](#) *string*

Synopsis	Enter the <b>accu-stats-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i>
Tree	<a href="#">accu-stats-policy</a>
Description	<p>Commands in this context configure a storage policy for cumulative statistics for subscribers.</p> <p>The policy defines the direction for the policer or the queue to be stored.</p> <p>The policy stores subscriber statistics even if the subscriber session has ended. The subscriber statistics can be viewed even if the subscriber is offline.</p> <p>When the subscriber session ends, the statistics are added to the past statistics stored in memory so that all previous session statistics are accumulated. The accumulated statistics are not persistent; they are only stored in memory and reset to zero when the chassis reboots.</p>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

#### [\[name\]](#) *string*

Synopsis	Policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i>
Tree	<a href="#">accu-stats-policy</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **egress** [[type](#)] *keyword id number*

Synopsis	Add a list entry for <b>egress</b>
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">egress</a> <i>keyword id number</i>
Tree	<a href="#">egress</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[type]** *keyword*

Synopsis	Type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">egress</a> <i>keyword id number</i>
Tree	<a href="#">egress</a>
Options	queue, policer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**id number**

Synopsis	Queue or policer ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">egress</a> <i>keyword</i> <i>id number</i>
Tree	<a href="#">egress</a>
Range	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ingress** [[type](#)] *keyword* *id number*

Synopsis	Add a list entry for <b>ingress</b>
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">ingress</a> <i>keyword</i> <i>id number</i>
Tree	<a href="#">ingress</a>
Max. Instances	4
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[type]** *keyword*

Synopsis	Type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">ingress</a> <i>keyword</i> <i>id number</i>
Tree	<a href="#">ingress</a>
Options	queue, policer
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**id number**

Synopsis	Queue or policer ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">accu-stats-policy</a> <i>string</i> <a href="#">ingress</a> <i>keyword</i> <i>id number</i>
Tree	<a href="#">ingress</a>
Range	1 to 63

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ancp

Synopsis	Enter the <b>ancp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp</a>
Tree	<a href="#">ancp</a>
Description	Commands in this context configure Access Node Control Protocol (ANCP) settings.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ancp-policy [[name](#)] *string*

Synopsis	Enter the <b>ancp-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i>
Tree	<a href="#">ancp-policy</a>
Description	<p>Commands in this context configure the specified ANCP policy, which can be associated with either an ANCP string (static) or a subscriber-profile (dynamic), and define the behavior of hosts belonging to these profiles.</p> <p>ANCP policies control rates and subscribers based on port-up/port-down messages from the access node. When configured, the node stops SHCV to a host that is part of a port that is down (by port-down message). When a port-up message is received for the port that was down, the node initiates the SHCV process immediately to verify connectivity.</p> <p>When ANCP is used with ESM, all hosts of a subscriber are updated with the ANCP string last associated with the subscriber.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[name](#)] *string*

Synopsis	Policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i>
Tree	<a href="#">ancp-policy</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rate-adjustment *number*

Synopsis	Rate adjustment for the scheduler
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">egress rate-adjustment</a> <i>number</i>
Tree	<a href="#">rate-adjustment</a>
Description	This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as:  $\text{DSLAM\_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$
Range	1 to 200
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rate-modify

Synopsis	Enter the <b>rate-modify</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">egress rate-modify</a>
Tree	<a href="#">rate-modify</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**agg-rate**

Synopsis	Maximum total rate for all subscriber egress queues
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-modify</a> <a href="#">agg-rate</a>
Tree	<a href="#">agg-rate</a>
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**scheduler** *string*

Synopsis	Scheduler to be applied for rate modification
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-modify</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rate-monitor**

Synopsis	Enter the <b>rate-monitor</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-monitor</a>
Tree	<a href="#">rate-monitor</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**alarm** *boolean*

Synopsis	Generate SNMP notification when monitor event is raised
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">egress</a> <a href="#">rate-monitor</a> <a href="#">alarm</a> <i>boolean</i>
Tree	<a href="#">alarm</a>
Description	When configured to <b>true</b> , the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate.

When configured to **false**, no alarm is generated.

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate number**

Synopsis	Rate below which the system generates an event
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">egress rate-monitor rate number</a>
Tree	<a href="#">rate</a>
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate-reduction number**

Synopsis	Constant rate reduction to specified DSLAM rate
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">egress rate-reduction number</a>
Tree	<a href="#">rate-reduction</a>
Description	This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as:  $\text{DSLAM\_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate-adjustment** *number*

Synopsis Rate adjustment for the scheduler

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) **rate-adjustment** *number*

Tree [rate-adjustment](#)

Description This command configures the rate adjustment for the scheduler. This setting is used when the rate returned by the DSLAM is calculated with a different encapsulation than the SR node. The node adjusts the rate by the percentage specified as:  
$$\text{DSLAM\_RATE} * (\text{adjustment rate})/100 \text{ — (rate reduction)}$$

Range 1 to 200

Units percent

Default 100

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate-modify**

Synopsis Enter the **rate-modify** context

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) **rate-modify**

Tree [rate-modify](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis Scheduler to be applied for rate modification

Context **configure** [subscriber-mgmt](#) [ancp](#) [ancp-policy](#) *string* [ingress](#) **rate-modify** **scheduler** *string*

Tree [scheduler](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rate-monitor**

Synopsis	Enter the <b>rate-monitor</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">ingress</a> <a href="#">rate-monitor</a>
Tree	<a href="#">rate-monitor</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**alarm** *boolean*

Synopsis	Generate SNMP notification when monitor event is raised
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">ingress</a> <a href="#">rate-monitor</a> <a href="#">alarm</a> <i>boolean</i>
Tree	<a href="#">alarm</a>
Description	When configured to <b>true</b> , the system generates an alarm (trap) to the management system including the rate, the ANCP policy name, and the ANCP string when the monitored rate is below the configured rate.  When configured to <b>false</b> , no alarm is generated.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rate** *number*

Synopsis	Rate below which the system generates an event
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">ingress</a> <a href="#">rate-monitor</a> <a href="#">rate</a> <i>number</i>
Tree	<a href="#">rate</a>
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rate-reduction** *number*

Synopsis	Constant rate reduction to specified DSLAM rate
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">ingress</a> <a href="#">rate-reduction</a> <i>number</i>
Tree	<a href="#">rate-reduction</a>

Description	This command configures a constant rate reduction to the rate specified by the DSLAM. This setting is used if the node must adjust the rate to a value that is offset (for example by a fixed multicast dedicated bandwidth) compared to the total available on the DSLAM. The rate is calculated as: $\text{DSLAM\_RATE} * (\text{adjustment rate})/100 - (\text{rate reduction})$
Range	1 to 4294967295
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## port-down

Synopsis	Enter the <b>port-down</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <b>port-down</b>
Tree	<a href="#">port-down</a>
Description	Commands in this context configure the actions taken on port-down.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## suspend-shcv

Synopsis	Enable the <b>suspend-shcv</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <b>port-down suspend-shcv</b>
Tree	<a href="#">suspend-shcv</a>
Description	Commands in this context specify the configuration to suspend SHCV for the hosts defined with the ANCP policy.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## alarm *boolean*

Synopsis	Send an alarm before suspending SHCV
Context	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i> <b>port-down suspend-shcv alarm</b> <i>boolean</i>
Tree	<a href="#">alarm</a>
Default	false



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-time** *number*

Synopsis	Time that SHCV is suspended
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i> <a href="#">port-down</a> <a href="#">suspend-shcv</a> <b>hold-time</b> <i>number</i>
Tree	<a href="#">hold-time</a>
Description	This command configures the time that the node suspends SHCV. When unconfigured, SHCV is suspended until a port-up message is received.
Range	1 to 7200
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ancp-static-map**

Synopsis	Enter the <b>ancp-static-map</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <b>ancp-static-map</b>
Tree	<a href="#">ancp-static-map</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **multi-service-site-entry** [[ancp-string](#)] *string* [customer-name](#) *reference* [customer-site-name](#) *reference*

Synopsis	Enter the <b>multi-service-site-entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <b>multi-service-site-entry</b> <i>string</i> <a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i>
Tree	<a href="#">multi-service-site-entry</a>
Description	Commands in this context configure the ANCP key mapping (usually the circuit ID of the DSLAM port) to a customer, site, and scheduler name when Multi-Service site (MSS) is used.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ancp-string]** *string*

Synopsis	ANCP string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">multi-service-site-entry</a> <i>string</i> <a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i>
Tree	<a href="#">multi-service-site-entry</a>
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**customer-name** *reference*

Synopsis	Customer ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">multi-service-site-entry</a> <i>string</i> <a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i>
Tree	<a href="#">multi-service-site-entry</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**customer-site-name** *reference*

Synopsis	Service customer multi-service site name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">multi-service-site-entry</a> <i>string</i> <a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i>
Tree	<a href="#">multi-service-site-entry</a>
Reference	<b>configure</b> <a href="#">service</a> <a href="#">customer</a> <i>string</i> <a href="#">multi-service-site</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ancp-policy** *reference*

Synopsis	ANCP policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">multi-service-site-entry</a> <i>string</i> <a href="#">customer-name</a> <i>reference</i> <a href="#">customer-site-name</a> <i>reference</i> <a href="#">ancp-policy</a> <i>reference</i>
Tree	<a href="#">ancp-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-entry** [[ancp-string](#)] *string* [sap-id](#) *string*

Synopsis	Enter the <b>sap-entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">sap-entry</a> <i>string</i> <a href="#">sap-id</a> <i>string</i>
Tree	<a href="#">sap-entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[ancp-string]** *string*

Synopsis	ANCP key name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">sap-entry</a> <i>string</i> <a href="#">sap-id</a> <i>string</i>
Tree	<a href="#">sap-entry</a>
String Length	1 to 63
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-id** *string*

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ancp</a> <a href="#">ancp-static-map</a> <a href="#">sap-entry</a> <i>string</i> <a href="#">sap-id</a> <i>string</i>
Tree	<a href="#">sap-entry</a>
String Length	1 to 45
Notes	This element is part of a list key.

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ancp-policy** *reference*

Synopsis ANCP policy name  
Context **configure** [subscriber-mgmt ancp ancp-static-map sap-entry string sap-id string ancp-policy reference](#)  
Tree [ancp-policy](#)  
Reference **configure** [subscriber-mgmt ancp ancp-policy string](#)  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **authentication-origin**

Synopsis Enter the **authentication-origin** context  
Context **configure** [subscriber-mgmt authentication-origin](#)  
Tree [authentication-origin](#)  
Introduced 21.2.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overrides**

Synopsis Enter the **overrides** context  
Context **configure** [subscriber-mgmt authentication-origin overrides](#)  
Tree [overrides](#)  
Introduced 21.2.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **priority** [*id*] *number*

Synopsis Enter the **priority** list instance  
Context **configure** [subscriber-mgmt authentication-origin overrides priority number](#)  
Tree [priority](#)

Description	Commands in this context arrange the relative order of authentication priorities.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id] number**

Synopsis	Authentication origin priority override
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">authentication-origin overrides</a> <a href="#">priority</a> <i>number</i>
Tree	<a href="#">priority</a>
Description	This command configures the insert position of the authentication origin priority override.
Range	1 to 4294967295
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**source keyword**

Synopsis	Source of authentication priority
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">authentication-origin overrides</a> <a href="#">priority</a> <i>number</i> <a href="#">source</a> <i>keyword</i>
Tree	<a href="#">source</a>
Description	This command specifies the prioritization of authentication sources.
Options	python, diameter-gx, ludb, radius, diameter-nasreq, gtp, dhcp, local-address-assignment, pfc, config
Notes	This element is mandatory.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**auto-sub-id**

Synopsis	Enter the <b>auto-sub-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">auto-sub-id</a>
Tree	<a href="#">auto-sub-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **implicit-generation** *boolean*

Synopsis	Generate implicitly a subscriber ID when not provided
Context	<b>configure</b> <a href="#">subscriber-mgmt auto-sub-id implicit-generation</a> <i>boolean</i>
Tree	<a href="#">implicit-generation</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe-key** *keyword*

Synopsis	Auto-generated subscriber ID key1 for IPoE hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt auto-sub-id ipoe-key</a> <i>keyword</i>
Tree	<a href="#">ipoe-key</a>
Options	mac, sap-id, circuit-id, remote-id, dual-stack-remote-id, service-name
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-key** *keyword*

Synopsis	Auto-generated subscriber identifier key1 for PPP hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt auto-sub-id ppp-key</a> <i>keyword</i>
Tree	<a href="#">ppp-key</a>
Options	mac, sap-id, circuit-id, remote-id, session-id
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bgp-peering-policy** [*name*] *string*

Synopsis	Enter the <b>bgp-peering-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i>
Tree	<a href="#">bgp-peering-policy</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	BGP peer policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i>
Tree	<a href="#">bgp-peering-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**advertise-inactive** *boolean*

Synopsis	Advertise inactive BGP routes to other BGP peers
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">advertise-inactive</a> <i>boolean</i>
Tree	<a href="#">advertise-inactive</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**aggregator-id-zero** *boolean*

Synopsis	Add router ID to BGP aggregator path attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">aggregator-id-zero</a> <i>boolean</i>
Tree	<a href="#">aggregator-id-zero</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**as-override** *boolean*

Synopsis	Replace the peer ASN with the local ASN in AS Path
Context	<b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>as-override</b> <i>boolean</i>
Tree	<a href="#">as-override</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**asn-4-byte** *boolean*

Synopsis	Enable the use of 4-byte ASNs
Context	<b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>asn-4-byte</b> <i>boolean</i>
Tree	<a href="#">asn-4-byte</a>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication-key** *string*

Synopsis	BGP authentication key for all peers
Context	<b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 370
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication-keychain** *reference*

Synopsis	Keychain name used for the TCP session
Context	<b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <b>authentication-keychain</b> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Reference	<b>configure</b> <a href="#">system security keychains</a> <b>keychain</b> <i>string</i>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**bfd-liveness** *boolean*

Synopsis	Enable BFD
Context	<b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <a href="#">bfd-liveness</a> <i>boolean</i>
Tree	<a href="#">bfd-liveness</a>
Description	<p>When configured to <b>true</b>, this command enables the use of Bi-directional Forwarding Detection (BFD) to control the state of an ESM dynamic BGP peer that is set up with the BGP peering policy. The parameters used for the BFD session are configured in the BFD context of the group interface or retail subscriber interface.</p> <p>When configured to <b>false</b>, this command disables the use of BFD for new ESM dynamic BGP peers that are set up with the BGP peering policy.</p>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**client-reflect** *boolean*

Synopsis	Enable client reflection of routes to all client peers
Context	<b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <a href="#">client-reflect</a> <i>boolean</i>
Tree	<a href="#">client-reflect</a>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cluster** *string*

Synopsis	Cluster ID for route reflector server
Context	<b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <a href="#">cluster</a> <i>string</i>
Tree	<a href="#">cluster</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**connect-retry** *number*

Synopsis	BGP connect retry timer value
Context	<b>configure</b> <a href="#">subscriber-mgmt bgp-peering-policy</a> <i>string</i> <a href="#">connect-retry</a> <i>number</i>
Tree	<a href="#">connect-retry</a>
Range	1 to 65535

Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**damping** *boolean*

Synopsis	Use BGP route damping for learned routes
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>damping</b> <i>boolean</i>
Tree	<a href="#">damping</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**export** *reference*

Synopsis	Export route policies to control advertised routes
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>export</b> <i>reference</i>
Tree	<a href="#">export</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## family

Synopsis	Enter the <b>family</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>family</b>
Tree	<a href="#">family</a>
Description	Commands in this context specify the BGP address families supported by the ESM dynamic BGP peers. When no address family is configured, the IPv4 address family is supported on BGPv4 peers and the IPv6 address family is supported on BGPv6 peers.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4 *boolean*

Synopsis	Advertise MP-BGP support for the IPv4 address family
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>family</b> <a href="#">ipv4</a> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6 *boolean*

Synopsis	Advertise MP-BGP support for the IPv6 address family
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>family</b> <a href="#">ipv6</a> <i>boolean</i>
Tree	<a href="#">ipv6</a>
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fast-external-failover *boolean*

Synopsis	Enable/disable BGP fast external failover.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <b>fast-external-failover</b> <i>boolean</i>
Tree	<a href="#">fast-external-failover</a>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-time** *number*

Synopsis	BGP hold time before closing connection
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>hold-time</b> <i>number</i>
Tree	<b>hold-time</b>
Range	0   3 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import** *reference*

Synopsis	Import route policies to control advertised routes
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>import</b> <i>reference</i>
Tree	<b>import</b>
Reference	<b>configure</b> <b>policy-options</b> <b>policy-statement</b> <i>string</i>
Max. Instances	15
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **keepalive** *number*

Synopsis	BGP keepalive timer
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>keepalive</b> <i>number</i>
Tree	<b>keepalive</b>
Range	0 to 21845
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Local IP address used when communicating with BGP peers
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Context	<b>configure subscriber-mgmt bgp-peering-policy</b> <i>string</i> <b>local-address</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<b>local-address</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-as

Synopsis	Enter the <b>local-as</b> context
Context	<b>configure subscriber-mgmt bgp-peering-policy</b> <i>string</i> <b>local-as</b>
Tree	<b>local-as</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## as-number *number*

Synopsis	AS number to be advertised to peer
Context	<b>configure subscriber-mgmt bgp-peering-policy</b> <i>string</i> <b>local-as as-number</b> <i>number</i>
Tree	<b>as-number</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## private *boolean*

Synopsis	Hide local AS number in paths learned from peering
Context	<b>configure subscriber-mgmt bgp-peering-policy</b> <i>string</i> <b>local-as private</b> <i>boolean</i>
Tree	<b>private</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local-preference *number*

Synopsis	Local preference for incoming routes if not specified
Context	<b>configure subscriber-mgmt bgp-peering-policy</b> <i>string</i> <b>local-preference</b> <i>number</i>

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Tree	<a href="#">local-preference</a>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **loop-detect** *keyword*

Synopsis	Strategy for loop detection in the AS path
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">loop-detect</a> <i>keyword</i>
Tree	<a href="#">loop-detect</a>
Options	drop-peer, ignore-loop, off, discard-route
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **med-out** (*number* | *keyword*)

Synopsis	Multi-Exit Discriminator (MED) advertising
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">med-out</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">med-out</a>
Max. Range	0 to 4294967295
Options	igp-cost
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-route-advertisement** *number*

Synopsis	Minimum interval for prefix to be advertised to a peer
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">min-route-advertisement</a> <i>number</i>
Tree	<a href="#">min-route-advertisement</a>
Range	1 to 255
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**multihop** *number*

Synopsis	TTL value entered in IP header of packets sent to peer
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>multihop</b> <i>number</i>
Tree	<b>multihop</b>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**next-hop-self** *boolean*

Synopsis	Set net hop path attribute to self when advertising
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>next-hop-self</b> <i>boolean</i>
Tree	<b>next-hop-self</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**passive** *boolean*

Synopsis	Wait passively for BGP peer to connect
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>passive</b> <i>boolean</i>
Tree	<b>passive</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**peer-as** *number*

Synopsis	AS number for remote peer
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>bgp-peering-policy</b> <i>string</i> <b>peer-as</b> <i>number</i>
Tree	<b>peer-as</b>
Range	1 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preference** *number*

Synopsis	Route preference for routes learned via configured peer
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix-limits** [[family](#)] *keyword*

Synopsis	Enter the <b>prefix-limits</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">prefix-limits</a> <i>keyword</i>
Tree	<a href="#">prefix-limits</a>
Description	Commands in this context limit the number of BGP routes per address family received from a BGP peer and define the actions when crossing the configured maximum.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[family]** *keyword*

Synopsis	Address family to which the limit applies
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">prefix-limits</a> <i>keyword</i>
Tree	<a href="#">prefix-limits</a>
Options	ipv4, ipv6
Notes	This element is part of a list key.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**idle-timeout** *number*

Synopsis	Time BGP peering remains idle before reconnecting
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">prefix-limits</a> <i>keyword</i> <a href="#">idle-timeout</a> <i>number</i>
Tree	<a href="#">idle-timeout</a>
Description	This command configures the time in minutes before a BGP peer is automatically re-established after reaching the prefix limit.



When unconfigured, the BGP peer stays down until the operator performs a reset. This command and **log-only** cannot be configured simultaneously.

Range	1 to 1024
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **log-only** *boolean*

Synopsis	Send warning message at threshold instead of take-down
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">prefix-limits</a> <i>keyword</i> <a href="#">log-only</a> <i>boolean</i>
Tree	<a href="#">log-only</a>
Description	<p>When configured to <b>true</b>, the router disables the BGP session from being taken down upon reaching the prefix limit. Instead, only a warning message is sent when the limit is reached. A warning message is also sent when the configured threshold percentage of the limit is reached.</p> <p>This command and <b>idle-timeout</b> cannot be configured simultaneously.</p> <p>When configured to <b>false</b>, the router generates a log event and takes the BGP session down upon reaching the prefix limit.</p>
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum** *number*

Synopsis	Maximum number of routes to be learned from a peer
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">prefix-limits</a> <i>keyword</i> <a href="#">maximum</a> <i>number</i>
Tree	<a href="#">maximum</a>
Description	<p>This command configures the maximum number of BGP routes of the specified address family that can be received from a peer before administrative action is taken.</p> <p>When <b>log-only</b> is unconfigured, the BGP session is taken down whenever the limit of any family is exceeded even if the limits of the other family has not been exceeded.</p>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **post-import** *boolean*

Synopsis	Apply limit only to routes accepted by import policies
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">prefix-limits</a> <i>keyword</i> <a href="#">post-import</a> <i>boolean</i>
Tree	<a href="#">post-import</a>
Description	When configured to <b>true</b> , the system limits the number of routes that are accepted by import policies. Routes rejected by import policies are not counted against the configured limit.  When configured to <b>false</b> , the system limits the number of routes to all routes received from the peer.
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **threshold** *number*

Synopsis	Percentage threshold that triggers a warning message
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">prefix-limits</a> <i>keyword</i> <a href="#">threshold</a> <i>number</i>
Tree	<a href="#">threshold</a>
Range	1 to 100
Default	90
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remove-private**

Synopsis	Enable the <b>remove-private</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">remove-private</a>
Tree	<a href="#">remove-private</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **limited** *boolean*

Synopsis	Remove private AS numbers up to first public ASN encountered
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">remove-private</a> <a href="#">limited</a> <i>boolean</i>
Tree	<a href="#">limited</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **send-communities**

Synopsis	Enter the <b>send-communities</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">send-communities</a>
Tree	<a href="#">send-communities</a>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **extended** *boolean*

Synopsis	Send communities which includes VRF target handling
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">send-communities</a> <a href="#">extended</a> <i>boolean</i>
Tree	<a href="#">extended</a>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **standard** *boolean*

Synopsis	Send standard communities that existed before VPRNs
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">send-communities</a> <a href="#">standard</a> <i>boolean</i>
Tree	<a href="#">standard</a>
Introduced	16.0.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ttl-security** *number*

Synopsis	Minimum TTL value for incoming BGP packet
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">ttl-security</a> <i>number</i>

Tree	<a href="#">ttl-security</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Peer type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">bgp-peering-policy</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	no-type, internal, external
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**category-map** [[category-map-name](#)] *string*

Synopsis	Enter the <b>category-map</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i>
Tree	<a href="#">category-map</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[category-map-name]** *string*

Synopsis	Category map name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i>
Tree	<a href="#">category-map</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**activity-threshold** *number*

Synopsis	Threshold to determine whether an activity is ongoing
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>activity-threshold</b> <i>number</i>
Tree	<a href="#">activity-threshold</a>
Range	1 to 100000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**category** [[category-name](#)] *string*

Synopsis	Enter the <b>category</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>category</b> <i>string</i>
Tree	<a href="#">category</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[category-name]** *string*

Synopsis	Category name
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>category</b> <i>string</i>
Tree	<a href="#">category</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**credit-type-override** *keyword*

Synopsis	Credit type override in category map
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>category</b> <i>string</i> <b>credit-type-override</b> <i>keyword</i>
Tree	<a href="#">credit-type-override</a>

Options	volume, time
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## default-credit

Synopsis	Enter the <b>default-credit</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>default-credit</b>
Tree	<a href="#">default-credit</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## time *number*

Synopsis	Default time credit
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>default-credit</b> <i>time number</i>
Tree	<a href="#">time</a>
Range	1 to 4294967295
Units	seconds
Notes	The following elements are part of a choice: <b>time</b> or <b>volume</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## volume

Synopsis	Enable the <b>volume</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>default-credit</b> <b>volume</b>
Tree	<a href="#">volume</a>
Notes	The following elements are part of a choice: <b>time</b> or <b>volume</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**unit keyword**

Synopsis	Unit for the default volume credit
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map string category string default-credit volume unit keyword</a>
Tree	<a href="#">unit</a>
Options	bytes, kilobytes, megabytes, gigabytes
Default	bytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**value number**

Synopsis	Default volume credit
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map string category string default-credit volume value number</a>
Tree	<a href="#">value</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map string category string description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map string category string egress</a>
Tree	<a href="#">egress</a>

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer** *number*

Synopsis	Egress policers for this category
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">egress</a> <a href="#">policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Max. Instances	63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **queue** *number*

Synopsis	Egress queues for this category
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">egress</a> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Max. Instances	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **exhausted-credit-service-level**

Synopsis	Enter the <b>exhausted-credit-service-level</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a>
Tree	<a href="#">exhausted-credit-service-level</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-filter

Synopsis	Enter the <b>ip-filter</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a>
Tree	<a href="#">ip-filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## entry [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [*id*] *number*

Synopsis	IP filter entry ID
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## action

Synopsis Enter the **action** context  
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **action**  
Tree [action](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## drop

Synopsis Packets matching the filter entry are dropped  
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **action** **drop**  
Tree [drop](#)  
Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## forward

Synopsis Packets matching the filter entry are forwarded  
Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **action** **forward**  
Tree [forward](#)  
Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## http-redirect

Synopsis Enable the **http-redirect** context

Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect</a>
Tree	<a href="#">http-redirect</a>
Notes	The following elements are part of a choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**allow-override** *boolean*

Synopsis	Allow URL to be overridden by RADIUS/Diameter
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect</a> <a href="#">allow-override</a> <i>boolean</i>
Tree	<a href="#">allow-override</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**url** *string*

Synopsis	URL that is used to redirect the packets
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect</a> <a href="#">url</a> <i>string</i>
Tree	<a href="#">url</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## match

Synopsis Enter the **match** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **match**

Tree [match](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dscp keyword

Synopsis DSCP to match

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **match** **dscp** *keyword*

Tree [dscp](#)

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dst-port

Synopsis Enter the **dst-port** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* **match** **dst-port**

Tree [dst-port](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## eq number

Synopsis Port equal

Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gt** *number*

Synopsis	Port greater than
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port gt</a> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lt** *number*

Synopsis	Port less than
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port lt</a> <i>number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port range</a>
Tree	<a href="#">range</a>

Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port range end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match dst-port range start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**fragment keyword**

Synopsis	Fragmentation to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match fragment</a> <i>keyword</i>
Tree	<a href="#">fragment</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match icmp</a>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## code number

Synopsis	ICMP code to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match icmp code</a> <i>number</i>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type number

Synopsis	ICMP type to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match icmp type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-option

Synopsis	Enter the <b>ip-option</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match ip-option</a>
Tree	<a href="#">ip-option</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mask** *number*

Synopsis IP option mask

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [ip-option](#) [mask](#) *number*

Tree [mask](#)

Range 0 to 255

Default 0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *number*

Synopsis First IP option value for the IP header

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [ip-option](#) [type](#) *number*

Tree [type](#)

Range 0 to 255

Default 0

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **multiple-option** *boolean*

Synopsis Match the multiple option

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [multiple-option](#) *boolean*

Tree [multiple-option](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option-present** *boolean*

Synopsis Match the present option



Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match option-present</a> <i>boolean</i>
Tree	<a href="#">option-present</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **protocol** (*number* | *keyword*)

Synopsis	IPv4 protocol to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match protocol</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **src-ip** *string*

Synopsis	Source IP address and mask to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match src-ip</a> <i>string</i>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**eq number**

Synopsis	Port equal
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number match src-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gt number**

Synopsis	Port greater than
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number match src-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lt number**

Synopsis	Port less than
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number match src-port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enable the <b>range</b> context
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Context	<b>configure subscriber-mgmt category-map</b> <i>string category string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number match src-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the port range to match
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number match src-port range</i> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	Lower bound of the port range to match
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number match src-port range</i> <b>start</b> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tcp-flags**

Synopsis	Enter the <b>tcp-flags</b> context
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string</i> <a href="#">exhausted-credit-service-level egress ip-filter entry</a> <i>number match</i> <b>tcp-flags</b>
Tree	<a href="#">tcp-flags</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ack** *boolean*

Synopsis Check for ACK bit

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [tcp-flags](#) **ack** *boolean*

Tree [ack](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **syn** *boolean*

Synopsis Check for SYN bit

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ip-filter](#) [entry](#) *number* [match](#) [tcp-flags](#) **syn** *boolean*

Tree [syn](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-filter**

Synopsis Enter the **ipv6-filter** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) **ipv6-filter**

Tree [ipv6-filter](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [*id*] *number*

Synopsis Enter the **entry** list instance

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [egress](#) [ipv6-filter](#) **entry** *number*

Tree [entry](#)

Max. 10

Instances

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	IP filter entry ID
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <b>action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**drop**

Synopsis	Packets matching the filter entry are dropped
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <b>action drop</b>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a choice: <b>drop</b> or <b>forward</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**forward**

Synopsis	Packets matching the filter entry are forwarded
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Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level egress ipv6-filter entry number action forward</i>
Tree	<a href="#">forward</a>
Notes	The following elements are part of a choice: <b>drop</b> or <b>forward</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level egress ipv6-filter entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level egress ipv6-filter entry number match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dscp** *keyword*

Synopsis	DSCP to match
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level egress ipv6-filter entry number match dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-port</b>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **eq number**

Synopsis	Port equal
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-port</b> <b>eq</b> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gt number**

Synopsis	Port greater than
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>dst-port</b> <b>gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lt number**

Synopsis	Port less than
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>lt</b> <i>number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis	Upper bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>range</b> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis	Lower bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match dst-port</a> <b>range</b> <b>start</b> <i>number</i>



Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match icmp</a>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## code number

Synopsis	ICMP code to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match icmp code</a> <i>number</i>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type number

Synopsis	ICMP type to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match icmp type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match next-header</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**src-ip** *string*

Synopsis	Source IP address and mask as the match condition
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match src-ip</a> <i>string</i>
Tree	<a href="#">src-ip</a>
Default	0::0 0::0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**eq** *number*

Synopsis	Port equal
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">match src-port eq</a> <i>number</i>
Tree	<a href="#">eq</a>

Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gt number**

Synopsis	Port greater than
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>gt</b> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lt number**

Synopsis	Port less than
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>lt</b> <i>number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">egress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <b>range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end number**

Synopsis Upper bound of the port range to match

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number* [match src-port range end](#) *number*

Tree [end](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start number**

Synopsis Lower bound of the port range to match

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number* [match src-port range start](#) *number*

Tree [start](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tcp-flags**

Synopsis Enter the **tcp-flags** context

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level egress ipv6-filter entry](#) *number* [match tcp-flags](#)

Tree [tcp-flags](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ack boolean**

Synopsis Check for ACK bit

Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match tcp-flags ack</a> <i>boolean</i>
Tree	<a href="#">ack</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**syn** *boolean*

Synopsis	Check for SYN bit
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level egress ipv6-filter entry</a> <i>number</i> <a href="#">match tcp-flags syn</a> <i>boolean</i>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-filter**

Synopsis	Enter the <b>ip-filter</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter</a>
Tree	<a href="#">ip-filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
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Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	IP filter entry ID
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <b>action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**drop**

Synopsis	Packets matching the filter entry are dropped
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <b>action</b> <a href="#">drop</a>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## forward

Synopsis Packets matching the filter entry are forwarded

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [action](#) [forward](#)

Tree [forward](#)

Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## http-redirect

Synopsis Enable the **http-redirect** context

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [action](#) [http-redirect](#)

Tree [http-redirect](#)

Notes The following elements are part of a choice: **drop**, **forward**, or **http-redirect**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## allow-override *boolean*

Synopsis Allow URL to be overridden by RADIUS/Diameter

Context **configure** [subscriber-mgmt](#) [category-map](#) *string* [category](#) *string* [exhausted-credit-service-level](#) [ingress](#) [ip-filter](#) [entry](#) *number* [action](#) [http-redirect](#) [allow-override](#) *boolean*

Tree [allow-override](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## url *string*

Synopsis URL that is used to redirect the packets

Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect url</a> <i>string</i>
Tree	<a href="#">url</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dscp** *keyword*

Synopsis	DSCP to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match</a> <a href="#">dscp</a> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef,



	cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dst-ip string**

Synopsis	Destination IP address and mask to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map string category string</a> <a href="#">exhausted-credit-service-level ingress ip-filter entry number match dst-ip string</a>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map string category string</a> <a href="#">exhausted-credit-service-level ingress ip-filter entry number match dst-port</a>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **eq number**

Synopsis	Port equal
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map string category string</a> <a href="#">exhausted-credit-service-level ingress ip-filter entry number match dst-port eq number</a>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gt number**

Synopsis	Port greater than
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Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port gt number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lt** *number*

Synopsis	Port less than
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **end** *number*

Synopsis	Upper bound of the port range to match
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ip-filter entry number match dst-port range end number</i>
Tree	<a href="#">end</a>
Range	0 to 65535

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number match dst-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**fragment keyword**

Synopsis	Fragmentation to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number match fragment keyword</i>
Tree	<a href="#">fragment</a>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number match icmp</i>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**code number**

Synopsis	ICMP code to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match icmp code</a> <i>number</i>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type number**

Synopsis	ICMP type to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match icmp type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-option**

Synopsis	Enter the <b>ip-option</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match ip-option</a>
Tree	<a href="#">ip-option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mask number**

Synopsis	IP option mask
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match ip-option mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	0 to 255
Default	0

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *number*

Synopsis	First IP option value for the IP header
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">ip-option</a> <b>type</b> <i>number</i>
Tree	<a href="#">type</a>
Range	0 to 255
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**multiple-option** *boolean*

Synopsis	Match the multiple option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">multiple-option</a> <b>boolean</b>
Tree	<a href="#">multiple-option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option-present** *boolean*

Synopsis	Match the present option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">option-present</a> <b>boolean</b>
Tree	<a href="#">option-present</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**protocol** (*number* | *keyword*)

Synopsis	IPv4 protocol to match
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">protocol</a> ( <i>number</i>   <i>keyword</i> )

Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### src-port

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### eq number

Synopsis	Port equal
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### gt number

Synopsis	Port greater than
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port gt</a> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lt number**

Synopsis	Port less than
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a> <b>lt</b> <i>number</i>
Tree	<b>lt</b>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a> <b>range</b>
Tree	<b>range</b>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port</a> <b>range end</b> <i>number</i>
Tree	<b>end</b>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **start** *number*

Synopsis	Lower bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match src-port range</a> <b>start</b> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tcp-flags**

Synopsis	Enter the <b>tcp-flags</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match tcp-flags</a>
Tree	<a href="#">tcp-flags</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ack** *boolean*

Synopsis	Check for ACK bit
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match tcp-flags</a> <b>ack</b> <i>boolean</i>
Tree	<a href="#">ack</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **syn** *boolean*

Synopsis	Check for SYN bit
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ip-filter entry</a> <i>number</i> <a href="#">match tcp-flags</a> <b>syn</b> <i>boolean</i>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**ipv6-filter**

Synopsis	Enter the <b>ipv6-filter</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a> <a href="#">ipv6-filter</a>
Tree	<a href="#">ipv6-filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a> <a href="#">ipv6-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	IP filter entry ID
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a> <a href="#">ipv6-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress</a> <a href="#">ipv6-filter entry</a> <i>number</i> <a href="#">action</a>
Tree	<a href="#">action</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## drop

Synopsis	Packets matching the filter entry are dropped
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop</a>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a choice: <b>drop</b> or <b>forward</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## forward

Synopsis	Packets matching the filter entry are forwarded
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a>
Tree	<a href="#">forward</a>
Notes	The following elements are part of a choice: <b>drop</b> or <b>forward</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## match

Synopsis	Enter the <b>match</b> context
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Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dscp keyword**

Synopsis	DSCP to match
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dst-ip string**

Synopsis	Destination IP address and mask to match
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dst-ip string</i>
Tree	<a href="#">dst-ip</a>
Default	0::0 0::0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure subscriber-mgmt category-map</b> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match dst-port</i>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **eq** *number*

Synopsis Port equal

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port eq number*

Tree [eq](#)

Range 0 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gt** *number*

Synopsis Port greater than

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port gt number*

Tree [gt](#)

Range 0 to 65534

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lt** *number*

Synopsis Port less than

Context **configure** [subscriber-mgmt category-map](#) *string* [category](#) *string* [exhausted-credit-service-level ingress ipv6-filter entry](#) *number match dst-port lt number*

Tree [lt](#)

Range 1 to 65535

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">icmp</a>

Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**code number**

Synopsis	ICMP code to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ipv6-filter entry</a> <i>number</i> <a href="#">match icmp code</a> <i>number</i>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type number**

Synopsis	ICMP type to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ipv6-filter entry</a> <i>number</i> <a href="#">match icmp type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level ingress ipv6-filter entry</a> <i>number</i> <a href="#">match next-header</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## src-port

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a>
Tree	<a href="#">src-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## eq number

Synopsis	Port equal
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gt number

Synopsis	Port greater than
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">gt</a> <i>number</i>
Tree	<a href="#">gt</a>
Range	0 to 65534
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lt number

Synopsis	Port less than
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">lt</a> <i>number</i>

Tree	<a href="#">lt</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

Synopsis	Upper bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port range end number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

Synopsis	Lower bound of the port range to match
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string exhausted-credit-service-level ingress ipv6-filter entry number match src-port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## tcp-flags

Synopsis	Enter the <b>tcp-flags</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a>
Tree	<a href="#">tcp-flags</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ack *boolean*

Synopsis	Check for ACK bit
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> <a href="#">ack</a> <i>boolean</i>
Tree	<a href="#">ack</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## syn *boolean*

Synopsis	Check for SYN bit
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">ingress</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> <a href="#">syn</a> <i>boolean</i>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pir (*number* | *keyword*)

Synopsis	PIR
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <a href="#">exhausted-credit-service-level</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000

Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string ingress</i>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## *policer number*

Synopsis	Ingress policers used in this category
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string ingress policer number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Max.	63
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## *queue number*

Synopsis	Ingress queues used in this category
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string ingress queue number</i>
Tree	<a href="#">queue</a>
Range	1 to 32
Max.	32
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-of-credit-action-override** *keyword*

Synopsis	Out of credit action that is overridden in category map
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>out-of-credit-action-override</b> <i>keyword</i>
Tree	<a href="#">out-of-credit-action-override</a>
Options	continue, disconnect-host, block-category, change-service-level
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rating-group** *number*

Synopsis	Rating group for this category
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <a href="#">category</a> <i>string</i> <b>rating-group</b> <i>number</i>
Tree	<a href="#">rating-group</a>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**credit-exhaust-threshold** *number*

Synopsis	Percentage for credit exhaust threshold
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>credit-exhaust-threshold</b> <i>number</i>
Tree	<a href="#">credit-exhaust-threshold</a>
Range	50 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**credit-type** *keyword*

Synopsis	Credit type
Context	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i> <b>credit-type</b> <i>keyword</i>
Tree	<a href="#">credit-type</a>
Options	volume, time

Default	volume
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gx-session-level-usage** *boolean*

Synopsis	Allow Gx session level Usage Monitoring
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i> <b>gx-session-level-usage</b> <i>boolean</i>
Tree	<a href="#">gx-session-level-usage</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**credit-control-policy** [[name](#)] *string*

Synopsis	Enter the <b>credit-control-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i>
Tree	<a href="#">credit-control-policy</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Credit control policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i>

Tree	<a href="#">credit-control-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-category-map** *reference*

Synopsis	Default category map for this policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> <a href="#">default-category-map</a> <i>reference</i>
Tree	<a href="#">default-category-map</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">category-map</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **error-handling-action** *keyword*

Synopsis	Error handling action for the policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> <a href="#">error-handling-action</a> <i>keyword</i>
Tree	<a href="#">error-handling-action</a>
Options	continue, block
Default	continue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-of-credit-action** *keyword*

Synopsis	Action when out of credit is reached
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> <b>out-of-credit-action</b> <i>keyword</i>
Tree	<a href="#">out-of-credit-action</a>
Options	continue, disconnect-host, block-category, change-service-level
Default	continue
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**server**

Synopsis	Enter the <b>server</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> <b>server</b>
Tree	<a href="#">server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**diameter** *reference*

Synopsis	Diameter policy that specifies Diameter peers to use
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> <b>server</b> <a href="#">diameter</a> <i>reference</i>
Tree	<a href="#">diameter</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i>
Notes	The following elements are part of a choice: <b>diameter</b> or <b>radius</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius**

Synopsis	Use RADIUS servers in the authentication policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i> <b>server</b> <a href="#">radius</a>
Tree	<a href="#">radius</a>
Notes	The following elements are part of a choice: <b>diameter</b> or <b>radius</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **diameter-gx-policy** [*name*] *string*

Synopsis Enter the **diameter-gx-policy** list instance

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string*

Tree [diameter-gx-policy](#)

Max. Instances 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis Diameter application policy name

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string*

Tree [diameter-gx-policy](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [description](#) *string*

Tree [description](#)

String Length 1 to 80

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gx**

Synopsis Enter the **gx** context

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* **gx**

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Tree	<a href="#">gx</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **avp-subscription-id**

Synopsis	Enter the <b>avp-subscription-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">avp-subscription-id</a>
Tree	<a href="#">avp-subscription-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **origin** *keyword*

Synopsis	Format of the Subscription-Id-Data AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">avp-subscription-id</a> <a href="#">origin</a> <i>keyword</i>
Tree	<a href="#">origin</a>
Options	<a href="#">subscriber-id</a> , <a href="#">circuit-id</a> , <a href="#">imsi</a> , <a href="#">msisdn</a> , <a href="#">imei</a> , <a href="#">dual-stack-remote-id</a> , <a href="#">mac</a> , <a href="#">username</a> , <a href="#">nas-port-id</a>
Default	<a href="#">subscriber-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis	Format of the Subscription-Id-Type AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">avp-subscription-id</a> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	<a href="#">e164</a> , <a href="#">imsi</a> , <a href="#">nai</a> , <a href="#">private</a>
Default	<a href="#">private</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**ccrt-replay**

Synopsis	Enable the <b>ccrt-replay</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">ccrt-replay</a>
Tree	<a href="#">ccrt-replay</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interval** *number*

Synopsis	Time between consecutive CCR-T replay attempts
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">ccrt-replay</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	60 to 86400
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-lifetime** *number*

Synopsis	Maximum time that CCR-t messages are replayed
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">ccrt-replay</a> <a href="#">max-lifetime</a> <i>number</i>
Tree	<a href="#">max-lifetime</a>
Description	This command specifies the maximum time that CCR-t messages for Diameter Gx sessions that belong to the Diameter application policy are replayed.
Range	1 to 24
Units	hours
Default	24
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**credit-mcs-interval** *number*

Synopsis	Volume syncing interval for usage monitoring
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">credit-mcs-interval</a> <i>number</i>
Tree	<a href="#">credit-mcs-interval</a>

Description	This command configures the MCS interval at which the accounting data of subscriber hosts is updated.
Range	5 to 60
Units	minutes
Default	10
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### destination-realm-learning *boolean*

Synopsis	Learn the destination realm from the incoming messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">destination-realm-learning</a> <i>boolean</i>
Tree	<a href="#">destination-realm-learning</a>
Description	<p>When configured to <b>true</b>, destination realm learning is enabled on the application level. The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gx session can use the destination realm learned from the replies.</p> <p>When configured to <b>false</b>, destination realm learning is disabled and the configured destination realm is used in outgoing request messages.</p>
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### features

Synopsis	Enter the <b>features</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">features</a>
Tree	<a href="#">features</a>
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### extended-bandwidth *boolean*

Synopsis	Negotiate support for extended bandwidth AVPs
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Context	<b>configure subscriber-mgmt diameter-gx-policy</b> <i>string</i> <b>gx features extended-bandwidth</b> <i>boolean</i>
Tree	<a href="#">extended-bandwidth</a>
Description	<p>When configured to <b>true</b>, negotiation occurs for the support of extended AVPs that are capable of supporting bandwidth values greater than <math>(2^{32} - 1)</math> b/s. The extended AVPs allow bitrates in kb/s and are as follows:</p> <ul style="list-style-type: none"> <li>• Extended-GBR-DL (AVP code 2850)</li> <li>• Extended-GBR-UL (AVP code 2851)</li> <li>• Extended-Max-Requested-BW-DL (AVP code 554)</li> <li>• Extended-Max-Requested-BW-UL (AVP code 555)</li> <li>• Extended-APN-AMBR-DL (AVP code 2848)</li> <li>• Extended-APN-AMBR-UL (AVP code 2849)</li> </ul> <p>When configured to <b>false</b>, the extended AVPs are not supported.</p>
Default	false
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## include-avp

Synopsis	Enter the <b>include-avp</b> context
Context	<b>configure subscriber-mgmt diameter-gx-policy</b> <i>string</i> <b>gx include-avp</b>
Tree	<a href="#">include-avp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## an-gw-address *boolean*

Synopsis	Include the IP address of this gateway
Context	<b>configure subscriber-mgmt diameter-gx-policy</b> <i>string</i> <b>gx include-avp an-gw-address</b> <i>boolean</i>
Tree	<a href="#">an-gw-address</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**apn-ambr** *boolean*

Synopsis	Include the APN aggregate maximum bitrate
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">apn-ambr</a> <i>boolean</i>
Tree	<a href="#">apn-ambr</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**called-station-id** *boolean*

Synopsis	Include the called station ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">called-station-id</a> <i>boolean</i>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**calling-station-id**

Synopsis	Enable the <b>calling-station-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">calling-station-id</a>
Tree	<a href="#">calling-station-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Format of the Calling-Station-ID AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">calling-station-id</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	sap-string, mac, sap-id, remote-id, llid
Default	sap-string
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-can-type** *boolean*

Synopsis Include the IP CAN type

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [ip-can-type](#) *boolean*

Tree [ip-can-type](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **logical-access-id** *boolean*

Synopsis Include the logical access id

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [logical-access-id](#) *boolean*

Tree [logical-access-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port**

Synopsis Enable the **nas-port** context

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [nas-port](#)

Tree [nas-port](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bit-spec** *string*

Synopsis NAS-Port AVP format

Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [include-avp](#) [nas-port](#) [bit-spec](#) *string*

Tree [bit-spec](#)

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String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id**

Synopsis	Enable the <b>nas-port-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a>
Tree	<a href="#">nas-port-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-string** *string*

Synopsis	Prefix string for NAS-Port-Id AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">prefix-string</a> <i>string</i>
Tree	<a href="#">prefix-string</a>
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix**

Synopsis	Enter the <b>suffix</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a>
Tree	<a href="#">suffix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id**

Synopsis	Add Circuit ID as suffix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">circuit-id</a>

Tree	<a href="#">circuit-id</a>
Notes	The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### not-included

Synopsis	Do not add a suffix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">not-included</a>
Tree	<a href="#">not-included</a>
Notes	The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### remote-id

Synopsis	Add Remote ID as suffix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">remote-id</a>
Tree	<a href="#">remote-id</a>
Notes	The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### user-string *string*

Synopsis	Add a user configurable string as suffix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">user-string</a> <i>string</i>
Tree	<a href="#">user-string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type**

Synopsis	Enable the <b>nas-port-type</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-type</a>
Tree	<a href="#">nas-port-type</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type number**

Synopsis	NAS-Port-Type AVP value
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">nas-port-type</a> <a href="#">type</a> <a href="#">number</a>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pdn-connection-id boolean**

Synopsis	Include the PDN connection id
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">pdn-connection-id</a> <a href="#">boolean</a>
Tree	<a href="#">pdn-connection-id</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **physical-access-id boolean**

Synopsis	Include the physical access ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">physical-access-id</a> <a href="#">boolean</a>



Tree	<a href="#">physical-access-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rai boolean**

Synopsis	Include the routing area identity
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx include-avp rai boolean</a>
Tree	<a href="#">rai</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rat-type boolean**

Synopsis	Include the RAT type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx include-avp rat-type boolean</a>
Tree	<a href="#">rat-type</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sgsn-mcc-mnc boolean**

Synopsis	Include the 3GPP-SGSN-MCC-MNC AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx include-avp sgsn-mcc-mnc boolean</a>
Tree	<a href="#">sgsn-mcc-mnc</a>
Description	When configured to <b>true</b> , this command enables the inclusion of the 3GPP-SGSN-MCC-MNC AVP, which contains the MCC and MNC as configured under <b>configure subscriber-mgmt gtp serving-network</b> .
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**supported-features** *boolean*

Synopsis	Include the supported features
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">supported-features</a> <i>boolean</i>
Tree	<a href="#">supported-features</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-equipment-info**

Synopsis	Enable the <b>user-equipment-info</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">user-equipment-info</a>
Tree	<a href="#">user-equipment-info</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Information for User-Equipment-Info attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">user-equipment-info</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	imeisv, mac, eui64, modified-eui64
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-location-info** *boolean*

Synopsis	Include the 3GPP-User-Location-Information AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">include-avp</a> <a href="#">user-location-info</a> <i>boolean</i>
Tree	<a href="#">user-location-info</a>

Description	When configured to <b>true</b> , this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-format** *string*

Synopsis	MAC address format
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <b>mac-format</b> <i>string</i>
Tree	<a href="#">mac-format</a>
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **report-ip-address-event** *boolean*

Synopsis	Enable CCR-u messages on IP address allocation events
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <b>report-ip-address-event</b> <i>boolean</i>
Tree	<a href="#">report-ip-address-event</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-qos-mapping**

Synopsis	Enter the <b>three-gpp-qos-mapping</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <b>three-gpp-qos-mapping</b>
Tree	<a href="#">three-gpp-qos-mapping</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## apn-ambr-dl

Synopsis	Enter the <b>apn-ambr-dl</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-dl</a>
Tree	<a href="#">apn-ambr-dl</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aggregate-rate

Synopsis	Map to an aggregate rate
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-dl</a> <a href="#">aggregate-rate</a>
Tree	<a href="#">aggregate-rate</a>
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## arbiter *string*

Synopsis	Arbiter name to be overridden
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-dl</a> <a href="#">arbiter</a> <i>string</i>
Tree	<a href="#">arbiter</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## hs-sla-agg-rate

Synopsis	Map to an HS SLA aggregate rate
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-dl</a> <a href="#">hs-sla-agg-rate</a>
Tree	<a href="#">hs-sla-agg-rate</a>

Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### ignore-override

Synopsis	no override on apn-ambr-dl
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>diameter-gx-policy</b> <i>string</i> <b>gx</b> <b>three-gpp-qos-mapping</b> <b>apn-ambr-dl</b> <b>ignore-override</b>
Tree	<a href="#">ignore-override</a>
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### policer *number*

Synopsis	Policer ID to be overridden
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>diameter-gx-policy</b> <i>string</i> <b>gx</b> <b>three-gpp-qos-mapping</b> <b>apn-ambr-dl</b> <b>policer</b> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### queue *number*

Synopsis	Queue ID to be overridden
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>diameter-gx-policy</b> <i>string</i> <b>gx</b> <b>three-gpp-qos-mapping</b> <b>apn-ambr-dl</b> <b>queue</b> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 8
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>hs-sla-agg-rate</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis Name of the scheduler to be overridden  
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-dl](#) **scheduler** *string*  
Tree [scheduler](#)  
String Length 1 to 32  
Notes The following elements are part of a choice: **aggregate-rate**, **arbiter**, **hs-sla-agg-rate**, **ignore-override**, **policer**, **queue**, or **scheduler**.  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **apn-ambr-ul**

Synopsis Enter the **apn-ambr-ul** context  
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-ul](#)  
Tree [apn-ambr-ul](#)  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **arbiter** *string*

Synopsis Arbiter name to be overridden  
Context **configure** [subscriber-mgmt](#) [diameter-gx-policy](#) *string* [gx](#) [three-gpp-qos-mapping](#) [apn-ambr-ul](#) **arbiter** *string*  
Tree [arbiter](#)  
String Length 1 to 32  
Notes The following elements are part of a choice: **arbiter**, **ignore-override**, **policer**, **queue**, or **scheduler**.  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ignore-override

Synopsis	no override on apn-ambr-ul
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-ul</a> <b>ignore-override</b>
Tree	<a href="#">ignore-override</a>
Notes	The following elements are part of a choice: <b>arbiter</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policer *number*

Synopsis	Policer ID to be overridden
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-ul</a> <b>policer</b> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	The following elements are part of a choice: <b>arbiter</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## queue *number*

Synopsis	Queue ID to be overridden
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-ul</a> <b>queue</b> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 32
Notes	The following elements are part of a choice: <b>arbiter</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**scheduler** *string*

Synopsis	Name of the scheduler to be overridden
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">gx</a> <a href="#">three-gpp-qos-mapping</a> <a href="#">apn-ambr-ul</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>arbiter</b> , <b>ignore-override</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**node**

Synopsis	Enter the <b>node</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">node</a>
Tree	<a href="#">node</a>
Notes	The following elements are part of a choice: <b>node</b> or <b>peer-policy</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destination-realm** *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">node</a> <a href="#">destination-realm</a> <i>string</i>
Tree	<a href="#">destination-realm</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**origin-host** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-Host AVP used by the Diameter policy
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">node</a> <a href="#">origin-host</a> <i>reference</i>
Tree	<a href="#">origin-host</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## on-failure

Synopsis	Enter the <b>on-failure</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">on-failure</a>
Tree	<a href="#">on-failure</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## failover *boolean*

Synopsis	Session peer failover
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">failover</a> <i>boolean</i>
Tree	<a href="#">failover</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## handling *keyword*

Synopsis	Session peer failure handling
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">handling</a> <i>keyword</i>
Tree	<a href="#">handling</a>
Options	terminate, continue, retry-and-terminate
Default	terminate
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tx-timer** *number*

Synopsis	Maximum wait time for a pending session request
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gx-policy</a> <i>string</i> <b>tx-timer</b> <i>number</i>
Tree	<a href="#">tx-timer</a>
Range	10 to 1000
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**diameter-gy-policy** [[name](#)] *string*

Synopsis	Enter the <b>diameter-gy-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i>
Tree	<a href="#">diameter-gy-policy</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Diameter application policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i>
Tree	<a href="#">diameter-gy-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>

String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gy

Synopsis Enter the **gy** context  
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* **gy**  
 Tree [gy](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## avp-subscription-id

Synopsis Enter the **avp-subscription-id** context  
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* **gy** **avp-subscription-id**  
 Tree [avp-subscription-id](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## origin keyword

Synopsis Origin for the Subscription-Id-Data AVP  
 Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* **gy** **avp-subscription-id** **origin** *keyword*  
 Tree [origin](#)  
 Options subscriber-id, circuit-id, imsi, msisdn, imei, dual-stack-remote-id, mac, username, nas-port-id  
 Default subscriber-id  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type keyword

Synopsis Origin for the Subscription-Id-Type AVP

Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">avp-subscription-id</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	e164, imsi, nai, private
Default	private
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ccrt-replay**

Synopsis	Enable the <b>ccrt-replay</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">ccrt-replay</a>
Tree	<a href="#">ccrt-replay</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Interval at which CCR-t messages are replayed
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">ccrt-replay</a> <i>interval</i> <i>number</i>
Tree	<a href="#">interval</a>
Description	This command specifies the interval at which CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed, until a valid CCA-t response is received or until the configured maximum lifetime period expires.
Range	60 to 86400
Default	3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-lifetime** *number*

Synopsis	Maximum time that CCR-t messages are replayed
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">ccrt-replay</a> <i>max-lifetime</i> <i>number</i>
Tree	<a href="#">max-lifetime</a>
Description	This command specifies the maximum period of time that CCR-t messages for Diameter Gy sessions that belong to the Diameter application policy are replayed.

Range	1 to 24
Units	hours
Default	24
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destination-realm-learning** *boolean*

Synopsis	Learn the destination realm from the incoming messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">destination-realm-learning</a> <i>boolean</i>
Tree	<a href="#">destination-realm-learning</a>
Description	<p>When configured to <b>true</b>, destination realm learning is enabled on the application level.</p> <p>The destination realm is a mandatory configuration parameter used in outgoing Credit Control Request messages (CCR). The configured destination realm is always used in the initial request (CCR-I) message. The consecutive request message of a Gy session can use the destination realm learned from the replies.</p> <p>When configured to <b>false</b>, destination realm learning is disabled and the configured destination realm is used in outgoing request messages.</p>
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **extended-failure-handling**

Synopsis	Enter the <b>extended-failure-handling</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a>
Tree	<a href="#">extended-failure-handling</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of Extended Failure Handling
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>

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Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interim-credit**

Synopsis	Enter the <b>interim-credit</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a>
Tree	<a href="#">interim-credit</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-attempts** (*number* | *keyword*)

Synopsis	Attempts to retry setting up a session to the OCS
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">max-attempts</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-attempts</a>
Range	1 to 4294967295
Options	infinite
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reporting** *boolean*

Synopsis	Report interim Credit
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">reporting</a> <i>boolean</i>
Tree	<a href="#">reporting</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**validity-time** (*number* | *keyword*)

Synopsis	Validity time for interim credit
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <b>validity-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">validity-time</a>
Range	1 to 4294967295
Units	seconds
Options	none
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**volume**

Synopsis	Enter the <b>volume</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <b>volume</b>
Tree	<a href="#">volume</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**credits** *number*

Synopsis	Default volume credit value
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">volume</a> <b>credits</b> <i>number</i>
Tree	<a href="#">credits</a>
Range	1 to 4294967295
Default	500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**units** *keyword*

Synopsis	Default volume credit units
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">interim-credit</a> <a href="#">volume</a> <a href="#">units</a> <i>keyword</i>
Tree	<a href="#">units</a>
Options	bytes, kilobytes, megabytes, gigabytes
Default	megabytes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **new-session-id** *boolean*

Synopsis	Enable use of a new session ID for CCR-i messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">extended-failure-handling</a> <a href="#">new-session-id</a> <i>boolean</i>
Tree	<a href="#">new-session-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **include-avp**

Synopsis	Enter the <b>include-avp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a>
Tree	<a href="#">include-avp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **aaa-user-name** *boolean*

Synopsis	Include RADIUS user name AVP in Diameter Gy messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">aaa-user-name</a> <i>boolean</i>
Tree	<a href="#">aaa-user-name</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



### address-avp *boolean*

Synopsis	DCCA AVPs that contain the host address or prefix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">address-avp</a> <i>boolean</i>
Tree	<a href="#">address-avp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### called-station-id

Synopsis	Enable the <b>called-station-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">called-station-id</a>
Tree	<a href="#">called-station-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### id *string*

Synopsis	Called station ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">called-station-id</a> <i>id</i> <i>string</i>
Tree	<a href="#">id</a>
String Length	1 to 64
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### charging-rule-base-name

Synopsis	Enter the <b>charging-rule-base-name</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">charging-rule-base-name</a>
Tree	<a href="#">charging-rule-base-name</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## category-map

Synopsis Use the category map name in use for this session

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [charging-rule-base-name](#) [category-map](#)

Tree [category-map](#)

Notes The following elements are part of a choice: **category-map**, **not-included**, or **user-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## not-included

Synopsis Do not include Charging-Rule-Base-Name AVP in Diameter DCCA CCR messages

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [charging-rule-base-name](#) [not-included](#)

Tree [not-included](#)

Notes The following elements are part of a choice: **category-map**, **not-included**, or **user-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## user-string *string*

Synopsis String for charging rule base name

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [charging-rule-base-name](#) [user-string](#) *string*

Tree [user-string](#)

String Length 1 to 64

Notes The following elements are part of a choice: **category-map**, **not-included**, or **user-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ggsn-address**

Synopsis	Enable the <b>ggsn-address</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">ggsn-address</a>
Tree	<a href="#">ggsn-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Address type of GGSN address AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">ggsn-address</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	ipv4, ipv6
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pdp-context-type** *boolean*

Synopsis	Include the DCCA PDP-Context-Type AVP Parameter
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">pdp-context-type</a> <i>boolean</i>
Tree	<a href="#">pdp-context-type</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ps-information** *boolean*

Synopsis	Enable reporting of AVPs in grouped PS-Information AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">ps-information</a> <i>boolean</i>
Tree	<a href="#">ps-information</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service-context-id**

Synopsis Enable the **service-context-id** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [service-context-id](#)

Tree [service-context-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **id string**

Synopsis Name for the service context ID AVP

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [service-context-id](#) [id](#) *string*

Tree [id](#)

String Length 1 to 32

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-charging-characteristics boolean**

Synopsis DCCA 3GPP charging characteristics AVP parameter

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-charging-characteristics](#) *boolean*

Tree [three-gpp-charging-characteristics](#)

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-charging-id keyword**

Synopsis DCCA 3GPP charging ID AVP parameter

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [three-gpp-charging-id](#) *keyword*

Tree	<a href="#">three-gpp-charging-id</a>
Options	false, auto, esm-info, id
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-ggsn-ipv4-address** *boolean*

Synopsis	Include the 3GPP-GGSN Address in Diameter Gy messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-ggsn-ipv4-address</a> <i>boolean</i>
Tree	<a href="#">three-gpp-ggsn-ipv4-address</a>
Description	When configured to <b>true</b> , this command includes the 3GPP GGSN Address AVP in the Diameter Gy messages. The value is set to the source IPv4 address that is used for outgoing diameter messages.
Default	true
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-ggsn-ipv6-address** *boolean*

Synopsis	Include the 3GPP-GGSN-Ipv6 address
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-ggsn-ipv6-address</a> <i>boolean</i>
Tree	<a href="#">three-gpp-ggsn-ipv6-address</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-gprs-negotiated-qos-profile** *boolean*

Synopsis	Include the 3GPP GPRS-QoS-Negotiated-Profile AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-gprs-negotiated-qos-profile</a> <i>boolean</i>
Tree	<a href="#">three-gpp-gprs-negotiated-qos-profile</a>
Default	true

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-imsi** *keyword*

Synopsis	Origin of the information to send in the IMSI AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <b>three-gpp-imsi</b> <i>keyword</i>
Tree	<a href="#">three-gpp-imsi</a>
Options	false, subscriber-id, circuit-id, imsi
Default	subscriber-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-nsapi** *boolean*

Synopsis	Include the 3GPP-NSAPI
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <b>three-gpp-nsapi</b> <i>boolean</i>
Tree	<a href="#">three-gpp-nsapi</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-rat-type**

Synopsis	Enable the <b>three-gpp-rat-type</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <b>three-gpp-rat-type</b>
Tree	<a href="#">three-gpp-rat-type</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *number*

Synopsis	Value for 3GPP-RAT-Type AVP
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-rat-type</a> <a href="#">type</a> <i>number</i>
Tree	<a href="#">type</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-selection-mode** *boolean*

Synopsis	DCCA 3GPP selection mode AVP parameter
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-selection-mode</a> <i>boolean</i>
Tree	<a href="#">three-gpp-selection-mode</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-session-stop-indicator** *boolean*

Synopsis	DCCA 3GPP session stop indicator AVP parameter
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-session-stop-indicator</a> <i>boolean</i>
Tree	<a href="#">three-gpp-session-stop-indicator</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **three-gpp-user-location-info** *boolean*

Synopsis	DCCA 3GPP session stop indicator AVP parameter
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <a href="#">include-avp</a> <a href="#">three-gpp-user-location-info</a> <i>boolean</i>
Tree	<a href="#">three-gpp-user-location-info</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-equipment-info-type**

Synopsis Enable the **user-equipment-info-type** context

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [user-equipment-info-type](#)

Tree [user-equipment-info-type](#)

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis Information to include in User-Equipment-Info attribute

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [include-avp](#) [user-equipment-info-type](#) **type** *keyword*

Tree [type](#)

Options imeisv

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-format** *string*

Synopsis MAC address format

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [mac-format](#) *string*

Tree [mac-format](#)

String Length 2 to 7

Default aa:

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **out-of-credit-reporting** *keyword*

Synopsis Reporting reason when final granted units are consumed

Context **configure** [subscriber-mgmt](#) [diameter-gy-policy](#) *string* [gy](#) [out-of-credit-reporting](#) *keyword*



Tree	<a href="#">out-of-credit-reporting</a>
Options	final, quota-exhausted
Default	final
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **vendor-support** *keyword*

Synopsis	Vendor support type announced in capability exchange
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">gy</a> <b>vendor-support</b> <i>keyword</i>
Tree	<a href="#">vendor-support</a>
Options	vodafone, three-gpp
Default	three-gpp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **node**

Synopsis	Enter the <b>node</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">node</a>
Tree	<a href="#">node</a>
Notes	The following elements are part of a choice: <b>node</b> or <b>peer-policy</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destination-realm** *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">node</a> <a href="#">destination-realm</a> <i>string</i>
Tree	<a href="#">destination-realm</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**origin-host** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-Host AVP used by the Diameter policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">node</a> <a href="#">origin-host</a> <i>reference</i>
Tree	<a href="#">origin-host</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**on-failure**

Synopsis	Enter the <b>on-failure</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">on-failure</a>
Tree	<a href="#">on-failure</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover** *boolean*

Synopsis	Session peer failover
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">failover</a> <i>boolean</i>
Tree	<a href="#">failover</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**handling** *keyword*

Synopsis	Session peer failure handling
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">handling</a> <i>keyword</i>
Tree	<a href="#">handling</a>
Options	terminate, continue, retry-and-terminate
Default	terminate

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tx-timer** *number*

Synopsis	Maximum wait time for a pending session request
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-gy-policy</a> <i>string</i> <b>tx-timer</b> <i>number</i>
Tree	<a href="#">tx-timer</a>
Range	10 to 1000
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**diameter-nasreq-policy** [*name*] *string*

Synopsis	Enter the <b>diameter-nasreq-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i>
Tree	<a href="#">diameter-nasreq-policy</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Diameter application policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i>
Tree	<a href="#">diameter-nasreq-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nasreq**

Synopsis	Enter the <b>nasreq</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a>
Tree	<a href="#">nasreq</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**include-avp**

Synopsis	Enter the <b>include-avp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a>
Tree	<a href="#">include-avp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**called-station-id** *boolean*

Synopsis	Include the called station ID AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">called-station-id</a> <i>boolean</i>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**calling-station-id**

Synopsis	Enable the <b>calling-station-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">calling-station-id</a>
Tree	<a href="#">calling-station-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Format of the Calling-Station-ID AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">calling-station-id</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	sap-string, mac, sap-id, remote-id, llid
Default	sap-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**circuit-id** *boolean*

Synopsis	Include the Agent-Circuit-ID AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">circuit-id</a> <i>boolean</i>
Tree	<a href="#">circuit-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**imei** *boolean*

Synopsis	Include the IMEI
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">imei</a> <i>boolean</i>
Tree	<a href="#">imei</a>
Default	false

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## nas-port

Synopsis	Enable the <b>nas-port</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port</a>
Tree	<a href="#">nas-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bit-spec *string*

Synopsis	NAS-Port AVP format
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port</a> <a href="#">bit-spec</a> <i>string</i>
Tree	<a href="#">bit-spec</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## nas-port-id

Synopsis	Enable the <b>nas-port-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a>
Tree	<a href="#">nas-port-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix-string *string*

Synopsis	Prefix string for NAS-Port-Id AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">prefix-string</a> <i>string</i>

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Tree	<a href="#">prefix-string</a>
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## suffix

Synopsis	Enter the <b>suffix</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a>
Tree	<a href="#">suffix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## circuit-id

Synopsis	Add Circuit ID as suffix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">circuit-id</a>
Tree	<a href="#">circuit-id</a>
Notes	The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## not-included

Synopsis	Do not add a suffix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">not-included</a>
Tree	<a href="#">not-included</a>
Notes	The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remote-id**

Synopsis	Add Remote ID as suffix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">remote-id</a>
Tree	<a href="#">remote-id</a>
Notes	The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-string** *string*

Synopsis	Add a user configurable string as suffix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <a href="#">user-string</a> <i>string</i>
Tree	<a href="#">user-string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>circuit-id</b> , <b>not-included</b> , <b>remote-id</b> , or <b>user-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nas-port-type**

Synopsis	Enable the <b>nas-port-type</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-type</a>
Tree	<a href="#">nas-port-type</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** (*keyword* | *number*)

Synopsis	NAS-Port-Type AVP value
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">nas-port-type</a> <a href="#">type</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">type</a>



Range	0 to 255
Options	rfc-aligned
Default	rfc-aligned
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rat-type** *boolean*

Synopsis	Include the Radio Access Technology (RAT) type AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">rat-type</a> <i>boolean</i>
Tree	<a href="#">rat-type</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remote-id** *boolean*

Synopsis	Include the agent remote ID AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">remote-id</a> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-location-info** *boolean*

Synopsis	Include the 3GPP-User-Location-Information AVP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">include-avp</a> <a href="#">user-location-info</a> <i>boolean</i>
Tree	<a href="#">user-location-info</a>
Description	When configured to <b>true</b> , this command enables the inclusion of the 3GPP-User-Location-Information AVP as signaled in the incoming GTP setup message.
Default	false
Introduced	16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-format** *string*

Synopsis MAC address format

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [mac-format](#) *string*

Tree [mac-format](#)

String Length 2 to 7

Default aa:

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis AA-request password

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [password](#) *string*

Tree [password](#)

String Length 1 to 115

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-name**

Synopsis Enter the **user-name** context

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#)

Tree [user-name](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-name** *string*

Synopsis Domain name

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [nasreq](#) [user-name](#) [domain-name](#) *string*

Tree [domain-name](#)

String Length 1 to 128

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **format** *keyword*

Synopsis	Format type for username
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">user-name</a> <b>format</b> <i>keyword</i>
Tree	<a href="#">format</a>
Options	mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, nas-port-id
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **operation** *keyword*

Synopsis	Operation to perform
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">nasreq</a> <a href="#">user-name</a> <b>operation</b> <i>keyword</i>
Tree	<a href="#">operation</a>
Options	append, strip, replace, default
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **node**

Synopsis	Enter the <b>node</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <b>node</b>
Tree	<a href="#">node</a>
Notes	The following elements are part of a choice: <b>node</b> or <b>peer-policy</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**destination-realm** *string*

Synopsis	Destination-Realm AVP used by the Diameter peer policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">node</a> <a href="#">destination-realm</a> <i>string</i>
Tree	<a href="#">destination-realm</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**origin-host** *reference***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Origin-Host AVP used by the Diameter policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">node</a> <a href="#">origin-host</a> <i>reference</i>
Tree	<a href="#">origin-host</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">diameter</a> <a href="#">node</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**on-failure**

Synopsis	Enter the <b>on-failure</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">on-failure</a>
Tree	<a href="#">on-failure</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**failover** *boolean*

Synopsis	Session peer failover
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">diameter-nasreq-policy</a> <i>string</i> <a href="#">on-failure</a> <a href="#">failover</a> <i>boolean</i>
Tree	<a href="#">failover</a>
Default	true
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **handling** *keyword*

Synopsis Session peer failure handling

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [on-failure](#) [handling](#) *keyword*

Tree [handling](#)

Options terminate, continue, retry-and-terminate

Default terminate

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tx-timer** *number*

Synopsis Maximum wait time for a pending session request

Context **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string* [tx-timer](#) *number*

Tree [tx-timer](#)

Range 10 to 1000

Units seconds

Default 10

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **explicit-subscriber-map**

Synopsis Enter the **explicit-subscriber-map** context

Context **configure** [subscriber-mgmt](#) [explicit-subscriber-map](#)

Tree [explicit-subscriber-map](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[subscriber-id](#)] *string*

Synopsis Enter the **entry** list instance

Context **configure** [subscriber-mgmt](#) [explicit-subscriber-map](#) [entry](#) *string*

Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[subscriber-id]** *string*

Synopsis	Subscriber Identification string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i>
Tree	<a href="#">entry</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**alias** *string*

Synopsis	Alias for subscriber identification string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i> <a href="#">alias</a> <i>string</i>
Tree	<a href="#">alias</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">explicit-subscriber-map</a> <a href="#">entry</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	SLA profile name
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Context	<b>configure</b> <a href="#">subscriber-mgmt explicit-subscriber-map entry</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Subscriber profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt explicit-subscriber-map entry</a> <i>string</i> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface-statistics**

Synopsis	Enter the <b>group-interface-statistics</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt group-interface-statistics</a>
Tree	<a href="#">group-interface-statistics</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state for statistics collection
Context	<b>configure</b> <a href="#">subscriber-mgmt group-interface-statistics admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-interface-template** [*name*] *string*

Synopsis	Enter the <b>group-interface-template</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i>
Tree	<a href="#">group-interface-template</a>
Description	Commands in this context configure a template for automatically-generated group interfaces that is used when creating CUPS sessions. A template with the name "default" is used when no other instance is created, however, the "default" template must be explicitly provisioned.
Max. Instances	256
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Identifies this group interface template template
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i>
Tree	<a href="#">group-interface-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-mtu** *number*

Synopsis	IP MTU applied to outgoing packets
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ip-mtu</a> <i>number</i>



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Tree	<a href="#">ip-mtu</a>
Description	This command configures the IP maximum transmission unit (MTU) for the associated router IP interface.
Range	512 to 9786
Units	bytes
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt group-interface-template</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a>
Tree	<a href="#">icmp</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mask-reply *boolean*

Synopsis	Allow responses to ICMP mask requests on the interface
Context	<b>configure</b> <a href="#">subscriber-mgmt group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">mask-reply</a> <i>boolean</i>
Tree	<a href="#">mask-reply</a>
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## param-problem

Synopsis	Enter the <b>param-problem</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a>
Tree	<a href="#">param-problem</a>
Description	Commands in this context specify the settings for ICMP Parameter Problem messages generated by the interface.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of sent Parameter Problem messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## number *number*

Synopsis	Maximum number of Parameter Problem messages to send
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 1000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## seconds *number*

Synopsis	Time used to limit number of Parameter Problem messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">param-problem</a> <a href="#">seconds</a> <i>number</i>

Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## redirects

Synopsis	Enter the <b>redirects</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a>
Tree	<a href="#">redirects</a>
Description	<p>Commands in this context configure the settings for ICMP redirect messages generated by the interface.</p> <p>The system sends ICMP redirect messages to alert the sending node that a more optimal route is available on another router on the same subnetwork.</p>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of sending ICMP redirect messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## number *number*

Synopsis	Maximum number of ICMP redirect messages to send
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">redirects</a> <a href="#">number</a> <i>number</i>
Tree	<a href="#">number</a>

Range	10 to 1000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis	Time used to limit the number of ICMP redirect messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4 icmp redirects seconds</a> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ttl-expired**

Synopsis	Enter the <b>ttl-expired</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4 icmp ttl-expired</a>
Tree	<a href="#">ttl-expired</a>
Description	Commands in this context configure the settings for ICMP TTL expired messages generated by the interface.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of sending TTL expired messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4 icmp ttl-expired admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **number** *number*

Synopsis Maximum number of TTL expired messages to send

Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4](#) [icmp](#) [ttl-expired](#) *number*

Tree [number](#)

Range 10 to 2000

Default 100

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **seconds** *number*

Synopsis Time used to limit the number of TTL expired messages

Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4](#) [icmp](#) [ttl-expired](#) [seconds](#) *number*

Tree [seconds](#)

Range 1 to 60

Units seconds

Default 10

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **unreachables**

Synopsis Enter the **unreachables** context

Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [ipv4](#) [icmp](#) [unreachables](#)

Tree [unreachables](#)

Description Commands in this context specify the settings for ICMP host and network destination unreachable messages generated by the interface.

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of sending unreachable messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**number** *number*

Synopsis	Maximum number of unreachable messages to send
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <b>number</b> <i>number</i>
Tree	<a href="#">number</a>
Range	10 to 2000
Default	100
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**seconds** *number*

Synopsis	Time to limit the number of ICMP unreachable messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">icmp</a> <a href="#">unreachables</a> <b>seconds</b> <i>number</i>
Tree	<a href="#">seconds</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**neighbor-discovery**

Synopsis	Enter the <b>neighbor-discovery</b> context
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a>
Tree	<a href="#">neighbor-discovery</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **proxy-arp-policy** *reference*

Synopsis	Proxy ARP policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">proxy-arp-policy</a> <i>reference</i>
Tree	<a href="#">proxy-arp-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-proxy-arp** *boolean*

Synopsis	Enable remote proxy ARP on the interface
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">neighbor-discovery</a> <a href="#">remote-proxy-arp</a> <i>boolean</i>
Tree	<a href="#">remote-proxy-arp</a>
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a>
Tree	<a href="#">urpf-check</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mode keyword**

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv4</a> <a href="#">urpf-check</a> <i>mode</i> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**urpf-check**

Synopsis	Enable the <b>urpf-check</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv6</a> <a href="#">urpf-check</a>
Tree	<a href="#">urpf-check</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mode keyword**

Synopsis	Unicast RPF check mode
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">group-interface-template</a> <i>string</i> <a href="#">ipv6</a> <a href="#">urpf-check</a> <i>mode</i> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	strict, loose, strict-no-ecmp
Default	strict
Introduced	20.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## trigger-packet

Synopsis Enter the **trigger-packet** context

Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [trigger-packet](#)

Tree [trigger-packet](#)

Introduced 23.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## data *boolean*

Synopsis Sample and forward data packets

Context **configure** [subscriber-mgmt](#) [group-interface-template](#) *string* [trigger-packet](#) [data](#) *boolean*

Tree [data](#)

Description When configured to **true**, the router processes data-trigger packets on dynamic SAPs. Data-trigger packets must also be enabled on the capture SAP.

Default false

Introduced 23.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gtp

Synopsis Enter the **gtp** context

Context **configure** [subscriber-mgmt](#) [gtp](#)

Tree [gtp](#)

Description This command enables the context to configure box-wide GTP parameters and profiles.

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## apn-policy [*name*] *string*

Synopsis Enter the **apn-policy** list instance

Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) *string*

Tree [apn-policy](#)

Max. Instances	128
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	APN policy name for a new incoming GTP connection
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i>
Tree	<a href="#">apn-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**apn** [[apn-name](#)] *string*

Synopsis	Enter the <b>apn</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <b>apn</b> <i>string</i>
Tree	<a href="#">apn</a>
Max. Instances	1024
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[apn-name]** *string*

Synopsis	GTP APN name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <b>apn</b> <i>string</i>
Tree	<a href="#">apn</a>
String Length	1 to 80
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ambr-qos-mapping

Synopsis	Enter the <b>ambr-qos-mapping</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a>
Tree	<a href="#">ambr-qos-mapping</a>
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## downlink

Synopsis	Enable the <b>downlink</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a>
Tree	<a href="#">downlink</a>
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## aggregate-rate

Synopsis	Map the downlink APN-AMBR rate to an aggregate rate
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a> <a href="#">aggregate-rate</a>
Tree	<a href="#">aggregate-rate</a>
Notes	The following elements are part of a mandatory choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## arbiter *string*

Synopsis	Name of arbiter to be overridden
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">ambr-qos-mapping</a> <a href="#">downlink</a> <a href="#">arbiter</a> <i>string</i>
Tree	<a href="#">arbiter</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer number**

Synopsis ID of policer to be overridden

Context **configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink policer number**

Tree [policer](#)

Range 1 to 63

Notes The following elements are part of a mandatory choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.

Introduced 16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **queue number**

Synopsis Map the downlink APN-AMBR rate to a queue PIR override

Context **configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink queue number**

Tree [queue](#)

Range 1 to 8

Notes The following elements are part of a mandatory choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.

Introduced 16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler string**

Synopsis Name of the scheduler to be overridden

Context **configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping downlink scheduler string**

Tree [scheduler](#)

String Length 1 to 32

Notes The following elements are part of a mandatory choice: **aggregate-rate**, **arbiter**, **policer**, **queue**, or **scheduler**.

Introduced 16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## uplink

Synopsis Enable the **uplink** context

Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) [string](#) [apn](#) [string](#) [ambr-qos-mapping](#) [uplink](#)

Tree [uplink](#)

Introduced 16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## arbiter *string*

Synopsis Name of arbiter to be overridden

Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) [string](#) [apn](#) [string](#) [ambr-qos-mapping](#) [uplink](#)  
[arbiter](#) *string*

Tree [arbiter](#)

String Length 1 to 32

Notes The following elements are part of a mandatory choice: **arbiter**, **policer**, **queue**, or **scheduler**.

Introduced 16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## policer *number*

Synopsis Map the uplink APN-AMBR rate to a policer PIR override

Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) [string](#) [apn](#) [string](#) [ambr-qos-mapping](#) [uplink](#)  
[policer](#) *number*

Tree [policer](#)

Range 1 to 63

Notes The following elements are part of a mandatory choice: **arbiter**, **policer**, **queue**, or **scheduler**.

Introduced 16.0.R7

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**queue number**

Synopsis	Map the uplink APN-AMBR rate to a queue PIR override
Context	<b>configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping uplink queue number</b>
Tree	<a href="#">queue</a>
Range	1 to 32
Notes	The following elements are part of a mandatory choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**scheduler string**

Synopsis	Name of scheduler to be overridden
Context	<b>configure subscriber-mgmt gtp apn-policy string apn string ambr-qos-mapping uplink scheduler string</b>
Tree	<a href="#">scheduler</a>
String Length	1 to 32
Notes	The following elements are part of a mandatory choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	16.0.R7
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**defaults**

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure subscriber-mgmt gtp apn-policy string apn string defaults</b>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**group-interface**

Synopsis	Enable the <b>group-interface</b> context
Context	<b>configure subscriber-mgmt gtp apn-policy string apn string defaults group-interface</b>
Tree	<a href="#">group-interface</a>

Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis Group interface name  
 Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) *string* [apn](#) *string* [defaults](#) [group-interface](#) [name](#) *string*  
 Tree [name](#)  
 String Length 1 to 32  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **svc-name** *string*

Synopsis Service name where the group interface resides  
 Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) *string* [apn](#) *string* [defaults](#) [group-interface](#) [svc-name](#) *string*  
 Tree [svc-name](#)  
 String Length 1 to 64  
 Notes This element is mandatory.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **diameter-nasreq-policy** *reference*

Synopsis NASREQ authentication policy name  
 Context **configure** [subscriber-mgmt](#) [gtp](#) [apn-policy](#) *string* [apn](#) *string* [diameter-nasreq-policy](#) *reference*  
 Tree [diameter-nasreq-policy](#)  
 Reference **configure** [subscriber-mgmt](#) [diameter-nasreq-policy](#) *string*  
 Notes The following elements are part of a choice: **diameter-nasreq-policy**, **radius-auth-policy**, or **user-db**.  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *reference*

Synopsis	RADIUS authentication policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt gtp apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">radius-auth-policy</a> <i>reference</i>
Tree	<a href="#">radius-auth-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i>
Notes	The following elements are part of a choice: <b>diameter-nasreq-policy</b> , <b>radius-auth-policy</b> , or <b>user-db</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **skip-gtp-ipv4-allocation** *boolean*

Synopsis	defer IPv4 address allocation to DHCP
Context	<b>configure</b> <a href="#">subscriber-mgmt gtp apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">skip-gtp-ipv4-allocation</a> <i>boolean</i>
Tree	<a href="#">skip-gtp-ipv4-allocation</a>
Default	false
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *reference*

Synopsis	Local user database name
Context	<b>configure</b> <a href="#">subscriber-mgmt gtp apn-policy</a> <i>string</i> <a href="#">apn</a> <i>string</i> <a href="#">user-db</a> <i>reference</i>
Tree	<a href="#">user-db</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i>
Notes	The following elements are part of a choice: <b>diameter-nasreq-policy</b> , <b>radius-auth-policy</b> , or <b>user-db</b> .
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **max-held-uplink-sessions** *number*

Synopsis	Maximum GTP sessions held while UE is disconnected
Context	<b>configure</b> <a href="#">subscriber-mgmt gtp max-held-uplink-sessions</a> <i>number</i>



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Tree	<a href="#">max-held-uplink-sessions</a>
Range	0 to 500000
Default	2000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**peer-profile** [[name](#)] *string*

Synopsis	Enter the <b>peer-profile</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i>
Tree	<a href="#">peer-profile</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Peer profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i>
Tree	<a href="#">peer-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**interface-type** *keyword*

Synopsis	3GPP interface type for connections toward this peer
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">interface-type</a> <i>keyword</i>
Tree	<a href="#">interface-type</a>
Options	gn, s2a, s2b, s11
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ip-ttl** *number*

Synopsis	IP header TTL value for GTP control messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">ip-ttl</a> <i>number</i>
Tree	<a href="#">ip-ttl</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**keep-alive**

Synopsis	Enter the <b>keep-alive</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">keep-alive</a>
Tree	<a href="#">keep-alive</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of GTP-C echo request messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">keep-alive</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Frequency for sending keepalives
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>peer-profile</b> <i>string</i> <b>keep-alive</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Range	60 to 180
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **retry-count** *number*

Synopsis	Time between echo retries toward the same peer
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>peer-profile</b> <i>string</i> <b>keep-alive</b> <b>retry-count</b> <i>number</i>
Tree	<b>retry-count</b>
Range	1 to 15
Default	4
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Timeout after which echo request is deemed unanswered
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>peer-profile</b> <i>string</i> <b>keep-alive</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	1 to 20
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **message-retransmit**

Synopsis	Enter the <b>message-retransmit</b> context
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">message-retransmit</a>
Tree	<a href="#">message-retransmit</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **retry-count** *number*

Synopsis	Maximum unanswered retries before message deemed failed
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">message-retransmit</a> <a href="#">retry-count</a> <i>number</i>
Tree	<a href="#">retry-count</a>
Range	1 to 8
Default	3
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Timeout after which a message is considered unanswered
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">message-retransmit</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 30
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **python-policy** *reference*

Synopsis	Python policy for MGW profile packets sent or received
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">python-policy</a> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**s11**

Synopsis	Enter the <b>s11</b> context
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>s11</b>
Tree	<b>s11</b>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**change-reporting-action** (*number* | *keyword*)

Synopsis	Value of change reporting action IE sends to the peer
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>s11 change-reporting-action</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>change-reporting-action</b>
Description	<p>This command specifies the value of the change reporting action IE sends to the peer in applicable messages. The peer needs to indicate support first using the appropriate flag in the indication IE.</p> <p>This can be overridden by AAA, if AAA explicitly request notification changes for either ECGI, TAI or both. If AAA does not request any notification changes or only the generic location changes, the configured value is used.</p> <p>When unconfigured, this command indicates that the IE is not sent, unless specified by AAA.</p>
Range	0 to 255
Options	cgi-sai, rai, tai, ecgi, cgi-sai-rai, tai-ecgi
Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**end-marker-count** *number*

Synopsis	Number of GTP-U end marker packets that are sent
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>s11 end-marker-count</b> <i>number</i>
Tree	<b>end-marker-count</b>
Description	This command specifies the number of end marker packets that are sent when it is certain no more packets will be sent over the corresponding GTP-U tunnel, such as after a completed mobility event.
Range	0 to 5
Default	1

Introduced	16.0.R5
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-mtu** *number*

Synopsis	IPv4-MTU PCO sent in S11 GTP messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string s11</i> <b>ipv4-mtu</b> <i>number</i>
Tree	<a href="#">ipv4-mtu</a>
Range	512 to 9000
Default	1400
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string s11</i> <b>qos</b>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ambr**

Synopsis	Enter the <b>ambr</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string s11</i> <b>qos</b> <b>ambr</b>
Tree	<a href="#">ambr</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **down-link** *number*

Synopsis	Downlink Aggregated Maximum Bit Rate (AMBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string s11</i> <b>qos</b> <b>ambr</b> <b>down-link</b> <i>number</i>
Tree	<a href="#">down-link</a>
Range	0 to 10000000

Units	kilobps
Default	20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **up-link** *number*

Synopsis	Uplink Aggregated Maximum Bit Rate (AMBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string s11 qos ambr up-link number</i>
Tree	<a href="#">up-link</a>
Range	0 to 10000000
Units	kilobps
Default	10000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **arp** *number*

Synopsis	Allocation or retention priority
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string s11 qos arp number</i>
Tree	<a href="#">arp</a>
Range	1 to 15
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **down-link**

Synopsis	Enter the <b>down-link</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string s11 qos down-link</i>
Tree	<a href="#">down-link</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gbr number**

Synopsis	Guaranteed Bit Rate (GBR)
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos down-link gbr number</i>
Tree	<a href="#">gbr</a>
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbr number**

Synopsis	Maximum Bit Rate (MBR)
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos down-link mbr number</i>
Tree	<a href="#">mbr</a>
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qci number**

Synopsis	QoS Class Identifier (QCI) to send in GTP messages
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos qci number</i>
Tree	<a href="#">qci</a>
Range	1 to 9
Default	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **up-link**

Synopsis	Enter the <b>up-link</b> context
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string s11 qos up-link</i>



Tree	<a href="#">up-link</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gbr number**

Synopsis	Guaranteed Bit Rate (GBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">s11</a> <a href="#">qos</a> <a href="#">up-link</a> <a href="#">gbr</a> <i>number</i>
Tree	<a href="#">gbr</a>
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbr number**

Synopsis	Maximum Bit Rate (MBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">s11</a> <a href="#">qos</a> <a href="#">up-link</a> <a href="#">mbr</a> <i>number</i>
Tree	<a href="#">mbr</a>
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**uplink**

Synopsis	Enter the <b>uplink</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a>
Tree	<a href="#">uplink</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## charging-characteristics

Synopsis	Enter the <b>charging-characteristics</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a>
Tree	<a href="#">charging-characteristics</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## home

Synopsis	Enter the <b>home</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a>
Tree	<a href="#">home</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## bit0 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit0</a> <i>boolean</i>
Tree	<a href="#">bit0</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## bit1 *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit1</a> <i>boolean</i>
Tree	<a href="#">bit1</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit10** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit10</a> <i>boolean</i>
Tree	<a href="#">bit10</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit11** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit11</a> <i>boolean</i>
Tree	<a href="#">bit11</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit12** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit12</a> <i>boolean</i>
Tree	<a href="#">bit12</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit13** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit13</a> <i>boolean</i>
Tree	<a href="#">bit13</a>
Default	false

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit14** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)  
[bit14](#) *boolean*  
Tree [bit14](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit15** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)  
[bit15](#) *boolean*  
Tree [bit15](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit2** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [home](#)  
[bit2](#) *boolean*  
Tree [bit2](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit3** *boolean*

Synopsis Set bit in charging characteristics information element

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Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics home bit3</b> <i>boolean</i>
Tree	<b>bit3</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit4** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics home bit4</b> <i>boolean</i>
Tree	<b>bit4</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit5** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics home bit5</b> <i>boolean</i>
Tree	<b>bit5</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit6** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics home bit6</b> <i>boolean</i>
Tree	<b>bit6</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit7** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit7</a> <i>boolean</i>
Tree	<a href="#">bit7</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit8** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit8</a> <i>boolean</i>
Tree	<a href="#">bit8</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit9** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">home</a> <a href="#">bit9</a> <i>boolean</i>
Tree	<a href="#">bit9</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**roaming**

Synopsis	Enter the <b>roaming</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a>
Tree	<a href="#">roaming</a>

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit0** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit0** *boolean*  
Tree [bit0](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit1** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit1** *boolean*  
Tree [bit1](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit10** *boolean*

Synopsis Set bit in charging characteristics information element  
Context **configure** [subscriber-mgmt](#) [gtp](#) [peer-profile](#) *string* [uplink](#) [charging-characteristics](#) [roaming](#) **bit10** *boolean*  
Tree [bit10](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit11** *boolean*

Synopsis Set bit in charging characteristics information element

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Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics roaming bit11</b> <i>boolean</i>
Tree	<b>bit11</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit12** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics roaming bit12</b> <i>boolean</i>
Tree	<b>bit12</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit13** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics roaming bit13</b> <i>boolean</i>
Tree	<b>bit13</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bit14** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure subscriber-mgmt gtp peer-profile</b> <i>string</i> <b>uplink charging-characteristics roaming bit14</b> <i>boolean</i>
Tree	<b>bit14</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



**bit15 boolean**

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt gtp peer-profile</a> <i>string</i> <a href="#">uplink charging-characteristics roaming</a> <a href="#">bit15</a> <i>boolean</i>
Tree	<a href="#">bit15</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit2 boolean**

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt gtp peer-profile</a> <i>string</i> <a href="#">uplink charging-characteristics roaming</a> <a href="#">bit2</a> <i>boolean</i>
Tree	<a href="#">bit2</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit3 boolean**

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt gtp peer-profile</a> <i>string</i> <a href="#">uplink charging-characteristics roaming</a> <a href="#">bit3</a> <i>boolean</i>
Tree	<a href="#">bit3</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit4 boolean**

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt gtp peer-profile</a> <i>string</i> <a href="#">uplink charging-characteristics roaming</a> <a href="#">bit4</a> <i>boolean</i>
Tree	<a href="#">bit4</a>

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Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit5** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit5</b> <i>boolean</i>
Tree	<a href="#">bit5</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit6** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit6</b> <i>boolean</i>
Tree	<a href="#">bit6</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit7** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit7</b> <i>boolean</i>
Tree	<a href="#">bit7</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit8** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit8</b> <i>boolean</i>
Tree	<a href="#">bit8</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bit9** *boolean*

Synopsis	Set bit in charging characteristics information element
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">charging-characteristics</a> <a href="#">roaming</a> <b>bit9</b> <i>boolean</i>
Tree	<a href="#">bit9</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ggsn**

Synopsis	Enter the <b>ggsn</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <b>ggsn</b>
Tree	<a href="#">ggsn</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <b>ggsn</b> <b>qos</b>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ambr**

Synopsis	Enable the <b>ambr</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">ambr</a>
Tree	<a href="#">ambr</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**down-link** *number*

Synopsis	Downlink Aggregated Maximum Bit Rate (AMBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">ambr</a> <a href="#">down-link</a> <i>number</i>
Tree	<a href="#">down-link</a>
Range	0 to 10000000
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**up-link** *number*

Synopsis	Uplink Aggregated Maximum Bit Rate (AMBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">ambr</a> <a href="#">up-link</a> <i>number</i>
Tree	<a href="#">up-link</a>
Range	0 to 10000000
Units	kilobps
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**arp** *number*

Synopsis	Allocation or retention priority
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">arp</a> <i>number</i>
Tree	<a href="#">arp</a>

Range	1 to 3
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **down-link**

Synopsis	Enter the <b>down-link</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">down-link</a>
Tree	<a href="#">down-link</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gbr number**

Synopsis	Guaranteed Bit Rate (GBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">down-link</a> <a href="#">gbr</a> <i>number</i>
Tree	<a href="#">gbr</a>
Range	0 to 100000
Units	kilobps
Default	2000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbr number**

Synopsis	Maximum Bit Rate (MBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">down-link</a> <a href="#">mbr</a> <i>number</i>
Tree	<a href="#">mbr</a>
Range	0 to 100000
Units	kilobps
Default	2000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## up-link

Synopsis	Enter the <b>up-link</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">up-link</a>
Tree	<a href="#">up-link</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## gbr number

Synopsis	Guaranteed Bit Rate (GBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">up-link</a> <a href="#">gbr</a> <i>number</i>
Tree	<a href="#">gbr</a>
Range	0 to 100000
Units	kilobps
Default	5000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## mbr number

Synopsis	Maximum Bit Rate (MBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">ggsn</a> <a href="#">qos</a> <a href="#">up-link</a> <a href="#">mbr</a> <i>number</i>
Tree	<a href="#">mbr</a>
Range	0 to 100000
Units	kilobps
Default	5000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pgw

Synopsis	Enter the <b>pgw</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a>
Tree	<a href="#">pgw</a>

Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ambr

Synopsis	Enter the <b>ambr</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">ambr</a>
Tree	<a href="#">ambr</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## down-link *number*

Synopsis	Downlink Aggregated Maximum Bit Rate (AMBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">ambr</a> <a href="#">down-link</a> <i>number</i>
Tree	<a href="#">down-link</a>
Range	0 to 10000000
Units	kilobps
Default	20000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## up-link *number*

Synopsis	Uplink Aggregated Maximum Bit Rate (AMBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">ambr</a> <a href="#">up-link</a> <i>number</i>
Tree	<a href="#">up-link</a>

Range	0 to 10000000
Units	kilobps
Default	10000
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**arp number**

Synopsis	Allocation or retention priority
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <i>arp number</i>
Tree	<a href="#">arp</a>
Range	1 to 15
Default	1
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**down-link**

Synopsis	Enter the <b>down-link</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <i>down-link</i>
Tree	<a href="#">down-link</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**gbr number**

Synopsis	Guaranteed Bit Rate (GBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">down-link</a> <i>gbr number</i>
Tree	<a href="#">gbr</a>
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



### **mbr number**

Synopsis	Maximum Bit Rate (MBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">down-link</a> <i>mbr number</i>
Tree	<a href="#">mbr</a>
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **qci number**

Synopsis	QoS Class Identifier (QCI) to send in GTP messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <i>qci number</i>
Tree	<a href="#">qci</a>
Range	1 to 9
Default	8
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **up-link**

Synopsis	Enter the <b>up-link</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <i>up-link</i>
Tree	<a href="#">up-link</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gbr number**

Synopsis	Guaranteed Bit Rate (GBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">up-link</a> <i>gbr number</i>
Tree	<a href="#">gbr</a>
Range	0 to 100000

Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbr number**

Synopsis	Maximum Bit Rate (MBR)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">pgw</a> <a href="#">qos</a> <a href="#">up-link</a> <i>mbr number</i>
Tree	<a href="#">mbr</a>
Range	0 to 100000
Units	kilobps
Default	0
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**protocol-configuration-options keyword**

Synopsis	Information Element for Protocol Configuration Options
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">protocol-configuration-options</a> <i>keyword</i>
Tree	<a href="#">protocol-configuration-options</a>
Options	pco, apco
Default	pco
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rat-type (number | keyword)**

Synopsis	Default Radio Access Type (RAT) signaled in GTP setup
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">peer-profile</a> <i>string</i> <a href="#">uplink</a> <a href="#">rat-type</a> ( <i>number   keyword</i> )
Tree	<a href="#">rat-type</a>
Description	This command configures the default Radio Access Technology (RAT) type signaled during GTP setup. RAT identifies the underlying physical connection method for a radio-based communication network. This can be overridden by RADIUS.
Range	0 to 255

Options	utran, geran, wlan, gan, hspa, eutran, virtual
Default	wlan
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **report-wlan-location** *boolean*

Synopsis	Report WLAN or cellular location of UE during setup
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>peer-profile</b> <i>string</i> <b>uplink</b> <b>report-wlan-location</b> <i>boolean</i>
Tree	<a href="#">report-wlan-location</a>
Description	When configured to <b>true</b> , this command enables reporting of the WLAN location or cellular location of the UE in the signaling interface (S2a or Gn) between the WLAN GW and the mobile gateway (PGW or GGSN).  When configured to <b>false</b> , this command disables location reporting.
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **session-hold-time** (*number* | *keyword*)

Synopsis	Time to hold a GTP session after its UE is disconnected
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>peer-profile</b> <i>string</i> <b>uplink</b> <b>session-hold-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">session-hold-time</a>
Range	0 to 3600
Units	seconds
Options	remaining-lease-time
Default	30
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **serving-network**

Synopsis	Enable the <b>serving-network</b> context
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>gtp</b> <b>serving-network</b>
Tree	<a href="#">serving-network</a>

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Description	Commands in this context configure the 3GPP serving network that the node is part of.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mcc string**

Synopsis	Mobile Country Code (MCC) portion of serving network
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">serving-network</a> <b>mcc</b> <i>string</i>
Tree	<a href="#">mcc</a>
String Length	3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mnc string**

Synopsis	Mobile Network Code (MNC) portion of serving network
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">gtp</a> <a href="#">serving-network</a> <b>mnc</b> <i>string</i>
Tree	<a href="#">mnc</a>
String Length	2 to 3
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **host-lockout-policy** [[name](#)] *string*

Synopsis	Enter the <b>host-lockout-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <b>host-lockout-policy</b> <i>string</i>
Tree	<a href="#">host-lockout-policy</a>
Max. Instances	128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Host lockout policy name to associate with the SAP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i>
Tree	<a href="#">host-lockout-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-key** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Parameters in host identification for lockout on a SAP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">host-key</a> <i>keyword</i>
Tree	<a href="#">host-key</a>
Options	all, mac
Default	all
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lockout-reset-time** *number*

Synopsis	Lockout reset time settings
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">lockout-reset-time</a> <i>number</i>

Tree	<a href="#">lockout-reset-time</a>
Range	1 to 86400
Units	seconds
Default	60
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lockout-time

Synopsis	Enter the <b>lockout-time</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">lockout-time</a>
Tree	<a href="#">lockout-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## max number

Synopsis	Maximum lockout time
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">lockout-time</a> <i>max number</i>
Tree	<a href="#">max</a>
Range	1 to 86400
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## min number

Synopsis	Minimum lockout time
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-lockout-policy</a> <i>string</i> <a href="#">lockout-time</a> <i>min number</i>
Tree	<a href="#">min</a>
Range	1 to 86400
Units	seconds
Default	10
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-lockout-hosts** *number*

Synopsis Max lockout hosts  
 Context **configure** [subscriber-mgmt](#) [host-lockout-policy](#) *string* [max-lockout-hosts](#) *number*  
 Tree [max-lockout-hosts](#)  
 Range 1 to 32000  
 Default 100  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-tracking-policy** [[name](#)] *string*

Synopsis Enter the **host-tracking-policy** list instance  
 Context **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string*  
 Tree [host-tracking-policy](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis Host tracking policy name  
 Context **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string*  
 Tree [host-tracking-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [subscriber-mgmt](#) [host-tracking-policy](#) *string* [description](#) *string*  
 Tree [description](#)

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String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **egress-rate-modify**

Synopsis	Enter the <b>egress-rate-modify</b> context
Context	<b>configure subscriber-mgmt host-tracking-policy</b> <i>string</i> <b>egress-rate-modify</b>
Tree	<a href="#">egress-rate-modify</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **agg-rate**

Synopsis	Maximum total rate for all subscriber egress queues
Context	<b>configure subscriber-mgmt host-tracking-policy</b> <i>string</i> <b>egress-rate-modify agg-rate</b>
Tree	<a href="#">agg-rate</a>
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis	Scheduler to be applied for rate modification
Context	<b>configure subscriber-mgmt host-tracking-policy</b> <i>string</i> <b>egress-rate-modify scheduler</b> <i>string</i>
Tree	<a href="#">scheduler</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**http-redirect-policy** [*name*] *string*

Synopsis	Enter the <b>http-redirect-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">http-redirect-policy</a> <i>string</i>
Tree	<a href="#">http-redirect-policy</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	HTTP redirect policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">http-redirect-policy</a> <i>string</i>
Tree	<a href="#">http-redirect-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**aa-url-parameter** *string*

Synopsis	AA URL parameter included for HTTP portal redirect
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">http-redirect-policy</a> <i>string</i> <a href="#">aa-url-parameter</a> <i>string</i>
Tree	<a href="#">aa-url-parameter</a>
String Length	1 to 247
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**application-assurance** *reference*

Synopsis	AA application profile used for portal authentication
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">http-redirect-policy</a> <i>string</i> <a href="#">application-assurance</a> <i>reference</i>
Tree	<a href="#">application-assurance</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <i>group</i> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	22.2.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dst-port** *number*

Synopsis Destination port number of the HTTP request to match  
 Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **dst-port** *number*  
 Tree [dst-port](#)  
 Range 1 to 65535  
 Default 80  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*

Synopsis Add a list entry for **forward-entry**  
 Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*  
 Tree [forward-entry](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dst-ip** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Destination address  
 Context **configure** **subscriber-mgmt** **http-redirect-policy** *string* **forward-entry** **dst-ip** (*ipv4-prefix* | *ipv6-prefix*) **protocol** *keyword* **dst-port** *number*  
 Tree [forward-entry](#)

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **protocol** *keyword*

Synopsis	Destination protocol
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>forward-entry</b> <b>dst-ip</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>protocol</b> <i>keyword</i> <b>dst-port</b> <i>number</i>
Tree	<b>forward-entry</b>
Options	tcp, udp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **dst-port** *number*

Synopsis	Destination port
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>forward-entry</b> <b>dst-ip</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>protocol</b> <i>keyword</i> <b>dst-port</b> <i>number</i>
Tree	<b>forward-entry</b>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ignore-app-profile** *boolean*

Synopsis	Ignore application profile attribute in the RADIUS Access-Accept message
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>ignore-app-profile</b> <i>boolean</i>
Tree	<b>ignore-app-profile</b>
Default	false
Introduced	19.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**portal-hold-time** *number*

Synopsis	Time to hold redirect forwarding resources
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>portal-hold-time</b> <i>number</i>
Tree	<b>portal-hold-time</b>
Range	1 to 60
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**url** *string*

Synopsis	HTTP URL to which the matching traffic is redirected
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>http-redirect-policy</b> <i>string</i> <b>url</b> <i>string</i>
Tree	<b>url</b>
Description	This command configures the HTTP redirect URL to which the matching traffic is redirected. Use the following variables to insert subscriber session data in the URL: <ul style="list-style-type: none"> <li>• \$URL (Request-URI in the HTTP GET Request received)</li> <li>• \$MAC (a string that represents the MAC address of the subscriber host)</li> <li>• \$IP (a string that represents the IP address of the subscriber host)</li> <li>• \$NASIP (a string that represents the RADIUS IP address of the ISA/ESA-VM)</li> </ul>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**igmp-policy** [*name*] *string*

Synopsis	Enter the <b>igmp-policy</b> list instance
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>igmp-policy</b> <i>string</i>
Tree	<b>igmp-policy</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Policy name
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Context	<b>configure subscriber-mgmt igmp-policy</b> <i>string</i>
Tree	<a href="#">igmp-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure subscriber-mgmt igmp-policy</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **egress-rate-modify**

Synopsis	Enter the <b>egress-rate-modify</b> context
Context	<b>configure subscriber-mgmt igmp-policy</b> <i>string</i> <b>egress-rate-modify</b>
Tree	<a href="#">egress-rate-modify</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **agg-rate**

Synopsis	Maximum total rate for all subscriber egress queues
Context	<b>configure subscriber-mgmt igmp-policy</b> <i>string</i> <b>egress-rate-modify</b> <b>agg-rate</b>
Tree	<a href="#">agg-rate</a>
Description	This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**scheduler** *string*

Synopsis	Scheduler to be applied for rate modification
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">egress-rate-modify scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>agg-rate</b> or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**fast-leave** *boolean*

Synopsis	Enable fast leave
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">fast-leave</a> <i>boolean</i>
Tree	<a href="#">fast-leave</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than

the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.

Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <b>maximum-number-groups</b> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <b>maximum-number-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **multicast-reporter**

Synopsis	Enter the <b>multicast-reporter</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <b>multicast-reporter</b>
Tree	<a href="#">multicast-reporter</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the multicast reporter
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <b>multicast-reporter</b> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **destination** *reference*

Synopsis	Multicast reporter destination
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">multicast-reporter destination</a> <i>reference</i>
Tree	<a href="#">destination</a>
Reference	<b>configure</b> <a href="#">multicast-management multicast-reporting-destination</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **optional-fields**

Synopsis	Enter the <b>optional-fields</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">multicast-reporter optional-fields</a>
Tree	<a href="#">optional-fields</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-mac** *boolean*

Synopsis	Include host mac address
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">multicast-reporter optional-fields host-mac</a> <i>boolean</i>
Tree	<a href="#">host-mac</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**pppoe-session-id** *boolean*

Synopsis	Include PPPoE session ID in multicast reporting message
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">multicast-reporter</a> <a href="#">optional-fields</a> <a href="#">pppoe-session-id</a> <i>boolean</i>
Tree	<a href="#">pppoe-session-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-id** *boolean*

Synopsis	Include sap ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">multicast-reporter</a> <a href="#">optional-fields</a> <a href="#">sap-id</a> <i>boolean</i>
Tree	<a href="#">sap-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**svc-id** *boolean*

Synopsis	Include service ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">multicast-reporter</a> <a href="#">optional-fields</a> <a href="#">svc-id</a> <i>boolean</i>
Tree	<a href="#">svc-id</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**query-interval** *number*

Synopsis	Time between two consecutive host-query messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* [query-last-member-interval](#) *number*  
 Tree [query-last-member-interval](#)  
 Range 1 to 1023  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* [query-response-interval](#) *number*  
 Tree [query-response-interval](#)  
 Range 1 to 1023  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **redirection-policy** *reference*

Synopsis Multicast redirection action applied to the subscriber  
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* [redirection-policy](#) *reference*  
 Tree [redirection-policy](#)  
 Reference **configure** [policy-options policy-statement](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **replication** *keyword*

Synopsis Multicast replication mode for subscriber multicast  
 Context **configure** [subscriber-mgmt igmp-policy](#) *string* [replication](#) *keyword*  
 Tree [replication](#)  
 Options per-sap, per-host, per-spi

Default	per-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis	Enable router alert checking for IGMP or MLD messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">router-alert-check</a> <i>boolean</i>
Tree	<a href="#">router-alert-check</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">static</a>
Tree	<a href="#">static</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group** [[group-address](#)] *string*

Synopsis	Enter the <b>group</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">static</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[group-address]** *string*

Synopsis	Group address of static IGMP multicast channel
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i> <a href="#">static</a> <a href="#">group</a> <i>string</i>
Tree	<a href="#">group</a>

Description	This command configures an address that receives data on an interface. The IP address must be unique for each static group.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source** [[source-address](#)] *string*

Synopsis	Add a list entry for <b>source</b>
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[source-address]** *string*

Synopsis	Source IP address of multicast channel sending data
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">source</a> <i>string</i>
Tree	<a href="#">source</a>
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **starg**

Synopsis	any source address (*,G)
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">static group</a> <i>string</i> <a href="#">starg</a>
Tree	<a href="#">starg</a>
Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**use-multicast-destination-mac** *boolean*

Synopsis	Use multicast destination mac address for outgoing traffic.
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">use-multicast-destination-mac</a> <i>boolean</i>
Tree	<a href="#">use-multicast-destination-mac</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	IGMP protocol version
Context	<b>configure</b> <a href="#">subscriber-mgmt igmp-policy</a> <i>string</i> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe-session-policy** [[name](#)] *string*

Synopsis	Enter the <b>ipoe-session-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i>
Tree	<a href="#">ipoe-session-policy</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	IPoE session policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i>
Tree	<a href="#">ipoe-session-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id-from-auth** *boolean*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Use circuit ID from authentication server to identify session  
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [circuit-id-from-auth](#) *boolean*  
 Tree [circuit-id-from-auth](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-key**

Synopsis Enter the **session-key** context  
 Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* [session-key](#)  
 Tree [session-key](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cid** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use the Circuit ID as part of the index
Context	<b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> <a href="#">session-key cid</a> <i>boolean</i>
Tree	<a href="#">cid</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac** *boolean*

Synopsis	Use the MAC address as part of the index
Context	<b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> <a href="#">session-key mac</a> <i>boolean</i>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rid** *boolean***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Use the remote ID as part of the index
Context	<b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> <a href="#">session-key rid</a> <i>boolean</i>
Tree	<a href="#">rid</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap** *boolean*

Synopsis	Use the SAP ID as part of the index
Context	<b>configure</b> <a href="#">subscriber-mgmt ipoe-session-policy</a> <i>string</i> <a href="#">session-key sap</a> <i>boolean</i>
Tree	<a href="#">sap</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-timeout** (*number* | *keyword*)

Synopsis Timeout for IPoE sessions

Context **configure** [subscriber-mgmt ipoe-session-policy](#) *string* **session-timeout** (*number* | *keyword*)

Tree [session-timeout](#)

Range 1 to 31104000

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **isa-filter** [[name](#)] *string*

Synopsis Enter the **isa-filter** list instance

Context **configure** [subscriber-mgmt isa-filter](#) *string*

Tree [isa-filter](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [[name](#)] *string*

Synopsis ISA filter name

Context **configure** [subscriber-mgmt isa-filter](#) *string*

Tree [isa-filter](#)

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description



Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## default-action *keyword*

Synopsis	Action for non-matching entry
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv4</a> <a href="#">default-action</a> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	drop – Drop packets forward – Forward packets
Default	drop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## entry [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv4</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [*id*] *number*

Synopsis	ISA filter entry ID
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Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv4 entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## action

Synopsis	Enable the <b>action</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv4 entry</a> <i>number</i> <a href="#">action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## drop

Synopsis	A packet matching the entry will be dropped
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv4 entry</a> <i>number</i> <a href="#">action</a> <a href="#">drop</a>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## forward

Synopsis	A packet matching the entry will be forwarded
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv4 entry</a> <i>number</i> <a href="#">action</a> <a href="#">forward</a>
Tree	<a href="#">forward</a>
Notes	The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## http-redirect

Synopsis	Enable the <b>http-redirect</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number action http-redirect</a>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context apply the HTTP redirect functionality to HTTP flows that match the entry. Other packets are dropped.
Notes	The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## url string



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	HTTP URL to which the matching traffic is redirected
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number action http-redirect url string</a>
Tree	<a href="#">url</a>
Description	This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA.  Only macros \$URL, \$MAC, \$IP are supported. For unsupported macros, the string is not modified.
String Length	1 to 255
Notes	This element is mandatory.
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description string

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## match

Synopsis Enter the **match** context

Context **configure** [subscriber-mgmt isa-filter string ipv4 entry number match](#)

Tree [match](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dst-ip string

Synopsis Destination IPv4 prefix

Context **configure** [subscriber-mgmt isa-filter string ipv4 entry number match dst-ip string](#)

Tree [dst-ip](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dst-port

Synopsis Enter the **dst-port** context

Context **configure** [subscriber-mgmt isa-filter string ipv4 entry number match dst-port](#)

Tree [dst-port](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## equals number

Synopsis Exact port number

Context **configure** [subscriber-mgmt isa-filter string ipv4 entry number match dst-port equals number](#)

Tree [equals](#)

Range 0 | 1 to 65535

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**protocol** *keyword*

Synopsis	Protocol
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv4 entry number match protocol keyword</a>
Tree	<a href="#">protocol</a>
Options	icmp – Match only ICMP packets tcp – Match only TCP packets udp – Match only UDP packets gre – Match only GRE packets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**default-action** *keyword*

Synopsis	Action for non-matching entry
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 default-action keyword</a>
Tree	<a href="#">default-action</a>
Options	drop – Drop packets forward – Forward packets
Default	drop
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter string ipv6 entry number</a>
Tree	<a href="#">entry</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[id]** *number*

Synopsis	ISA filter entry ID
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv6 entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 1024
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**action**

Synopsis	Enable the <b>action</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv6 entry</a> <i>number</i> <b>action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**drop**

Synopsis	A packet matching the entry will be dropped
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv6 entry</a> <i>number</i> <b>action</b> <b>drop</b>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**forward**

Synopsis	A packet matching the entry will be forwarded
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-filter</a> <i>string</i> <a href="#">ipv6 entry</a> <i>number</i> <b>action</b> <b>forward</b>
Tree	<a href="#">forward</a>

Notes	The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .
Introduced	16.0.R5
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## http-redirect

Synopsis	Enable the <b>http-redirect</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-filter</a> <i>string</i> <a href="#">ipv6</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect</a>
Tree	<a href="#">http-redirect</a>
Description	Commands in this context apply the HTTP redirect functionality to HTTP flows that match the entry. Other packets are dropped.
Notes	The following elements are part of a mandatory choice: <b>drop</b> , <b>forward</b> , or <b>http-redirect</b> .
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## url *string*



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	HTTP URL to which the matching traffic is redirected
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-filter</a> <i>string</i> <a href="#">ipv6</a> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <a href="#">http-redirect</a> <a href="#">url</a> <i>string</i>
Tree	<a href="#">url</a>
Description	This command specifies the URL to which HTTP flows matching the entry are redirected. The URL can be overridden by AAA.  Only macros \$URL, \$MAC, \$IP are supported. For unsupported macros, the string is not modified.
String Length	1 to 255
Notes	This element is mandatory.
Introduced	20.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
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Context	<b>configure subscriber-mgmt isa-filter</b> <i>string ipv6 entry number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure subscriber-mgmt isa-filter</b> <i>string ipv6 entry number match</i>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dst-ip *string*

Synopsis	Destination IPv6 prefix
Context	<b>configure subscriber-mgmt isa-filter</b> <i>string ipv6 entry number match dst-ip string</i>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dst-port

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure subscriber-mgmt isa-filter</b> <i>string ipv6 entry number match dst-port</i>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## equals *number*

Synopsis	Exact port number
Context	<b>configure subscriber-mgmt isa-filter</b> <i>string ipv6 entry number match dst-port equals number</i>
Tree	<a href="#">equals</a>



Range	0   1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**protocol** *keyword*

Synopsis	Protocol
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-filter</a> <i>string</i> <a href="#">ipv6</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">match</a> <b>protocol</b> <i>keyword</i>
Tree	<a href="#">protocol</a>
Options	icmp – Match only ICMP packets tcp – Match only TCP packets udp – Match only UDP packets gre – Match only GRE packets
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Limit what the ISA filter can be used for
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-filter</a> <i>string</i> <b>type</b> <i>keyword</i>
Tree	<a href="#">type</a>
Options	dsm – Limited to DSM applications
Default	dsm
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**isa-policer** [[name](#)] *string*

Synopsis	Enter the <b>isa-policer</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-policer</a> <i>string</i>
Tree	<a href="#">isa-policer</a>
Max. Instances	128

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis ISA policer name  
 Context **configure** [subscriber-mgmt isa-policer](#) *string*  
 Tree [isa-policer](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis Action for in-profile and out-of-profile packets  
 Context **configure** [subscriber-mgmt isa-policer](#) *string* **action** *keyword*  
 Tree [action](#)  
 Options permit-deny – Permit or deny packets based on policer outcome  
 priority-mark – Mark packets as in or out of profile based on policer outcome  
 Default permit-deny  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **adaptation-rule**

Synopsis Enter the **adaptation-rule** context  
 Context **configure** [subscriber-mgmt isa-policer](#) *string* **adaptation-rule**  
 Tree [adaptation-rule](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cir** *keyword*

Synopsis Committed information rate

Context	<b>configure subscriber-mgmt isa-policer</b> <i>string</i> <b>adaptation-rule cir</b> <i>keyword</i>
Tree	<b>cir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pir** *keyword*

Synopsis	Peak Information Rate
Context	<b>configure subscriber-mgmt isa-policer</b> <i>string</i> <b>adaptation-rule pir</b> <i>keyword</i>
Tree	<b>pir</b>
Options	max, min, closest
Default	closest
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cbs** *number*

Synopsis	Committed burst size
Context	<b>configure subscriber-mgmt isa-policer</b> <i>string</i> <b>cbs</b> <i>number</i>
Tree	<b>cbs</b>
Range	0 to 131071
Units	kilobytes
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure subscriber-mgmt isa-policer</b> <i>string</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mbs** *number*

Synopsis Maximum Burst Size  
 Context **configure** [subscriber-mgmt isa-policer](#) *string* [mbs](#) *number*  
 Tree [mbs](#)  
 Range 0 to 131071  
 Units kilobytes  
 Default 0  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rate**

Synopsis Enter the **rate** context  
 Context **configure** [subscriber-mgmt isa-policer](#) *string* [rate](#)  
 Tree [rate](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cir** (*number* | *keyword*)

Synopsis Committed information rate  
 Context **configure** [subscriber-mgmt isa-policer](#) *string* [rate](#) [cir](#) (*number* | *keyword*)  
 Tree [cir](#)  
 Range 0 to 100000000  
 Units kilobps  
 Options max  
 Default 0  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	Peak Information Rate
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Policing technique
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-policer</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	single-bucket-bandwidth – Police traffic using a single bucket dual-bucket-bandwidth – Police traffic using dual buckets
Default	single-bucket-bandwidth
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**isa-service-chaining**

Synopsis	Enter the <b>isa-service-chaining</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-service-chaining</a>
Tree	<a href="#">isa-service-chaining</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**evpn [id] string**

Synopsis	Enter the <b>evpn</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-service-chaining evpn string</a>
Tree	<a href="#">evpn</a>
Max. Instances	1024
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[id] string**

Synopsis	EVPN service ID
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-service-chaining evpn string</a>
Tree	<a href="#">evpn</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state keyword**

Synopsis	Administrative state of EVPN
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-service-chaining evpn string admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bgp**

Synopsis	Enter the <b>bgp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt isa-service-chaining evpn string bgp</a>
Tree	<a href="#">bgp</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## route-distinguisher

Synopsis Enter the **route-distinguisher** context

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [evpn](#) *string* [bgp](#) [route-distinguisher](#)

Tree [route-distinguisher](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rd (*keyword* | *vpn-route-distinguisher*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis RD component for NLRI

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [evpn](#) *string* [bgp](#) [route-distinguisher](#) [rd](#) (*keyword* | *vpn-route-distinguisher*)

Tree [rd](#)

Options auto-rd

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## route-target

Synopsis Enable the **route-target** context

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [evpn](#) *string* [bgp](#) [route-target](#)

Tree [route-target](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**export string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended community name for default export policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">route-target</a> <a href="#">export</a> <a href="#">string</a>
Tree	<a href="#">export</a>
String Length	10 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**import string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Extended community name for default import policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <a href="#">string</a> <a href="#">bgp</a> <a href="#">route-target</a> <a href="#">import</a> <a href="#">string</a>
Tree	<a href="#">import</a>
String Length	10 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <a href="#">string</a> <a href="#">description</a> <a href="#">string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## export

Synopsis	Enter the <b>export</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <b>export</b>
Tree	<a href="#">export</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## advertise-pools

Synopsis	Enter the <b>advertise-pools</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <b>export</b> <b>advertise-pools</b>
Tree	<a href="#">advertise-pools</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of NAT pool route advertisement
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <b>export</b> <b>advertise-pools</b> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## pool [router-instance](#) *string* **name** *string*

Synopsis	Add a list entry for <b>pool</b>
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <b>export</b> <b>advertise-pools</b> <b>pool</b> <a href="#">router-instance</a> <i>string</i> <b>name</b> <i>string</i>
Tree	<a href="#">pool</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Router-instance of the NAT pool
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">advertise-pools</a> <a href="#">pool</a> <a href="#">router-instance</a> <i>string</i> <a href="#">name</a> <i>string</i>
Tree	<a href="#">pool</a>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis	NAT pool name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">advertise-pools</a> <a href="#">pool</a> <a href="#">router-instance</a> <i>string</i> <a href="#">name</a> <i>string</i>
Tree	<a href="#">pool</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gateway-address-range**

Synopsis	Enable the <b>gateway-address-range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">gateway-address-range</a>
Tree	<a href="#">gateway-address-range</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **end** *string*

Synopsis	Upper bound of the gateway address range
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">gateway-address-range</a> <a href="#">end</a> <i>string</i>
Tree	<a href="#">end</a>

Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **start string**

Synopsis	Lower bound of the gateway address range
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">gateway-address-range</a> <b>start</b> <i>string</i>
Tree	<a href="#">start</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vxlan**

Synopsis	Enter the <b>vxlan</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <b>vxlan</b>
Tree	<a href="#">vxlan</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vni number**



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VNI of the VXLAN created by the EVPN service
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">export</a> <a href="#">vxlan</a> <b>vni</b> <i>number</i>
Tree	<a href="#">vni</a>
Range	1 to 16777215
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**import-mode** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Import mode for the EVPN
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">import-mode</a> <i>keyword</i>
Tree	<a href="#">import-mode</a>
Options	none, bridged, routed
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**prefix-route-resolution** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	How prefix routes should be resolved
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i> <a href="#">prefix-route-resolution</a> <i>keyword</i>
Tree	<a href="#">prefix-route-resolution</a>
Options	recursive, non-recursive
Default	recursive
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mac-prefix** *string*

Synopsis	MAC prefix for all NAT groups for Service Chaining
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">mac-prefix</a> <i>string</i>
Tree	<a href="#">mac-prefix</a>
String Length	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**vas-filter** [*name*] *string*

Synopsis	Enter the <b>vas-filter</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i>
Tree	<a href="#">vas-filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	VAS filter name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i>
Tree	<a href="#">vas-filter</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**entry** [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Max. Instances	64
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *number*

Synopsis VAS filter entry ID

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string* [entry](#) *number*

Tree [entry](#)

Range 1 to 65535

Notes This element is part of a list key.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **action** [[direction](#)] *keyword*

Synopsis Enter the **action** list instance

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string* [entry](#) *number* [action](#) *keyword*

Tree [action](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[direction]** *keyword*

Synopsis Direction for the action in a VAS filter entry

Context **configure** [subscriber-mgmt](#) [isa-service-chaining](#) [vas-filter](#) *string* [entry](#) *number* [action](#) *keyword*

Tree [action](#)

Options upstream, downstream

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **fail-action** *keyword*

Synopsis Action for unresolved SF-IP or ESI

Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>keyword</i> <a href="#">fail-action</a> <i>keyword</i>
Tree	<a href="#">fail-action</a>
Options	drop, accept
Default	accept
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## forward

Synopsis	Enable the <b>forward</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>keyword</i> <a href="#">forward</a>
Tree	<a href="#">forward</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esi string

Synopsis	ESI for the action in the VAS filter entry
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>keyword</i> <a href="#">forward</a> <a href="#">esi</a> <i>string</i>
Tree	<a href="#">esi</a>
Default	00:00:00:00:00:00:00:00:00
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## sf-ip (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Forwarding SF IP address for the action
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <i>entry</i> <i>number</i> <i>action</i> <i>keyword</i> <a href="#">forward</a> <a href="#">sf-ip</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">sf-ip</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **svc reference**

Synopsis	EVPN service used for forwarding packets
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> <a href="#">forward</a> <a href="#">svc</a> <i>reference</i>
Tree	<a href="#">svc</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">evpn</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **insert-nsh**

Synopsis	Enter the <b>insert-nsh</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> <a href="#">insert-nsh</a>
Tree	<a href="#">insert-nsh</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **meta-data**

Synopsis	Enter the <b>meta-data</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> <a href="#">insert-nsh</a> <a href="#">meta-data</a>
Tree	<a href="#">meta-data</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **insert-subscriber-id**

Synopsis	Insert the subscriber-id in the NSH
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> <a href="#">insert-nsh</a> <a href="#">meta-data</a> <a href="#">insert-subscriber-id</a>
Tree	<a href="#">insert-subscriber-id</a>
Notes	The following elements are part of a choice: <b>insert-subscriber-id</b> or <b>opaque-data</b> .



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **opaque-data** *string*

Synopsis	Opaque meta-data for the NSH
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> <a href="#">insert-nsh</a> <a href="#">meta-data</a> <a href="#">opaque-data</a> <i>string</i>
Tree	<a href="#">opaque-data</a>
String Length	10 18 26 34
Notes	The following elements are part of a choice: <b>insert-subscriber-id</b> or <b>opaque-data</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **svc-path**

Synopsis	Enable the <b>svc-path</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> <a href="#">insert-nsh</a> <a href="#">svc-path</a>
Tree	<a href="#">svc-path</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **path-id** *number*

Synopsis	Path ID in the base part of NSH
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i> <a href="#">insert-nsh</a> <a href="#">svc-path</a> <a href="#">path-id</a> <i>number</i>
Tree	<a href="#">path-id</a>
Range	1 to 16777215
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**svc-index** *number*

Synopsis	Service index inserted in the base part of NSH
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>isa-service-chaining</b> <b>vas-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>action</b> <i>keyword</i> <b>insert-nsh</b> <b>svc-path</b> <b>svc-index</b> <i>number</i>
Tree	<a href="#">svc-index</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the VAS filter
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>isa-service-chaining</b> <b>vas-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>isa-service-chaining</b> <b>vas-filter</b> <i>string</i> <b>entry</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**match****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **foreign-ip** (*ipv4-unicast-prefix* | *ipv4-unicast-address*)



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Foreign IP address or prefix for match criterion
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">foreign-ip</a> ( <i>ipv4-unicast-prefix</i>   <i>ipv4-unicast-address</i> )
Tree	<a href="#">foreign-ip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **foreign-port** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Foreign TCP or UDP port as the match criterion
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">foreign-port</a> <i>number</i>
Tree	<a href="#">foreign-port</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**protocol** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP protocol to match the VAS filter
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">isa-service-chaining</a> <a href="#">vas-filter</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>protocol</b> <i>keyword</i>
Tree	<a href="#">protocol</a>
Options	tcp-udp – TCP and UDP none – Matching disabled by the IP protocol icmp – ICMP tcp – TCP udp – UDP
Default	none
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**local-user-db** [[name](#)] *string*

Synopsis	Enter the <b>local-user-db</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Tree	<a href="#">local-user-db</a>
Max. Instances	127
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Local user database name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i>
Tree	<a href="#">local-user-db</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the local user database
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipoe**

Synopsis	Enter the <b>ipoe</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <b>ipoe</b>
Tree	<a href="#">ipoe</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host** [[host-name](#)] *string*

Synopsis	Enter the <b>host</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <b>host</b> <i>string</i>
Tree	<a href="#">host</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[host-name]** *string*

Synopsis	Host name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i>
Tree	<a href="#">host</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the host
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication**

Synopsis	Enter the <b>authentication</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>authentication</b>
Tree	<a href="#">authentication</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**auth-domain-name** *string*

Synopsis	Domain name appended to the username for the host
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>authentication</b> <a href="#">auth-domain-name</a> <i>string</i>
Tree	<a href="#">auth-domain-name</a>
String Length	1 to 32

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gx-policy** *string*

Synopsis Diameter application policy  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [authentication](#) [gx-policy](#) *string*  
 Tree [gx-policy](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nasreq-auth-policy** *string*

Synopsis Diameter NASREQ application policy for authentication  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [authentication](#) [nasreq-auth-policy](#) *string*  
 Tree [nasreq-auth-policy](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *string*

Synopsis Host authentication policy  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [authentication](#) [radius-auth-policy](#) *string*  
 Tree [radius-auth-policy](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gtp-interface**

Synopsis Enable the **gtp-interface** context

Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">gtp-interface</a>
Tree	<a href="#">gtp-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">gtp-interface</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-id** *number*

Synopsis	Service ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">gtp-interface</a> <a href="#">service-id</a> <i>number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-identification**

Synopsis	Enter the <b>host-identification</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a>
Tree	<a href="#">host-identification</a>
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## circuit-id

Synopsis Enter the **circuit-id** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [host-identification](#) [circuit-id](#)

Tree [circuit-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Circuit ID as ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [host-identification](#) [circuit-id](#) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a choice: **ascii-string** or **hex-string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Circuit ID as hexadecimal string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [host-identification](#) [circuit-id](#) [hex-string](#) *string*

Tree [hex-string](#)

String Length 1 to 256

Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### derived-id *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Derived ID string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">derived-id</a> <a href="#">string</a>
Tree	<a href="#">derived-id</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### encap-tag-range

Synopsis	Enable the <b>encap-tag-range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-range</a>
Tree	<a href="#">encap-tag-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### from *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start tag
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> <a href="#">from</a> <a href="#">string</a>
Tree	<a href="#">from</a>
String Length	1 to 11

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### to string



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	End tag
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> <a href="#">to</a> <a href="#">string</a>
Tree	<a href="#">to</a>
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### encap-tag-separate-range

Synopsis	Enter the <b>encap-tag-separate-range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a>
Tree	<a href="#">encap-tag-separate-range</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### inner

Synopsis	Enter the <b>inner</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">inner</a>
Tree	<a href="#">inner</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the inner encapsulation tag range
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">inner</a> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Description	This command configures an inner end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the inner encapsulation tag range
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">inner</a> <b>start</b> <i>number</i>
Tree	<a href="#">start</a>
Description	This command configures an inner start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## outer

Synopsis	Enter the <b>outer</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <b>outer</b>
Tree	<a href="#">outer</a>

Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the outer encapsulation tag range
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string ipoe host</a> <a href="#">string host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">outer end</a> <i>number</i>
Tree	<a href="#">end</a>
Description	This command configures an outer end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the outer encapsulation tag range
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string ipoe host</a> <a href="#">string host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">outer start</a> <i>number</i>
Tree	<a href="#">start</a>
Description	This command configures an outer start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-prefix** (*ipv4-prefix-with-host-bits* | *ipv6-prefix-with-host-bits*)**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">ip-prefix</a> ( <i>ipv4-prefix-with-host-bits</i>   <i>ipv6-prefix-with-host-bits</i> )
Tree	<a href="#">ip-prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">mac string</a>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option60**

Synopsis	Enter the <b>option60</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">option60</a>
Tree	<a href="#">option60</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Option 60 as ASCII string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">option60</a> <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Option as a hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">option60</a> <a href="#">hex-string</a> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## remote-id

Synopsis	Enter the <b>remote-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">remote-id</a>
Tree	<a href="#">remote-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as ASCII string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">remote-id</a> <a href="#">ascii-string</a> <a href="#">string</a>
Tree	<a href="#">ascii-string</a>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">remote-id</a> <a href="#">hex-string</a> <a href="#">string</a>
Tree	<a href="#">hex-string</a>
String Length	1 to 512
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP ID
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">sap-id</a> <i>string</i>
Tree	<a href="#">sap-id</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **service-id** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Service ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">service-id</a> <i>number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	VSO string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## system-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	System ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">system-id</a> <i>string</i>
Tree	<a href="#">system-id</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## identification

Synopsis	Enable the <b>identification</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a>
Tree	<a href="#">identification</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ancp-string *string*

Synopsis	ANCP string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">ancp-string</a> <i>string</i>
Tree	<a href="#">ancp-string</a>
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## app-profile-string *string*

Synopsis	Application profile string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">app-profile-string</a> <i>string</i>
Tree	<a href="#">app-profile-string</a>

String Length 1 to 16  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **category-map-name** *string*

Synopsis Category map name  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [category-map-name](#) *string*  
 Tree [category-map-name](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id** *string*

Synopsis Intermediate destination ID  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [int-dest-id](#) *string*  
 Tree [int-dest-id](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option-number** *number*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Identification strings for the subscriber  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [option-number](#) *number*  
 Tree [option-number](#)  
 Range 1 to 254  
 Default 254  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile-string** *string*

Synopsis SLA profile string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [sla-profile-string](#) *string*

Tree [sla-profile-string](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **spi-sharing-group-id** *number*

Synopsis SPI sharing group ID

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [spi-sharing-group-id](#) *number*

Tree [spi-sharing-group-id](#)

Range 0 to 65535

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile-string** *string*

Synopsis Sub profile string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [sub-profile-string](#) *string*

Tree [sub-profile-string](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id** *string*

Synopsis Subscriber ID

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [identification](#) [subscriber-id](#) *string*

Tree	<a href="#">subscriber-id</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Enter the <b>address</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string ipv4 address</a>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gi-address *keyword*

Synopsis	Use gi-address to select a pool with the given scope
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ipoe host string ipv4 address gi-address keyword</a>
Tree	<a href="#">gi-address</a>
Options	subnet-scope, pool-scope
Notes	The following elements are part of a choice: <b>gi-address</b> , <b>ip-address</b> , <b>pool</b> , or <b>use-pool-from-client</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-address *string*

Synopsis	Fixed IPv4 address of the host
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">ip-address</a> <i>string</i>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>gi-address</b> , <b>ip-address</b> , <b>pool</b> , or <b>use-pool-from-client</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pool

Synopsis	Enable the <b>pool</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">pool</a>
Tree	<a href="#">pool</a>
Notes	The following elements are part of a choice: <b>gi-address</b> , <b>ip-address</b> , <b>pool</b> , or <b>use-pool-from-client</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## delimiter *string*

Synopsis	Delimiter separating primary and secondary pool names
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">pool</a> <a href="#">delimiter</a> <i>string</i>
Tree	<a href="#">delimiter</a>
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## primary *string*

Synopsis	Primary pool name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">pool</a> <a href="#">primary</a> <i>string</i>
Tree	<a href="#">primary</a>
String Length	1 to 32
Notes	This element is mandatory.

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secondary string**

Synopsis Secondary pool name  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string ipoe](#) [host](#) [string ipv4](#) [address](#) [pool](#) [secondary](#) [string](#)  
Tree [secondary](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-pool-from-client**

Synopsis Enable the **use-pool-from-client** context  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string ipoe](#) [host](#) [string ipv4](#) [address](#) [use-pool-from-client](#)  
Tree [use-pool-from-client](#)  
Notes The following elements are part of a choice: **gi-address**, **ip-address**, **pool**, or **use-pool-from-client**.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delimiter string**

Synopsis Delimiter character to combine primary and secondary pool names  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string ipoe](#) [host](#) [string ipv4](#) [address](#) [use-pool-from-client](#) [delimiter](#) [string](#)  
Tree [delimiter](#)  
String Length 1  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gi-address** *string*

Synopsis	GI addresses based on the host entry in the LUDB
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string ipv4 gi-address string</i>
Tree	<a href="#">gi-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option** [[number](#)] (*number | keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword)</i>
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number]** (*number | keyword*)

Synopsis	DHCP option to send identification strings to client
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword)</i>
Tree	<a href="#">option</a>
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword) ascii-string string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127



Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option as time duration
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword)</i> <b>duration</b> <i>number</i>
Tree	<a href="#">duration</a>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Empty DHCP option.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword)</i> <b>empty</b>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword)</i> <b>hex-string</b> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-address** *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword) ipv4-address string</i>
Tree	<a href="#">ipv4-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string ipv4 option (number   keyword) netbios-node-type keyword</i>
Tree	<a href="#">netbios-node-type</a>
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *string*

Synopsis	IPv4 address of the DHCP server
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string ipoe host string ipv4 server string</i>
Tree	<a href="#">server</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6

Synopsis Enter the **ipv6** context  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* **ipv6**  
 Tree [ipv6](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address *string*

Synopsis Fixed IPv6 address of the host  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* **ipv6** [address](#) *string*  
 Tree [address](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address-pool *string*

Synopsis IPv6 address pool name  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* **ipv6** [address-pool](#) *string*  
 Tree [address-pool](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## delegated-prefix *string*

Synopsis IPv6 delegated prefix of this host  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* **ipv6** [delegated-prefix](#) *string*  
 Tree [delegated-prefix](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**delegated-prefix-length** *number*

Synopsis	Delegated prefix length
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">delegated-prefix-length</a> <i>number</i>
Tree	<a href="#">delegated-prefix-length</a>
Range	48 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**delegated-prefix-pool** *string*

Synopsis	Delegated prefix pool
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">delegated-prefix-pool</a> <i>string</i>
Tree	<a href="#">delegated-prefix-pool</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**link-address** *string*

Synopsis	Link address used for prefix selection at DHCP server
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">link-address</a> <i>string</i>
Tree	<a href="#">link-address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number]** (*number* | *keyword*)

Synopsis	The number of the DHCPv6 option.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Range	23
Options	dns-server
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">hex-string</a> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>hex-string</b> or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>hex-string</b> or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-advertisement-policy** *string*

Synopsis	IPv6 router advertisement policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">router-advertisement-policy</a> <i>string</i>
Tree	<a href="#">router-advertisement-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **server** *string*

Synopsis	IPv6 address of the DHCP server
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">server</a> <i>string</i>
Tree	<a href="#">server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **slaac-prefix** *string*

Synopsis	IPv6 SLAAC prefix of this host
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">slaac-prefix</a> <i>string</i>
Tree	<a href="#">slaac-prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **slaac-prefix-pool** *string*

Synopsis	IPv6 SLAAC prefix pool of this host
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">slaac-prefix-pool</a> <i>string</i>
Tree	<a href="#">slaac-prefix-pool</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timers**

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv6</i> <b>timers</b>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime** (*number | keyword*)

Synopsis	Time for a lease to remain preferred
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv6</i> <b>timers preferred-lifetime</b> ( <i>number   keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rebind** *number*

Synopsis	Rebind timer (T2)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv6</i> <b>timers rebind</b> <i>number</i>
Tree	<a href="#">rebind</a>
Range	0 to 1209600
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**renew** *number*

Synopsis	Renew timer (T1)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string ipoe host string ipv6</i> <b>timers renew</b> <i>number</i>

Tree	<a href="#">renew</a>
Range	0 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** (*number* | *keyword*)

Synopsis	Time for a lease to remain valid
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <b>valid-lifetime</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **match-radius-proxy-cache**

Synopsis	Enter the <b>match-radius-proxy-cache</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <b>match-radius-proxy-cache</b>
Tree	<a href="#">match-radius-proxy-cache</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **fail-action** *keyword*

Synopsis	Action when no match is found
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <b>fail-action</b> <i>keyword</i>
Tree	<a href="#">fail-action</a>
Options	continue, drop
Default	drop
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac-format** *string*

Synopsis MAC address format

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ipoe](#) [host](#) [string](#) [match-radius-proxy-cache](#) **mac-format** *string*

Tree [mac-format](#)

String Length 2 to 7

Default aa:

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **match**

Synopsis Enter the **match** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ipoe](#) [host](#) [string](#) [match-radius-proxy-cache](#) **match**

Tree [match](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id** *boolean*

Synopsis Match circuit ID in DHCP Option 82

Context **configure** [subscriber-mgmt](#) [local-user-db](#) [string](#) [ipoe](#) [host](#) [string](#) [match-radius-proxy-cache](#) [match](#) **circuit-id** *boolean*

Tree [circuit-id](#)

Notes The following elements are part of a choice: **circuit-id**, (**ipv4-option** and **ipv6-option**), **mac**, or **remote-id**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-option** *number*

Synopsis DHCP option number

Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <a href="#">match</a> <a href="#">ipv4-option</a> <i>number</i>
Tree	<a href="#">ipv4-option</a>
Range	1 to 254
Notes	The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-option** *number*

Synopsis	DHCPv6 option number
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <a href="#">match</a> <a href="#">ipv6-option</a> <i>number</i>
Tree	<a href="#">ipv6-option</a>
Range	1 to 65535
Notes	The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac** *boolean*

Synopsis	Match MAC address of DHCP client
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <a href="#">match</a> <a href="#">mac</a> <i>boolean</i>
Tree	<a href="#">mac</a>
Default	true
Notes	The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-id** *boolean*

Synopsis	Match remote ID in DHCP Option 82
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <a href="#">match</a> <a href="#">remote-id</a> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Notes	The following elements are part of a choice: <b>circuit-id</b> , ( <b>ipv4-option</b> and <b>ipv6-option</b> ), <b>mac</b> , or <b>remote-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## server

Synopsis	Enable the <b>server</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <a href="#">server</a>
Tree	<a href="#">server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## name *string*

Synopsis	Local user database server name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <a href="#">server</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## service *number*

Synopsis	Service ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">match-radius-proxy-cache</a> <a href="#">server</a> <a href="#">service</a> <i>number</i>
Tree	<a href="#">service</a>
Range	1 to 2147483647
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mld-import** [*policy-name*] *string*

Synopsis Add a list entry for **mld-import**

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **mld-import** *string*

Tree **mld-import**

Max. Instances 14

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[policy-name]** *string*

Synopsis MLD import policy used to control the multicast group

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **mld-import** *string*

Tree **mld-import**

String Length 1 to 32

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **msap-defaults**

Synopsis Enter the **msap-defaults** context

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **msap-defaults**

Tree **msap-defaults**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group-interface**

Synopsis Enable the **group-interface** context

Context **configure** **subscriber-mgmt** **local-user-db** *string* **ipoe** **host** *string* **msap-defaults** **group-interface**

Tree **group-interface**

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix** *keyword*

Synopsis	Prefix to the IP interface name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">prefix</a> <i>keyword</i>
Tree	<a href="#">prefix</a>
Options	port-id
Notes	The following elements are part of a choice: <b>prefix</b> or <b>suffix</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix** *keyword*

Synopsis	Suffix for the group interface
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">suffix</a> <i>keyword</i>
Tree	<a href="#">suffix</a>
Options	port-id
Notes	The following elements are part of a choice: <b>prefix</b> or <b>suffix</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy string**

Synopsis	MSAP policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">policy</a> <i>string</i>
Tree	<a href="#">policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service number**

Synopsis	Service ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">service</a> <i>number</i>
Tree	<a href="#">service</a>
Range	1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy**

Synopsis	Enter the <b>radius-accounting-policy</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">radius-accounting-policy</a>
Tree	<a href="#">radius-accounting-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duplicate string**

Synopsis	RADIUS accounting policy for generating duplicate accounting information
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">radius-accounting-policy</a> <a href="#">duplicate</a> <i>string</i>

Tree	<a href="#">duplicate</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name** *string*

Synopsis	RADIUS accounting policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe host</a> <i>string</i> <a href="#">radius-accounting-policy name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retail-service-id** *number*

Synopsis	Configure the retail service-id
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe host</a> <i>string</i> <a href="#">retail-service-id</a> <i>number</i>
Tree	<a href="#">retail-service-id</a>
Range	1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rip-policy** *string*

Synopsis	RIP policy
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe host</a> <i>string</i> <a href="#">rip-policy</a> <i>string</i>
Tree	<a href="#">rip-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## to-client-options

Synopsis	Enter the <b>to-client-options</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe host</a> <i>string</i> <b>to-client-options</b>
Tree	<a href="#">to-client-options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4-option [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>ipv4-option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe host</a> <i>string</i> <b>to-client-options</b> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">ipv4-option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[number](#)] (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe host</a> <i>string</i> <b>to-client-options</b> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">ipv4-option</a>
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ipoe host</a> <i>string</i> <b>to-client-options</b> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127



Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis	DHCP option as time duration
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> ) <b>duration</b> <i>number</i>
Tree	<a href="#">duration</a>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Empty DHCP option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> ) <b>hex-string</b> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256

Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4-address** *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv4-address</a> <i>string</i>
Tree	<a href="#">ipv4-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv4-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">netbios-node-type</a> <i>keyword</i>
Tree	<a href="#">netbios-node-type</a>
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>ipv6-option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">ipv6-option</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">ipv6-option</a>
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-string** *string*

Synopsis	DHCP option specified as a domain name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">domain-string</a> <i>string</i>
Tree	<a href="#">domain-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## empty

Synopsis	Empty DHCP option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">empty</a>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">hex-string</a> <a href="#">string</a>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6-address *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ipoe</a> <a href="#">host</a> <a href="#">string</a> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">ipv6-address</a> <a href="#">string</a>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## to-server-options

Synopsis Enter the **to-server-options** context  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-server-options](#)  
 Tree [to-server-options](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6-option [[number](#)] (*number* | *keyword*)

Synopsis Enter the **ipv6-option** list instance  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-server-options](#) [ipv6-option](#) (*number* | *keyword*)  
 Tree [ipv6-option](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[number](#)] (*number* | *keyword*)

Synopsis DHCP option to send as identification string  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [to-server-options](#) [ipv6-option](#) (*number* | *keyword*)  
 Tree [ipv6-option](#)  
 Range 1 to 65535  
 Options dns-server, domain-name  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis DHCP option specified as an ASCII string

Context	<b>configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option</b> ( <i>number</i>   <i>keyword</i> ) <b>ascii-string string</b>
Tree	<b>ascii-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **domain-string string**

Synopsis	DHCP option specified as a domain name
Context	<b>configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option</b> ( <i>number</i>   <i>keyword</i> ) <b>domain-string string</b>
Tree	<b>domain-string</b>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Empty DHCP option
Context	<b>configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option</b> ( <i>number</i>   <i>keyword</i> ) <b>empty</b>
Tree	<b>empty</b>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string string**

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure subscriber-mgmt local-user-db string ipoe host string to-server-options ipv6-option</b> ( <i>number</i>   <i>keyword</i> ) <b>hex-string string</b>

Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">to-server-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wpp**

Synopsis	Enter the <b>wpp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a>
Tree	<a href="#">wpp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **initial**

Synopsis	Enter the <b>initial</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <a href="#">initial</a>
Tree	<a href="#">initial</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** *string*

Synopsis	Initial application profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <b>initial</b> <a href="#">app-profile</a> <i>string</i>
Tree	<a href="#">app-profile</a>
String Length	1 to 32
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile** *string*

Synopsis	Initial SLA profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <b>initial</b> <a href="#">sla-profile</a> <i>string</i>
Tree	<a href="#">sla-profile</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *string*

Synopsis	Initial subscriber profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <b>initial</b> <a href="#">sub-profile</a> <i>string</i>
Tree	<a href="#">sub-profile</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **portal**

Synopsis	Enter the <b>portal</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">host</a> <i>string</i> <a href="#">wpp</a> <b>portal</b>
Tree	<a href="#">portal</a>
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*

Synopsis Web portal server name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [wpp](#) [portal](#) **name** *string*

Tree [name](#)

String Length 1 to 32

Notes The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **portal-group** *string*

Synopsis WPP portal group for this interface

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [wpp](#) [portal](#) **portal-group** *string*

Tree [portal-group](#)

String Length 1 to 32

Notes The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** (*keyword* | *number*)

Synopsis Virtual router instance of the WPP portal for the host

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [wpp](#) [portal](#) **router-instance** (*keyword* | *number*)

Tree [router-instance](#)

Range 1 to 2147483647

Options base

Default base

Notes The following elements are part of a choice: **portal-group** or (**name** and **router-instance**).

Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **restore-to-initial-on-disconnect** *keyword*

Synopsis Restore initial profiles after a host has disconnected  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) [host](#) *string* [wpp](#) **restore-to-initial-on-disconnect** *keyword*  
Tree [restore-to-initial-on-disconnect](#)  
Options restore, no-restore  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mask type** *keyword*

Synopsis Enter the **mask** list instance  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) **mask type** *keyword*  
Tree [mask](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis Matching type to identify a host  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) **mask type** *keyword*  
Tree [mask](#)  
Options circuit-id, remote-id, sap-id, string, system-id, option60  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix**

Synopsis Enable the **prefix** context  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ipoe](#) **mask type** *keyword* **prefix**

Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **length** *number*

Synopsis	PPP mask prefix length
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <i>keyword</i> <a href="#">prefix</a> <a href="#">length</a> <i>number</i>
Tree	<a href="#">length</a>
Range	1 to 127
Notes	The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis	Prefix string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <i>keyword</i> <a href="#">prefix</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix**

Synopsis	Enable the <b>suffix</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <i>keyword</i> <a href="#">suffix</a>
Tree	<a href="#">suffix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**length** *number*

Synopsis	PPP mask suffix length
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">suffix</a> <a href="#">length</a> <i>number</i>
Tree	<a href="#">length</a>
Range	1 to 127
Notes	The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	Suffix string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">mask</a> <a href="#">type</a> <a href="#">keyword</a> <a href="#">suffix</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**match-list** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	IPoE host match type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ipoe</a> <a href="#">match-list</a> <i>keyword</i>
Tree	<a href="#">match-list</a>
Options	circuit-id, mac, remote-id, sap-id, service-id, string, system-id, option60, encap-tag-range, dual-stack-remote-id, derived-id, ip, encap-tag-separate-range
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp

Synopsis Enter the **ppp** context  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* **ppp**  
 Tree [ppp](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host [[host-name](#)] *string*

Synopsis Enter the **host** list instance  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* **ppp** **host** *string*  
 Tree [host](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [\[host-name\]](#) *string*

Synopsis Host name  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* **ppp** **host** *string*  
 Tree [host](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## access-loop-encapsulation

Synopsis Enable the **access-loop-encapsulation** context  
 Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* **ppp** **host** *string* **access-loop-encapsulation**  
 Tree [access-loop-encapsulation](#)  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## encap-offset

Synopsis Enter the **encap-offset** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [access-loop-encapsulation](#) **encap-offset**

Tree [encap-offset](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type *keyword*

Synopsis Egress encapsulation type

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [access-loop-encapsulation](#) **encap-offset** *type* *keyword*

Tree [type](#)

Options pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rate-down *number*

Synopsis Last mile link downstream rate in the access loop

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [access-loop-encapsulation](#) **rate-down** *number*

Tree [rate-down](#)

Range 1 to 100000

Units kilobps

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## access-loop-information

Synopsis	Enter the <b>access-loop-information</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">access-loop-information</a>
Tree	<a href="#">access-loop-information</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## circuit-id

Synopsis	Enable the <b>circuit-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">access-loop-information</a> <a href="#">circuit-id</a>
Tree	<a href="#">circuit-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis	Circuit ID as an ASCII string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">access-loop-information</a> <a href="#">circuit-id</a> <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 63
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>sap-id</b> , or <b>use-sap-id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-sap-id

Synopsis	Use sap-id as circuit-id.
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">access-loop-information</a> <a href="#">circuit-id</a> <a href="#">use-sap-id</a>
Tree	<a href="#">use-sap-id</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>sap-id</b> , or <b>use-sap-id</b> .

Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## remote-id

Synopsis	Enable the <b>remote-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">access-loop-information</a> <b>remote-id</b>
Tree	<a href="#">remote-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*

Synopsis	String format for the remote ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">access-loop-information</a> <b>remote-id</b> <b>ascii-string</b> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 63
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>mac</b> , or <b>use-mac-address</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-mac-address

Synopsis	Use MAC address as remote-id.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">access-loop-information</a> <b>remote-id</b> <b>use-mac-address</b>
Tree	<a href="#">use-mac-address</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>mac</b> , or <b>use-mac-address</b> .
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**admin-state** *keyword*

Synopsis	Administrative state of the host
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication**

Synopsis	Enter the <b>authentication</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <b>authentication</b>
Tree	<a href="#">authentication</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**gx-policy** *string*

Synopsis	Diameter application policy
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <b>authentication</b> <a href="#">gx-policy</a> <i>string</i>
Tree	<a href="#">gx-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nasreq-auth-policy** *string*

Synopsis	Diameter NASREQ application policy for authentication
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <b>authentication</b> <a href="#">nasreq-auth-policy</a> <i>string</i>
Tree	<a href="#">nasreq-auth-policy</a>
String Length	1 to 32
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **padi-auth-policy** *string*

Synopsis Authentication policy name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [authentication](#) [padi-auth-policy](#) *string*

Tree [padi-auth-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pre-auth-policy** *string*

Synopsis Pre-authentication policy of this host

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [authentication](#) [pre-auth-policy](#) *string*

Tree [pre-auth-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-auth-policy** *string*

Synopsis Host authentication policy

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [authentication](#) [radius-auth-policy](#) *string*

Tree [radius-auth-policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **user-db** *string*

Synopsis Local user DB to use for PPP PAP/CHAP authentication

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [authentication](#) [user-db](#) *string*

Tree	<a href="#">user-db</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-identification

Synopsis	Enter the <b>host-identification</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string host-identification</a>
Tree	<a href="#">host-identification</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## circuit-id

Synopsis	Enter the <b>circuit-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string host-identification circuit-id</a>
Tree	<a href="#">circuit-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ascii-string *string*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as ASCII string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string host-identification circuit-id ascii-string string</a>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Circuit ID as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">host-identification circuit-id hex-string string</a>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## derived-id *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Derived ID string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">host-identification derived-id string</a>
Tree	<a href="#">derived-id</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## encap-tag-range

Synopsis	Enable the <b>encap-tag-range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">host-identification encap-tag-range</a>
Tree	<a href="#">encap-tag-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**from string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Start tag
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> <a href="#">from</a> <a href="#">string</a>
Tree	<a href="#">from</a>
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**to string****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	End tag
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-range</a> <a href="#">to</a> <a href="#">string</a>
Tree	<a href="#">to</a>
String Length	1 to 11
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**encap-tag-separate-range**

Synopsis	Enter the <b>encap-tag-separate-range</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a>
Tree	<a href="#">encap-tag-separate-range</a>
Introduced	20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## inner

Synopsis Enter the **inner** context

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [host-identification](#) [encap-tag-separate-range](#) **inner**

Tree [inner](#)

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Upper bound of the inner encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [host-identification](#) [encap-tag-separate-range](#) **inner** **end** *number*

Tree [end](#)

Description This command configures an inner end tag for the range of encapsulation tags used for host identification.

Range 0 to 4094

Introduced 20.5.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Lower bound of the inner encapsulation tag range

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [host-identification](#) [encap-tag-separate-range](#) **inner** **start** *number*

Tree [start](#)

Description	This command configures an inner start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## outer

Synopsis	Enter the <b>outer</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string host-identification encap-tag-separate-range outer</a>
Tree	<a href="#">outer</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## end number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the outer encapsulation tag range
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string host-identification encap-tag-separate-range outer end number</a>
Tree	<a href="#">end</a>
Description	This command configures an outer end tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## start number



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the outer encapsulation tag range
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">encap-tag-separate-range</a> <a href="#">outer</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Description	This command configures an outer start tag for the range of encapsulation tags used for host identification.
Range	0 to 4094
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### mac *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	MAC address
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">mac</a> <i>string</i>
Tree	<a href="#">mac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### remote-id

Synopsis	Enter the <b>remote-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">remote-id</a>
Tree	<a href="#">remote-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ascii-string *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as ASCII string
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">remote-id</a> <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### hex-string *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Remote ID as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">remote-id</a> <a href="#">hex-string</a> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 512
Notes	The following elements are part of a choice: <b>ascii-string</b> or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sap-id *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	SAP ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">sap-id</a> <i>string</i>
Tree	<a href="#">sap-id</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-name**

Synopsis	Enable the <b>user-name</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">user-name</a>
Tree	<a href="#">user-name</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**format** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Username format
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">user-name</a> <a href="#">format</a> <i>keyword</i>
Tree	<a href="#">format</a>
Options	full, no-domain, domain-only
Default	full
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Host username
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">host-identification</a> <a href="#">user-name</a> <i>name</i> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 253
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**identification**

Synopsis	Enable the <b>identification</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a>
Tree	<a href="#">identification</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ancp-string** *string*

Synopsis	ANCP string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">ancp-string</a> <i>string</i>
Tree	<a href="#">ancp-string</a>
String Length	1 to 63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**app-profile-string** *string*

Synopsis	Application profile string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">app-profile-string</a> <i>string</i>

Tree	<a href="#">app-profile-string</a>
String Length	1 to 16
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **category-map-name** *string*

Synopsis	Category map name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">category-map-name</a> <i>string</i>
Tree	<a href="#">category-map-name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **int-dest-id** *string*

Synopsis	Intermediate destination ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">int-dest-id</a> <i>string</i>
Tree	<a href="#">int-dest-id</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option-number** *number*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Identification strings for the subscriber
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">option-number</a> <i>number</i>
Tree	<a href="#">option-number</a>
Range	1 to 254
Default	254

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile-string** *string*

Synopsis SLA profile string  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [identification](#) [sla-profile-string](#) *string*  
Tree [sla-profile-string](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **spi-sharing-group-id** *number*

Synopsis SPI sharing group ID  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [identification](#) [spi-sharing-group-id](#) *number*  
Tree [spi-sharing-group-id](#)  
Range 0 to 65535  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile-string** *string*

Synopsis Sub profile string  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* [identification](#) [sub-profile-string](#) *string*  
Tree [sub-profile-string](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id** *string*

Synopsis Subscriber ID

Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">identification</a> <a href="#">subscriber-id</a> <i>string</i>
Tree	<a href="#">subscriber-id</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Enter the <b>address</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## gi-address *keyword*

Synopsis	Use <b>gi-address</b> to select a pool with the given scope
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">gi-address</a> <i>keyword</i>
Tree	<a href="#">gi-address</a>
Options	subnet-scope, pool-scope
Notes	The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-address string**

Synopsis	Fixed IPv4 address of the host
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 address ip-address string</a>
Tree	<a href="#">ip-address</a>
Notes	The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pool**

Synopsis	Enable the <b>pool</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 address pool</a>
Tree	<a href="#">pool</a>
Notes	The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**delimiter string**

Synopsis	Delimiter separating primary and secondary pool names
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 address pool delimiter string</a>
Tree	<a href="#">delimiter</a>
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**primary string**

Synopsis	Primary pool name
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ipv4 address pool primary string</a>
Tree	<a href="#">primary</a>

String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secondary string**

Synopsis	Secondary pool name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">pool</a> <a href="#">secondary</a> <a href="#">string</a>
Tree	<a href="#">secondary</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-length number**

Synopsis	IPv4 host address prefix length
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">prefix-length</a> <a href="#">number</a>
Tree	<a href="#">prefix-length</a>
Range	1 to 32
Default	32
Notes	The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-pool-from-client**

Synopsis	Enable the <b>use-pool-from-client</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp</a> <a href="#">host</a> <a href="#">string</a> <a href="#">ipv4</a> <a href="#">address</a> <a href="#">use-pool-from-client</a>
Tree	<a href="#">use-pool-from-client</a>
Notes	The following elements are part of a choice: <b>gi-address</b> , ( <b>ip-address</b> and <b>prefix-length</b> ), <b>pool</b> , or <b>use-pool-from-client</b> .



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delimiter** *string*

Synopsis	Delimiter character to combine primary and secondary pool names
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4 address use-pool-from-client</a> <b>delimiter</b> <i>string</i>
Tree	<a href="#">delimiter</a>
String Length	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ignore-df-bit** *boolean*

Synopsis	Ignore the DF bit in the IPv4 header when fragmenting
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4</a> <b>ignore-df-bit</b> <i>boolean</i>
Tree	<a href="#">ignore-df-bit</a>
Description	<p>When configured to <b>true</b>, the router ignores the DF bit in the IPv4 header for frames egressing the subscriber interface. The frames are fragmented according to the applicable egress MTU. The DF bit is reset for frames that are fragmented.</p> <p>This command applies to PPPoE PTA and L2TP LNS frames only. It is not applicable for L2TP LAC frames.</p> <p>When configured to <b>false</b>, the router does not ignore the DF bit in the IPv4 header for frames egressing the subscriber interface.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4</a> <b>option</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [number] (*number* | *keyword*)

Synopsis DHCP option to send identification strings to client

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [ipv4 option](#) (*number* | *keyword*)

Tree [option](#)

Range 1 to 254

Options subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis DHCP option specified as an ASCII string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [ipv4 option](#) (*number* | *keyword*) [ascii-string](#) *string*

Tree [ascii-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **duration** *number*

Synopsis DHCP option as time duration

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [ipv4 option](#) (*number* | *keyword*) [duration](#) *number*

Tree [duration](#)

Range 10 to 315446399

Units seconds

Notes The following elements are part of a mandatory choice: **ascii-string**, **duration**, **empty**, **hex-string**, **ipv4-address**, or **netbios-node-type**.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## empty

Synopsis	Empty DHCP option.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp host</a> <a href="#">string</a> <a href="#">ipv4 option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">empty</a>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp host</a> <a href="#">string</a> <a href="#">ipv4 option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">hex-string</a> <a href="#">string</a>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <a href="#">string</a> <a href="#">ppp host</a> <a href="#">string</a> <a href="#">ipv4 option</a> ( <a href="#">number</a>   <a href="#">keyword</a> ) <a href="#">ipv4-address</a> <a href="#">string</a>
Tree	<a href="#">ipv4-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . This element is ordered by the user.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis	DHCP option as NetBIOS node type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv4 option</a> ( <i>number</i>   <i>keyword</i> ) <b>netbios-node-type</b> <i>keyword</i>
Tree	<a href="#">netbios-node-type</a>
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <b>ipv6</b>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address** *string*

Synopsis	Fixed IPv6 address of the host
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <b>ipv6</b> <b>address</b> <i>string</i>
Tree	<a href="#">address</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address-pool** *string*

Synopsis	IPv6 address pool name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <b>ipv6</b> <b>address-pool</b> <i>string</i>
Tree	<a href="#">address-pool</a>

String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix** *string*

Synopsis IPv6 delegated prefix of this host  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [ipv6](#) [delegated-prefix](#) *string*  
Tree [delegated-prefix](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix-length** *number*

Synopsis Delegated prefix length  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [ipv6](#) [delegated-prefix-length](#) *number*  
Tree [delegated-prefix-length](#)  
Range 48 to 64  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-prefix-pool** *string*

Synopsis Delegated prefix pool  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [ipv6](#) [delegated-prefix-pool](#) *string*  
Tree [delegated-prefix-pool](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **force-ipv6cp** *boolean*

Synopsis Force IPv6 control protocol

Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 force-ipv6cp</a> <i>boolean</i>
Tree	<a href="#">force-ipv6cp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis	The number of the DHCPv6 option.
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Range	23
Options	dns-server
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hex-string** *string*

Synopsis	DHCP option specified as hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ipv6 option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">hex-string</a> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>hex-string</b> or <b>ipv6-address</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6 option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>hex-string</b> or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-advertisement-policy** *string*

Synopsis	IPv6 router advertisement policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6 router-advertisement-policy</a> <i>string</i>
Tree	<a href="#">router-advertisement-policy</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **slaac-prefix** *string*

Synopsis	IPv6 SLAAC prefix of this host
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6 slaac-prefix</a> <i>string</i>
Tree	<a href="#">slaac-prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **slaac-prefix-pool** *string*

Synopsis	IPv6 SLAAC prefix pool of this host
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">slaac-prefix-pool</a> <i>string</i>
Tree	<a href="#">slaac-prefix-pool</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timers**

Synopsis	Enter the <b>timers</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a>
Tree	<a href="#">timers</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** (*number* | *keyword*)

Synopsis	Time for a lease to remain preferred
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">preferred-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rebind** *number*

Synopsis	Rebind timer (T2)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">ipv6</a> <a href="#">timers</a> <a href="#">rebind</a> <i>number</i>
Tree	<a href="#">rebind</a>
Range	0 to 1209600



Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**renew number**

Synopsis	Renew timer (T1)
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6 timers</a> <a href="#">renew number</a>
Tree	<a href="#">renew</a>
Range	0 to 604800
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** (*number* | *keyword*)

Synopsis	Time for a lease to remain valid
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">ipv6 timers</a> <a href="#">valid-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	300 to 315446399
Units	seconds
Options	infinite
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**l2tp**

Synopsis	Enter the <b>l2tp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">l2tp</a>
Tree	<a href="#">l2tp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## group

Synopsis	Enable the <b>group</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">l2tp group</a>
Tree	<a href="#">group</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## name *string*

Synopsis	L2TP tunnel group name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">l2tp group name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 63
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## service-id *number*

Synopsis	Service ID for the L2TP tunnel group
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">l2tp group service-id</a> <i>number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## Ins-interface

Synopsis	Enable the <b>Ins-interface</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">Ins-interface</a>
Tree	<a href="#">Ins-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name** *string*

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">lms-interface</a> <i>name</i> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-id** *number*

Synopsis	Service ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">lms-interface</a> <i>service-id</i> <i>number</i>
Tree	<a href="#">service-id</a>
Range	1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mld-import** [[policy-name](#)] *string*

Synopsis	Add a list entry for <b>mld-import</b>
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <b>mld-import</b> <i>string</i>
Tree	<a href="#">mld-import</a>
Max. Instances	14
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[policy-name] string**

Synopsis	MLD import policy used to control the multicast group
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">mld-import</a> <i>string</i>
Tree	<a href="#">mld-import</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**msap-defaults**

Synopsis	Enter the <b>msap-defaults</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">msap-defaults</a>
Tree	<a href="#">msap-defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**group-interface**

Synopsis	Enable the <b>group-interface</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a>
Tree	<a href="#">group-interface</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name string**

Synopsis	IP interface name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">msap-defaults</a> <a href="#">group-interface</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix** *keyword*

Synopsis Prefix to the IP interface name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) [group-interface](#) **prefix** *keyword*

Tree [prefix](#)

Options port-id

Notes The following elements are part of a choice: **prefix** or **suffix**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix** *keyword*

Synopsis Suffix for the group interface

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) [group-interface](#) **suffix** *keyword*

Tree [suffix](#)

Options port-id

Notes The following elements are part of a choice: **prefix** or **suffix**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy** *string*

Synopsis MSAP policy

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [msap-defaults](#) **policy** *string*

Tree [policy](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service number**

Synopsis	Service ID
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">msap-defaults service number</a>
Tree	<a href="#">service</a>
Range	1 to 2147483647   2147483648   2147483649   2147483650   2147483651 to 2147483690   2147483691 to 2148007980   2148007981 to 2148012076   2148012077 to 2148016172   2148016173 to 2148278316   2148278317   2148278318 to 2148278381   2148278382   2148278383 to 2148278386
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pado-delay number**

Synopsis	Delay timeout before sending a PADO
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">pado-delay number</a>
Tree	<a href="#">pado-delay</a>
Range	1 to 30
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**password**

Synopsis	Enter the <b>password</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">password</a>
Tree	<a href="#">password</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**chap string**

Synopsis	CHAP protocol
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db</a> <i>string</i> <a href="#">ppp host</a> <i>string</i> <a href="#">password chap</a> <i>string</i>
Tree	<a href="#">chap</a>
String Length	1 to 115

Notes	The following elements are part of a choice: <b>chap</b> , <b>ignore</b> , or <b>pap</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ignore

Synopsis	Ignore the PAP and CHAP passwords
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">password ignore</a>
Tree	<a href="#">ignore</a>
Notes	The following elements are part of a choice: <b>chap</b> , <b>ignore</b> , or <b>pap</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pap *string*

Synopsis	PAP for the password
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">password pap string</a>
Tree	<a href="#">pap</a>
String Length	1 to 115
Notes	The following elements are part of a choice: <b>chap</b> , <b>ignore</b> , or <b>pap</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp-policy-parameters

Synopsis	Enter the <b>ppp-policy-parameters</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string</a> <a href="#">ppp host string</a> <a href="#">ppp-policy-parameters</a>
Tree	<a href="#">ppp-policy-parameters</a>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## keepalive

Synopsis	Enable the <b>keepalive</b> context
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Context	<b>configure subscriber-mgmt local-user-db</b> <i>string</i> <b>ppp host</b> <i>string</i> <b>ppp-policy-parameters</b> <b>keepalive</b>
Tree	<b>keepalive</b>
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-up-multiplier** *number*

Synopsis	PPP LCP keepalive hold up multiplier override
Context	<b>configure subscriber-mgmt local-user-db</b> <i>string</i> <b>ppp host</b> <i>string</i> <b>ppp-policy-parameters</b> <b>keepalive hold-up-multiplier</b> <i>number</i>
Tree	<b>hold-up-multiplier</b>
Description	This command configures the number of LCP echo replies that can be missed before the PPP session is brought down and overrides the value configured in the <b>configure subscriber-mgmt ppp-policy</b> context for PPPoE PTA sessions or in the <b>configure l2tp group</b> context for L2TP LNS sessions.
Range	1 to 5
Default	3
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	PPP LCP keepalive interval override
Context	<b>configure subscriber-mgmt local-user-db</b> <i>string</i> <b>ppp host</b> <i>string</i> <b>ppp-policy-parameters</b> <b>keepalive interval</b> <i>number</i>
Tree	<b>interval</b>
Description	This command configures the time interval in seconds at which LCP echo requests are transmitted for the PPP session and overrides the value configured in the <b>configure subscriber-mgmt ppp-policy</b> context for PPPoE PTA sessions or the <b>configure l2tp group</b> context for L2TP LNS sessions.
Range	4 to 300
Units	seconds
Default	30
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**max-sessions-per-mac** *number*

Synopsis	Maximum number of sessions per MAC address
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string ppp-policy-parameters max-sessions-per-mac</a> <i>number</i>
Tree	<a href="#">max-sessions-per-mac</a>
Description	This command sets the maximum PPP sessions that can be opened for a specified MAC address.
Range	1 to 8191
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy**

Synopsis	Enter the <b>radius-accounting-policy</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string radius-accounting-policy</a>
Tree	<a href="#">radius-accounting-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duplicate** *string*

Synopsis	RADIUS accounting policy for generating duplicate accounting information
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string radius-accounting-policy duplicate</a> <i>string</i>
Tree	<a href="#">duplicate</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name** *string*

Synopsis	RADIUS accounting policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string radius-accounting-policy name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retail-service-id** *number*

Synopsis Configure the retail service-id  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* **retail-service-id** *number*  
Tree [retail-service-id](#)  
Range 1 to 2147483647 | 2147483648 | 2147483649 | 2147483650 | 2147483651 to 2147483690 | 2147483691 to 2148007980 | 2148007981 to 2148012076 | 2148012077 to 2148016172 | 2148016173 to 2148278316 | 2148278317 | 2148278318 to 2148278381 | 2148278382 | 2148278383 to 2148278386  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rip-policy** *string*

Synopsis RIP policy  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* **rip-policy** *string*  
Tree [rip-policy](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **steering-profile** *string*

Synopsis Steering profile  
Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp](#) [host](#) *string* **steering-profile** *string*  
Tree [steering-profile](#)  
String Length 1 to 32  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **to-client-options**

Synopsis Enter the **to-client-options** context

Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string to-client-options</a>
Tree	<a href="#">to-client-options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-option** [[number](#)] (*number* | *keyword*)

Synopsis	Enter the <b>ipv6-option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string to-client-options ipv6-option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">ipv6-option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[number]** (*number* | *keyword*)

Synopsis	DHCP option to send as identification string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string to-client-options ipv6-option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">ipv6-option</a>
Range	1 to 65535
Options	dns-server, domain-name
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	DHCP option specified as an ASCII string
Context	<b>configure</b> <a href="#">subscriber-mgmt local-user-db string ppp host string to-client-options ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### domain-string *string*

Synopsis DHCP option specified as a domain name

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*) [domain-string](#) *string*

Tree [domain-string](#)

String Length 1 to 127

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### empty

Synopsis Empty DHCP option

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*) [empty](#)

Tree [empty](#)

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 16.0.R4

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### hex-string *string*

Synopsis DHCP option specified as hexadecimal string

Context **configure** [subscriber-mgmt](#) [local-user-db](#) *string* [ppp host](#) *string* [to-client-options](#) [ipv6-option](#) (*number* | *keyword*) [hex-string](#) *string*

Tree [hex-string](#)

String Length 1 to 256

Notes The following elements are part of a mandatory choice: **ascii-string**, **domain-string**, **empty**, **hex-string**, or **ipv6-address**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6-address** *string*

Synopsis	DHCP option specified as a list of IPv6 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">host</a> <i>string</i> <a href="#">to-client-options</a> <a href="#">ipv6-option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv6-address</a> <i>string</i>
Tree	<a href="#">ipv6-address</a>
Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>domain-string</b> , <b>empty</b> , <b>hex-string</b> , or <b>ipv6-address</b> . This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mask** *type* *keyword*

Synopsis	Enter the <b>mask</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">mask</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">mask</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type** *keyword*

Synopsis	Matching type to identify a host
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">mask</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">mask</a>
Options	circuit-id, mac, remote-id, user-name, service-name, sap-id
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix**

Synopsis	Enable the <b>prefix</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">mask</a> <i>type</i> <i>keyword</i> <a href="#">prefix</a>

Tree	<a href="#">prefix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **length** *number*

Synopsis	PPP mask prefix length
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <i>keyword</i> <a href="#">prefix</a> <a href="#">length</a> <i>number</i>
Tree	<a href="#">length</a>
Range	1 to 127
Notes	The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis	Prefix string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <i>keyword</i> <a href="#">prefix</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix**

Synopsis	Enable the <b>suffix</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <i>keyword</i> <a href="#">suffix</a>
Tree	<a href="#">suffix</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**length** *number*

Synopsis	PPP mask suffix length
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <i>keyword</i> <a href="#">suffix</a> <a href="#">length</a> <i>number</i>
Tree	<a href="#">length</a>
Range	1 to 127
Notes	The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	Suffix string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">mask</a> <a href="#">type</a> <i>keyword</i> <a href="#">suffix</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>length</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**match-list** *keyword***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PPP host match type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">local-user-db</a> <i>string</i> <a href="#">ppp</a> <a href="#">match-list</a> <i>keyword</i>
Tree	<a href="#">match-list</a>
Options	circuit-id, mac, remote-id, user-name, service-name, sap-id, encap-tag-range, derived-id, encap-tag-separate-range
Max. Instances	3
Notes	This element is ordered by the user.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mld-policy** [*name*] *string*

Synopsis Enter the **mld-policy** list instance  
 Context **configure** **subscriber-mgmt** **mld-policy** *string*  
 Tree **mld-policy**  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis Policy name  
 Context **configure** **subscriber-mgmt** **mld-policy** *string*  
 Tree **mld-policy**  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** **subscriber-mgmt** **mld-policy** *string* **description** *string*  
 Tree **description**  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **egress-rate-modify**

Synopsis Enter the **egress-rate-modify** context  
 Context **configure** **subscriber-mgmt** **mld-policy** *string* **egress-rate-modify**  
 Tree **egress-rate-modify**  
 Introduced 16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **agg-rate**

Synopsis Maximum total rate for all subscriber egress queues

Context **configure subscriber-mgmt mld-policy string egress-rate-modify agg-rate**

Tree **agg-rate**

Description This command specifies the maximum total rate for all subscriber egress queues for each subscriber associated with the policy.

Notes The following elements are part of a choice: **agg-rate** or **scheduler**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **scheduler string**

Synopsis Scheduler to be applied for rate modification

Context **configure subscriber-mgmt mld-policy string egress-rate-modify scheduler string**

Tree **scheduler**

String Length 1 to 32

Notes The following elements are part of a choice: **agg-rate** or **scheduler**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **fast-leave boolean**

Synopsis Enable fast leave

Context **configure subscriber-mgmt mld-policy string fast-leave boolean**

Tree **fast-leave**

Default true

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## **import-policy reference**

Synopsis Import policy to filter MLD packets

Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-group-sources** *number*

Synopsis	Maximum number of group sources for this interface
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">maximum-number-group-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Description	This command configures the maximum number of group sources for which IGMP or MLD can have local receiver information based on received IGMP or MLD reports on this interface. When this configuration is changed dynamically to a lower value than the currently accepted number of group sources, the group sources that are already accepted are not deleted. Only new group sources are not allowed.
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of groups for this interface
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">maximum-number-groups</a> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of sources that are allowed per group
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <a href="#">maximum-number-sources</a> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval** *number*

Synopsis Time between two consecutive host-query messages  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [query-interval](#) *number*  
Tree [query-interval](#)  
Range 2 to 1024  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis Time between group-specific query messages  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [query-last-member-interval](#) *number*  
Tree [query-last-member-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis Time to wait for a response to the host-query messages  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [query-response-interval](#) *number*  
Tree [query-response-interval](#)  
Range 1 to 1023  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **redirection-policy** *reference*

Synopsis Multicast redirection action applied to the subscriber  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [redirection-policy](#) *reference*  
Tree [redirection-policy](#)  
Reference **configure** [policy-options](#) [policy-statement](#) *string*

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **replication** *keyword*

Synopsis Multicast replication mode for subscriber multicast  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [replication](#) *keyword*  
Tree [replication](#)  
Options per-sap, per-host, per-spi  
Default per-sap  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-alert-check** *boolean*

Synopsis Enable router alert checking for IGMP or MLD messages  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [router-alert-check](#) *boolean*  
Tree [router-alert-check](#)  
Default true  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **static**

Synopsis Enter the **static** context  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [static](#)  
Tree [static](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **group** [[group-address](#)] *string*

Synopsis Enter the **group** list instance  
Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [static](#) [group](#) *string*  
Tree [group](#)

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [group-address] *string*

Synopsis Group address of multicast channel  
 Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [static](#) [group](#) *string*  
 Tree [group](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **source** [[source-address](#)] *string*

Synopsis Add a list entry for **source**  
 Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [static](#) [group](#) *string* **source** *string*  
 Tree [source](#)  
 Notes The following elements are part of a mandatory choice: **source** or **starg**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [[source-address](#)] *string*

Synopsis Source IP address  
 Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [static](#) [group](#) *string* [source](#) *string*  
 Tree [source](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R2  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **starg**

Synopsis Any source address (\*,G)  
 Context **configure** [subscriber-mgmt](#) [mld-policy](#) *string* [static](#) [group](#) *string* **starg**  
 Tree [starg](#)

Notes	The following elements are part of a mandatory choice: <b>source</b> or <b>starg</b> .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-multicast-destination-mac** *boolean*

Synopsis	Use multicast destination mac address for outgoing traffic.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <b>use-multicast-destination-mac</b> <i>boolean</i>
Tree	<a href="#">use-multicast-destination-mac</a>
Default	false
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **version** *keyword*

Synopsis	MLD protocol version
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **msap-policy** [[name](#)] *string*

Synopsis	Enter the <b>msap-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <b>msap-policy</b> <i>string</i>
Tree	<a href="#">msap-policy</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	Managed SAP policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i>
Tree	<a href="#">msap-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">cpu-protection</a>
Tree	<a href="#">cpu-protection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

**ip-src-monitoring**

Synopsis	Apply the IP source monitoring
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a>
Tree	<a href="#">ip-src-monitoring</a>
Notes	The following elements are part of a choice: <b>ip-src-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

**mac-monitoring**

Synopsis	Apply the per-source rate limit
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>ip-src-monitoring</b> or <b>mac-monitoring</b> .
Introduced	16.0.R2
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

### **policy-id** *reference*

Synopsis	CPM protection policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dist-cpu-protection** *string*

Synopsis	Distributed CPU protection policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">dist-cpu-protection</a> <i>string</i>
Tree	<a href="#">dist-cpu-protection</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ies-vprn-only-sap-parameters**

Synopsis	Enter the <b>ies-vprn-only-sap-parameters</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a>
Tree	<a href="#">ies-vprn-only-sap-parameters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**anti-spoof** *keyword*

Synopsis	Anti-spoof filtering for the MSAP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">anti-spoof</a> <i>keyword</i>
Tree	<a href="#">anti-spoof</a>
Options	source-ip-and-mac-addr, next-hop-ip-and-mac-addr
Default	source-ip-and-mac-addr
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">egress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">ies-vprn-only-sap-parameters</a> <a href="#">egress</a> <a href="#">qos</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis Enter the **ingress** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#) [ingress](#)

Tree [ingress](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis Enter the **qos** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#) [ingress](#)  
[qos](#)

Tree [qos](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policy-name *reference*

Synopsis QoS policy ID or name to associate with the MSAPs

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#) [ingress](#)  
[qos](#) [policy-name](#) *reference*

Tree [policy-name](#)

Reference **configure** [qos](#) [sap-ingress](#) *string*

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## queuing-type *keyword*

Synopsis Queuing type

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [ies-vprn-only-sap-parameters](#) [ingress](#)  
[qos](#) [queuing-type](#) *keyword*

Tree [queuing-type](#)

Options shared, service

Default	shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## igmp-host-tracking

Synopsis	Enter the <b>igmp-host-tracking</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">igmp-host-tracking</a>
Tree	<a href="#">igmp-host-tracking</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## expiry-time *number*

Synopsis	Time that the system continues to track inactive hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">expiry-time</a> <i>number</i>
Tree	<a href="#">expiry-time</a>
Range	1 to 65535
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## import-policy *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">igmp-host-tracking</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options</a> <a href="#">policy-statement</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## maximum-number-group-sources *number*

Synopsis	Maximum number of multicast groups to track per group
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Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>igmp-host-tracking</b> <b>maximum-number-group-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-group-sources</a>
Range	1 to 32000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** *number*

Synopsis	Maximum number of multicast groups to be tracked
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>igmp-host-tracking</b> <b>maximum-number-groups</b> <i>number</i>
Tree	<a href="#">maximum-number-groups</a>
Range	1 to 16000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-sources** *number*

Synopsis	Maximum number of multicast sources to be tracked
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>igmp-host-tracking</b> <b>maximum-number-sources</b> <i>number</i>
Tree	<a href="#">maximum-number-sources</a>
Range	1 to 1000
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lag-link-map-profile** *number*

Synopsis	Map profile for LAG link
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>lag-link-map-profile</b> <i>number</i>
Tree	<a href="#">lag-link-map-profile</a>
Range	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sticky-msaps** *boolean*

Synopsis	Prevent MSAPs from being deleted
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>sticky-msaps</b> <i>boolean</i>
Tree	<a href="#">sticky-msaps</a>
Description	<p>When configured to <b>true</b>, MSAPs associated with the specified MSAP policy are not removed unless a manual <b>clear</b> command is issued.</p> <p>This feature is useful if historical statistics records on MSAPs need to be retained. It can also reduce host creation time because the MSAP is already created.</p> <p>When configured to <b>false</b>, MSAPs can be automatically removed when a host creation fails or when a subscriber is no longer associated with the MSAP, for example, when a subscriber ends the session.</p>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sticky-msaps-idle-timeout** *number*

Synopsis	Timeout used for sticky MSAPs
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>sticky-msaps-idle-timeout</b> <i>number</i>
Tree	<a href="#">sticky-msaps-idle-timeout</a>
Description	<p>This command configures the timeout interval which determines when idle sticky MSAPs can be removed.</p> <p>By default, MSAPs are deleted shortly after the subscriber session ends. The system is prevented from automatically deleting sticky MSAPs after the session ends, allowing for a faster subsequent subscriber connection without MSAP creation; however, sticky MSAPs require SAP resources. The configuration of this command allows for the removal of sticky MSAPs that are idle for the specified time period.</p> <p>When unconfigured, no timeout interval is applied.</p>
Range	5 to 604800
Units	seconds
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sub-sla-mgmt**

Synopsis	Enter the <b>sub-sla-mgmt</b> context
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>sub-sla-mgmt</b>

Tree	<a href="#">sub-sla-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## defaults

Synopsis	Enter the <b>defaults</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <b>defaults</b>
Tree	<a href="#">defaults</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## app-profile *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <b>defaults</b> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## int-dest-id

Synopsis	Enter the <b>int-dest-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <b>defaults</b> <a href="#">int-dest-id</a>
Tree	<a href="#">int-dest-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string *string*

Synopsis	String to be used as the int-dest-id
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <b>defaults</b> <a href="#">int-dest-id</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>

String Length	1 to 32
Notes	The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### top-q-tag

Synopsis	Derive string from top most delineating Dot1Q tag
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">int-dest-id</a> <a href="#">top-q-tag</a>
Tree	<a href="#">top-q-tag</a>
Notes	The following elements are part of a choice: <b>string</b> or <b>top-q-tag</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sla-profile *reference*

Synopsis	Default SLA profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sub-profile *reference*

Synopsis	Subscriber profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> <a href="#">defaults</a> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## subscriber-id

Synopsis	Enter the <b>subscriber-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">subscriber-id</a>
Tree	<a href="#">subscriber-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## auto-id

Synopsis	Autogenerated sub-id as default sub-id
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">subscriber-id</a> <a href="#">auto-id</a>
Tree	<a href="#">auto-id</a>
Notes	The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-id

Synopsis	SAP-id as default sub-id
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">subscriber-id</a> <a href="#">sap-id</a>
Tree	<a href="#">sap-id</a>
Notes	The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## string *string*

Synopsis	String to be used as default sub-id
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt</a> defaults <a href="#">subscriber-id</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>auto-id</b> , <b>sap-id</b> , or <b>string</b> .



Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### single-sub-parameters

Synopsis Enter the **single-sub-parameters** context  
 Context **configure** [subscriber-mgmt msap-policy string sub-sla-mgmt single-sub-parameters](#)  
 Tree [single-sub-parameters](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### non-sub-traffic-profiles

Synopsis Enable the **non-sub-traffic-profiles** context  
 Context **configure** [subscriber-mgmt msap-policy string sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles](#)  
 Tree [non-sub-traffic-profiles](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### app-profile *reference*

Synopsis Application profile name  
 Context **configure** [subscriber-mgmt msap-policy string sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles app-profile reference](#)  
 Tree [app-profile](#)  
 Reference **configure** [application-assurance group number partition number policy app-profile string](#)  
 Introduced 21.10.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### sla-profile *reference*

Synopsis SLA profile name  
 Context **configure** [subscriber-mgmt msap-policy string sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles sla-profile reference](#)  
 Tree [sla-profile](#)

Reference	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Subscriber profile
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id** *string*

Synopsis	Subscriber identification string
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt single-sub-parameters non-sub-traffic-profiles subscriber-id</a> <i>string</i>
Tree	<a href="#">subscriber-id</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **profiled-traffic-only** *boolean*

Synopsis	Enable/disable profiled-traffic-only.
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt single-sub-parameters profiled-traffic-only</a> <i>boolean</i>
Tree	<a href="#">profiled-traffic-only</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sub-ident-policy *reference*

Synopsis	Configure subscriber identification policy
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt sub-ident-policy</a> <i>reference</i>
Tree	<a href="#">sub-ident-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### subscriber-limit (*keyword* | *number*)

Synopsis	Maximum subscribers on this SAP
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">sub-sla-mgmt subscriber-limit</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">subscriber-limit</a>
Range	1 to 131071
Options	no-limit
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### vpls-only-sap-parameters

Synopsis	Enter the <b>vpls-only-sap-parameters</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a>
Tree	<a href="#">vpls-only-sap-parameters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### arp-host

Synopsis	Enter the <b>arp-host</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters arp-host</a>
Tree	<a href="#">arp-host</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-limit** *number*

Synopsis Maximum number of ARP hosts

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [arp-host](#) [host-limit](#) *number*

Tree [host-limit](#)

Range 1 to 131071

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-auth-interval** *number*

Synopsis Minimum authentication interval

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [arp-host](#) [min-auth-interval](#) *number*

Tree [min-auth-interval](#)

Range 1 to 6000

Units minutes

Default 15

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **arp-reply-agent** *keyword*

Synopsis Enable arp-reply-agent function

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [arp-reply-agent](#) *keyword*

Tree [arp-reply-agent](#)

Options true, with-subscr-ident

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## dhcp

Synopsis	Enter the <b>dhcp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <a href="#">string</a> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp</a>
Tree	<a href="#">dhcp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lease-populate *number*

Synopsis	Maximum number of DHCPv4 leases per managed SAP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <a href="#">string</a> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp</a> <a href="#">lease-populate</a> <i>number</i>
Tree	<a href="#">lease-populate</a>
Range	1 to 131071
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## option-82

Synopsis	Enter the <b>option-82</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <a href="#">string</a> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp</a> <a href="#">option-82</a>
Tree	<a href="#">option-82</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## action *keyword*

Synopsis	DHCP relay forwarding policy action
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <a href="#">string</a> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp</a> <a href="#">option-82</a> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	replace, drop, keep
Default	keep
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id** *keyword*

Synopsis Circuit ID suboption of the IPOE relay

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp option-82](#) **circuit-id** *keyword*

Tree [circuit-id](#)

Options none, [ascii-tuple](#), [vlan-ascii-tuple](#)

Default [ascii-tuple](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **remote-id**

Synopsis Enter the **remote-id** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp option-82](#) **remote-id**

Tree [remote-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac**

Synopsis MAC address of the remote end encoded in the sub-option

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [dhcp option-82](#) **remote-id** **mac**

Tree [mac](#)

Notes The following elements are part of a choice: **mac** or **string**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **string** *string*

Synopsis String to encode in the suboption

Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy string vpls-only-sap-parameters dhcp option-82 remote-id string string</a>
Tree	<a href="#">string</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>mac</b> or <b>string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### vendor-specific-option

Synopsis	Enter the <b>vendor-specific-option</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy string vpls-only-sap-parameters dhcp option-82 vendor-specific-option</a>
Tree	<a href="#">vendor-specific-option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### client-mac-address *boolean*

Synopsis	Send MAC address in Nokia vendor-specific sub-option
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy string vpls-only-sap-parameters dhcp option-82 vendor-specific-option client-mac-address boolean</a>
Tree	<a href="#">client-mac-address</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### sap-id *boolean*

Synopsis	Send SAP ID in the Nokia vendor-specific sub-option
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy string vpls-only-sap-parameters dhcp option-82 vendor-specific-option sap-id boolean</a>
Tree	<a href="#">sap-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service-id** *boolean*

Synopsis	Send service ID in the Nokia vendor-specific sub-option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">vendor-specific-option</a> <a href="#">service-id</a> <i>boolean</i>
Tree	<a href="#">service-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**string** *string*

Synopsis	String in the sub-option of the DHCP relay packet
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">vendor-specific-option</a> <a href="#">string</a> <i>string</i>
Tree	<a href="#">string</a>
Description	This command specifies the string in the Nokia vendor-specific sub-option of the DHCP relay packet.
String Length	1 to 32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**system-id** *boolean*

Synopsis	Send system ID in the Nokia vendor-specific sub-option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp option-82</a> <a href="#">vendor-specific-option</a> <a href="#">system-id</a> <i>boolean</i>
Tree	<a href="#">system-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**proxy-server**

Synopsis	Enter the <b>proxy-server</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp proxy-server</a>



Tree	<a href="#">proxy-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the DHCP proxy server
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp proxy-server</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **emulated-server** *string*

Synopsis	IP address used as DHCP server address in SAP context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp proxy-server</a> <b>emulated-server</b> <i>string</i>
Tree	<a href="#">emulated-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-time**

Synopsis	Enter the <b>lease-time</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp proxy-server</a> <b>lease-time</b>
Tree	<a href="#">lease-time</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-override** *boolean*

Synopsis	Use lease time information provided by RADIUS server
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp proxy-server</a> <a href="#">lease-time</a> <a href="#">radius-override</a> <i>boolean</i>
Tree	<a href="#">radius-override</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **value** *number*

Synopsis	DHCP lease time
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">dhcp proxy-server</a> <a href="#">lease-time</a> <i>value</i> <i>number</i>
Tree	<a href="#">value</a>
Range	300 to 315446399
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **egress**

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">egress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters egress qos</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **igmp-snooping**

Synopsis	Enter the <b>igmp-snooping</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters igmp-snooping</a>
Tree	<a href="#">igmp-snooping</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **fast-leave** *boolean*

Synopsis	Allow IGMP fast leave processing
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters igmp-snooping</a> <a href="#">fast-leave</a> <i>boolean</i>
Tree	<a href="#">fast-leave</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **import-policy** *reference*

Synopsis	Import policy that filters IGMP packets
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters igmp-snooping</a> <a href="#">import-policy</a> <i>reference</i>
Tree	<a href="#">import-policy</a>
Reference	<b>configure</b> <a href="#">policy-options policy-statement</a> <i>string</i>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **maximum-number-groups** (*keyword | number*)

Synopsis Maximum number of multicast groups

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#) [maximum-number-groups](#) (*keyword | number*)

Tree [maximum-number-groups](#)

Range 1 to 16000

Options unlimited

Default unlimited

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mcac**

Synopsis Enter the **mcac** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#) [mcac](#)

Tree [mcac](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth**

Synopsis Enter the **bandwidth** context

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#) [mcac](#) [bandwidth](#)

Tree [bandwidth](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mandatory** (*number | keyword*)

Synopsis Pre-reserved bandwidth for all mandatory channels

Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [igmp-snooping](#) [mcac](#) [bandwidth](#) [mandatory](#) (*number | keyword*)

Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">bandwidth</a> <b>total</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface-policy** *reference*

Synopsis	MCAC interface policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>reference</i>
Tree	<a href="#">interface-policy</a>
Reference	<b>configure</b> <a href="#">mcac</a> <a href="#">interface-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mc-constraints**

Synopsis	Enter the <b>mc-constraints</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">mcac</a> <a href="#">mc-constraints</a>
Tree	<a href="#">mc-constraints</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **level** [**level-id**] *number*

Synopsis Enter the **level** list instance

Context **configure subscriber-mgmt msap-policy** *string* **vpls-only-sap-parameters igmp-snooping mcac mc-constraints level** *number*

Tree **level**

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[level-id]** *number*

Synopsis Bandwidth level ID for an MCAC constraint

Context **configure subscriber-mgmt msap-policy** *string* **vpls-only-sap-parameters igmp-snooping mcac mc-constraints level** *number*

Tree **level**

Range 1 to 8

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bandwidth** *number*

Synopsis Bandwidth available for this level

Context **configure subscriber-mgmt msap-policy** *string* **vpls-only-sap-parameters igmp-snooping mcac mc-constraints level** *number* **bandwidth** *number*

Tree **bandwidth**

Max. Range 0 to 4294967295

Units kilobps

Default 1

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**number-down** [**number-lag-port-down**] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i>
Tree	<b>number-down</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number-lag-port-down]** *number*

Synopsis	Number of lag ports down
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i>
Tree	<b>number-down</b>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**level** *number*

Synopsis	Level to be associated with this number of lag ports that are down
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>mcac</b> <b>mc-constraints</b> <b>number-down</b> <i>number</i> <b>level</b> <i>number</i>
Tree	<b>level</b>
Range	1 to 8
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**use-lag-port-weight** *boolean*

Synopsis	Use LAG port weight to calculate MCAC constraints
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>msap-policy</b> <i>string</i> <b>vpls-only-sap-parameters</b> <b>igmp-snooping</b> <b>mcac</b> <b>mc-constraints</b> <b>use-lag-port-weight</b> <i>boolean</i>
Tree	<b>use-lag-port-weight</b>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy reference**

Synopsis	Multicast CAC policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy string</a> <a href="#">vpls-only-sap-parameters igmp-snooping mcac policy reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">mcac policy string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mvr**

Synopsis	Enter the <b>mvr</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy string</a> <a href="#">vpls-only-sap-parameters igmp-snooping mvr</a>
Tree	<a href="#">mvr</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **from-vpls reference**

Synopsis	MVR VPLS from which the multicast channels are taken
Context	<b>configure</b> <a href="#">subscriber-mgmt msap-policy string</a> <a href="#">vpls-only-sap-parameters igmp-snooping mvr from-vpls reference</a>
Tree	<a href="#">from-vpls</a>
Reference	<b>configure</b> <a href="#">service vpls string</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-interval number**

Synopsis	Time between two consecutive host-query messages
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">query-interval</a> <i>number</i>
Tree	<a href="#">query-interval</a>
Range	2 to 1024
Units	seconds
Default	125
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-last-member-interval** *number*

Synopsis	Time between group-specific query messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">query-last-member-interval</a> <i>number</i>
Tree	<a href="#">query-last-member-interval</a>
Range	1 to 50
Units	deciseconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **query-response-interval** *number*

Synopsis	Time to wait for a response to the host-query messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">query-response-interval</a> <i>number</i>
Tree	<a href="#">query-response-interval</a>
Range	1 to 1023
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **robust-count** *number*

Synopsis	Number of retries after expected message loss
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">robust-count</a> <i>number</i>
Tree	<a href="#">robust-count</a>
Range	2 to 7
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**send-queries** *boolean*

Synopsis	Generate IGMP general queries
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">send-queries</a> <i>boolean</i>
Tree	<a href="#">send-queries</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**version** *keyword*

Synopsis	IGMP version
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">igmp-snooping</a> <a href="#">version</a> <i>keyword</i>
Tree	<a href="#">version</a>
Options	1, 2, 3
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ingress**

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">ingress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	QoS policy ID or name to associate with the MSAPs
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">queuing-type</a> <i>keyword</i>
Tree	<a href="#">queuing-type</a>
Options	multipoint-shared, service
Default	multipoint-shared
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mac-da-hashing** *boolean*

Synopsis	Include hashing on MAC DA ISO subscriber ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">msap-policy</a> <i>string</i> <a href="#">vpls-only-sap-parameters</a> <a href="#">mac-da-hashing</a> <i>boolean</i>
Tree	<a href="#">mac-da-hashing</a>
Default	false

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **split-horizon-group** *string*

Synopsis Name of the split horizon group for the MSAP  
 Context **configure** [subscriber-mgmt](#) [msap-policy](#) *string* [vpls-only-sap-parameters](#) [split-horizon-group](#) *string*  
 Tree [split-horizon-group](#)  
 String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pfcp**

Synopsis Enter the **pfcp** context  
 Context **configure** [subscriber-mgmt](#) [pfcp](#)  
 Tree [pfcp](#)  
 Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **association** [[name](#)] *string*

Synopsis Enter the **association** list instance  
 Context **configure** [subscriber-mgmt](#) [pfcp](#) [association](#) *string*  
 Tree [association](#)  
 Description Commands in this context configure a PFCP association towards a BNG CUPS CPF.  
 Max. Instances 2  
 Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis PFCP association name  
 Context **configure** [subscriber-mgmt](#) [pfcp](#) [association](#) *string*

Tree	<a href="#">association</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the PFCP association
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pfc</a> <a href="#">association</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **association-release-timeout** (*keyword* | *number*)

Synopsis	Time to wait for a response to a release request
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pfc</a> <a href="#">association</a> <i>string</i> <a href="#">association-release-timeout</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">association-release-timeout</a>
Description	<p>This command configures the time to wait to clean up the PFCP association after it has been disabled. After administratively disabling a PFCP association, the system requests a shutdown to the BNG CPF. If the BNG CPF does not gracefully remove the association before expiry of the timer, the full association and all related sessions are forcefully removed.</p> <p>The PFCP protocol encoding does not allow the full range of configured values. The system automatically rounds up the configured value to the nearest value allowed by the protocol. For more information about the protocol encoding, see 3GPP TS 29.244 8.2.78.1.</p>
Range	30 to 3600
Units	seconds
Options	none
Default	3600
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**bfd-expedited-path-down** *boolean*

Synopsis	Track BFD sessions to expedite PFCP path down detection
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">bfd-expedited-path-down</a> <i>boolean</i>
Tree	<a href="#">bfd-expedited-path-down</a>
Description	When configured to <b>true</b> , the system tracks BFD sessions to expedite PFCP path down detection on BFD down events. This requires the configuration of <b>path-restoration-time</b> .
Default	false
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**heartbeat**

Synopsis	Enter the <b>heartbeat</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">heartbeat</a>
Tree	<a href="#">heartbeat</a>
Description	Commands in this context configure the parameters for transmitting PFCP Heartbeat Request messages to a PFCP peer.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interval** *number*

Synopsis	Time between two successful heartbeat request messages
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">heartbeat</a> <i>interval</i> <i>number</i>
Tree	<a href="#">interval</a>

Range	5 to 180
Units	seconds
Default	60
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retries** *number*

Synopsis	Number of retries after the heartbeat timeout expires
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcf association</a> <i>string</i> <a href="#">heartbeat</a> <b>retries</b> <i>number</i>
Tree	<a href="#">retries</a>
Description	This command configures the number of times the same Heartbeat Request is sent before the PFCF path to the peer is considered down.
Range	0 to 30
Default	4
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Time the system waits for a heartbeat response message
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcf association</a> <i>string</i> <a href="#">heartbeat</a> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Description	This command configures the timeout after which a Heartbeat Request is considered unanswered.
Range	1 to 20
Units	seconds
Default	5
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interface**

Synopsis	Enter the <b>interface</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcf association</a> <i>string</i> <b>interface</b>

Tree	<a href="#">interface</a>
Description	Commands in this context configure the interface from which PFCP messages will be sent and on which PFCP messages will be received.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **name** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Name of the interface to use for the association
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pfc</a> <a href="#">association</a> <i>string</i> <a href="#">interface</a> <i>name</i> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Router context for the PFCP association
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pfc</a> <a href="#">association</a> <i>string</i> <a href="#">interface</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Description	This command configures the name of the interface, along with its routing instance, used as binding interface for PFCP.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nat**

Synopsis	Enter the <b>nat</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pfc</a> <a href="#">association</a> <i>string</i> <b>nat</b>



Tree	<a href="#">nat</a>
Description	Commands in this context configure NAT or WLAN-GW groups for BNG CUPS PFCP association.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nat-group** *reference*

Synopsis	NAT group used for CUPS NAT functionality
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">nat nat-group</a> <i>reference</i>
Tree	<a href="#">nat-group</a>
Reference	<b>configure</b> <a href="#">isa nat-group</a> <i>number</i>
Notes	The following elements are part of a choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group** *reference*

Synopsis	WLAN gateway group used for CUPS NAT functionality
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">nat wlan-gw-group</a> <i>reference</i>
Tree	<a href="#">wlan-gw-group</a>
Reference	<b>configure</b> <a href="#">isa wlan-gw-group</a> <i>number</i>
Notes	The following elements are part of a choice: <b>nat-group</b> or <b>wlan-gw-group</b> .
Introduced	20.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **node-id**

Synopsis	Enter the <b>node-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">node-id</a>
Tree	<a href="#">node-id</a>
Description	Commands in this context configure the UPF Node Identifier as sent in PFCP. It can either be configured to use the linked interface source IP or a preconfigured FQDN.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fqdn string

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	FQDN that identifies the local system for PFCP
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">node-id</a> <a href="#">fqdn</a> <i>string</i>
Tree	<a href="#">fqdn</a>
String Length	1 to 255
Notes	The following elements are part of a choice: <b>fqdn</b> or <b>use-ip-address</b> .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## use-ip-address

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use the IP address of interface for the association
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">node-id</a> <a href="#">use-ip-address</a>
Tree	<a href="#">use-ip-address</a>
Description	When configured, the binding interface address is used as identification of the local system for PFCP.
Notes	The following elements are part of a choice: <b>fqdn</b> or <b>use-ip-address</b> .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## path-restoration-time number

Synopsis	Time to wait before declaring the path down
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string</i> <a href="#">path-restoration-time</a> <i>number</i>
Tree	<a href="#">path-restoration-time</a>
Description	This command configures the time for which sessions are kept after a PFCP path failure is detected. If the path recovers without a restart before this time expires, the sessions are kept. Otherwise, they are removed.

Range	1 to 11520
Units	minutes
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## peer

Synopsis	Enter the <b>peer</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <b>peer</b>
Tree	<a href="#">peer</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-address (*ipv4-address-no-zone* | *ipv6-address-no-zone*)



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PFCP peer IP address
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <b>peer ip-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">ip-address</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## python-policy *reference*

Synopsis	Python policy to process PFCP messages
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcg association</a> <i>string</i> <b>python-policy</b> <i>reference</i>
Tree	<a href="#">python-policy</a>
Reference	<b>configure</b> <a href="#">python</a> <b>python-policy</b> <i>string</i>
Introduced	22.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tx**

Synopsis	Enter the <b>tx</b> context
Context	<b>configure subscriber-mgmt pfcg association string tx</b>
Tree	<b>tx</b>
Description	Commands in this context configure how PFCP messages are sent.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retries number**

Synopsis	Number of retries
Context	<b>configure subscriber-mgmt pfcg association string tx retries number</b>
Tree	<b>retries</b>
Description	This command configures the number of times a message is retried before it is considered lost, also known as N1.
Range	0 to 7
Default	3
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout number**

Synopsis	Retransmission timer
Context	<b>configure subscriber-mgmt pfcg association string tx timeout number</b>
Tree	<b>timeout</b>
Description	This command configures the time after which a message is considered unanswered, also known as T1.
Range	1 to 30
Units	seconds
Default	1
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ttl number**

Synopsis	TTL value in the IP header of egress PFCP packets
Context	<b>configure</b> <a href="#">subscriber-mgmt pfcp association</a> <i>string tx ttl number</i>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	255
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pim-policy [name] string**

Synopsis	Enter the <b>pim-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt pim-policy</a> <i>string</i>
Tree	<a href="#">pim-policy</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name] string**

Synopsis	Policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt pim-policy</a> <i>string</i>
Tree	<a href="#">pim-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt pim-policy</a> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-policy** [*name*] *string*

Synopsis	Enter the <b>ppp-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i>
Tree	<a href="#">ppp-policy</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	PPP policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i>
Tree	<a href="#">ppp-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **allow-same-circuit-id-for-dhcp** *boolean*

Synopsis	Enable support for IPv4 address allocation on a SAP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">allow-same-circuit-id-for-dhcp</a> <i>boolean</i>
Tree	<a href="#">allow-same-circuit-id-for-dhcp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cookies** *boolean*

Synopsis	Enable/disable the use of AC-Cookie tags.
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">cookies</a> <i>boolean</i>
Tree	<a href="#">cookies</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-pap-password** *string*

Synopsis	Default PAP password when no password from PPP client
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">default-pap-password</a> <i>string</i>
Tree	<a href="#">default-pap-password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **default-user-name** *string*

Synopsis	Default username used for authentication
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">default-user-name</a> <i>string</i>
Tree	<a href="#">default-user-name</a>
Description	This command configures the default username for authentication when not provided in PAP/CHAP authentication (no Name field in CHAP Response message or PeerId-Length=0 in PAP Authenticate-Request).  The PPP session terminates when no username is provided in the PAP/CHAP authentication and no default username is configured.
String Length	1 to 253
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **force-ppp-mtu-gt-1492** *boolean*

Synopsis Enable PPPoE MRU negotiations greater than 1492 bytes

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [force-ppp-mtu-gt-1492](#) *boolean*

Tree [force-ppp-mtu-gt-1492](#)

Description When configured to **true**, this command enables PPPoE MRU negotiations greater than 1492 bytes without the need to receive a “PPP-Max-Payload” tag in PADI/PADR from the client as defined in RFC 4638, *Accommodating a Maximum Transit Unit/Maximum Receive Unit (MTU/MRU) Greater Than 1492 in the Point-to-Point Protocol over Ethernet (PPPoE)*.

When configured to **false**, this command disables PPPoE MRU negotiations greater than 1492 bytes.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipcp-subnet-negotiation** *boolean*

Synopsis Allow IPCP subnet negotiation for PPPoE hosts

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [ipcp-subnet-negotiation](#) *boolean*

Tree [ipcp-subnet-negotiation](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **keepalive**

Synopsis Enter the **keepalive** context

Context **configure** [subscriber-mgmt](#) [ppp-policy](#) *string* [keepalive](#)

Tree [keepalive](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**hold-up-multiplier** *number*

Synopsis	PPP keepalive multiplier
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">keepalive</a> <b>hold-up-multiplier</b> <i>number</i>
Tree	<a href="#">hold-up-multiplier</a>
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interval** *number*

Synopsis	PPP keepalive interval
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">keepalive</a> <b>interval</b> <i>number</i>
Tree	<a href="#">interval</a>
Range	4 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lcp-ignore-identifier** *boolean*

Synopsis	Ignore identifier values in the LCP Echo Reply
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">lcp-ignore-identifier</a> <i>boolean</i>
Tree	<a href="#">lcp-ignore-identifier</a>
Description	When configured to <b>true</b> , BNG ignores the Identifier field of the Echo-Reply message and keeps the PPP session up.  When configured to <b>false</b> , BNG does not ignore the identifier value, discards any incorrect messages, and the PPP session terminates because of the echo timeout.
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lcp-ignore-magic-numbers** *boolean*

Synopsis	Ignore LCP peer magic number mismatch
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">lcp-ignore-magic-numbers</a> <i>boolean</i>
Tree	<a href="#">lcp-ignore-magic-numbers</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**max-sessions-per-cid**

Synopsis	Enable the <b>max-sessions-per-cid</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">max-sessions-per-cid</a>
Tree	<a href="#">max-sessions-per-cid</a>
Description	<p>Commands in this context specify the configuration settings for PPPoE sessions based on the Agent Circuit ID.</p> <p>When this context is configured, the limit for PPPoE sessions per Agent Circuit ID must be configured. The limit does not apply to sessions without an Agent Circuit ID; however, sessions without an Agent Circuit ID can only be established when the <b>allow-sessions-without-cid</b> command is configured to <b>true</b>.</p> <p>When this context is unconfigured, no limit is placed on the number of PPPoE sessions with the same Agent Circuit ID on the same SAP or MSAP and PPPoE sessions with or without an Agent Circuit ID can be established.</p>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**allow-sessions-without-cid** *boolean*

Synopsis	Allow PPPoE sessions without an Agent Circuit ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">max-sessions-per-cid</a> <a href="#">allow-sessions-without-cid</a> <i>boolean</i>
Tree	<a href="#">allow-sessions-without-cid</a>
Description	<p>When configured to <b>true</b>, PPPoE sessions without an Agent Circuit ID can be established on a SAP. The limit configured for the maximum number of sessions allowed per Agent Circuit ID does not apply to these sessions.</p> <p>When configured to <b>false</b>, PPPoE sessions without an Agent Circuit ID are denied.</p> <p>The command is valid only when a limit is configured for the maximum sessions per Agent Circuit ID on a SAP.</p>
Default	false

Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **limit** *number*

Synopsis	Maximum sessions per Agent Circuit ID and per SAP
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">max-sessions-per-cid</a> <i>limit</i> <i>number</i>
Tree	<a href="#">limit</a>
Description	<p>This command configures the maximum number of PPPoE sessions that can be active with the same Agent Circuit ID on the same SAP or MSAP. This limit is enforced in the discovery phase, prior to PAP or CHAP authentication, based on the Agent Circuit ID sub-option present in the vendor-specific PPPoE access loop identification tag added in PADI and PADR messages by a PPPoE intermediate agent.</p> <p>PPPoE sessions without an Agent Circuit ID are not subject to the configured limit; however, sessions without an Agent Circuit ID can only be established when the <b>allow-sessions-without-cid</b> command is configured to <b>true</b>.</p>
Range	1 to 8190
Notes	This element is mandatory.
Introduced	20.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-sessions-per-mac** *number*

Synopsis	Maximum number of sessions per MAC address
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">max-sessions-per-mac</a> <i>number</i>
Tree	<a href="#">max-sessions-per-mac</a>
Description	<p>This command sets the maximum PPP sessions that can be opened for a specified MAC address.</p> <p>To enable IPv4 address allocation using the internal DHCPv4 client for multiple PPPoE sessions on a single SAP and having the same MAC address and circuit-ID, the optional CLI parameter <b>allow-same-circuit-id-for-dhcp</b> should be added. The SR OS local DHCP server detects the additional vendor-specific options inserted by the internal DHCPv4 client and use an extended unique key for lease allocation.</p>
Range	1 to 8191
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## mlppp

Synopsis	Enter the <b>mlppp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a>
Tree	<a href="#">mlppp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## accept-mrru *boolean*

Synopsis	Accept multilink MRRU LCP option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">accept-mrru</a> <i>boolean</i>
Tree	<a href="#">accept-mrru</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## endpoint

Synopsis	Enter the <b>endpoint</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint</a>
Tree	<a href="#">endpoint</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

## ip (*ipv4-address* | *keyword*)

Synopsis	Endpoint ID as an IP address
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint</a> <a href="#">ip</a> ( <i>ipv4-address</i>   <i>keyword</i> )
Tree	<a href="#">ip</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**mac** (*mac-address* | *keyword*)

Synopsis	Endpoint ID as a MAC address
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">endpoint</a> <a href="#">mac</a> ( <i>mac-address</i>   <i>keyword</i> )
Tree	<a href="#">mac</a>
Options	system
Notes	The following elements are part of a choice: <b>ip</b> or <b>mac</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**short-sequence-numbers** *boolean*

Synopsis	Request a peer to send short sequence numbers
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">mlppp</a> <a href="#">short-sequence-numbers</a> <i>boolean</i>
Tree	<a href="#">short-sequence-numbers</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**ncp-renegotiation** *keyword*

Synopsis	Behavior for subsequent NCP renegotiation messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ncp-renegotiation</a> <i>keyword</i>
Tree	<a href="#">ncp-renegotiation</a>
Options	ignore, terminate-session
Default	terminate-session
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pado-ac-name** *string*

Synopsis	Access Concentrator name used in PPPoE PADO message
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">pado-ac-name</a> <i>string</i>
Tree	<a href="#">pado-ac-name</a>

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String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pado-delay** *number*

Synopsis	Delay timeout before sending a PADO
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">pado-delay</a> <i>number</i>
Tree	<a href="#">pado-delay</a>
Range	1 to 30
Units	deciseconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-authentication** *keyword*

Synopsis	PPP authentication protocol to negotiate
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-authentication</a> <i>keyword</i>
Tree	<a href="#">ppp-authentication</a>
Options	pap, chap, pref-chap, pref-pap
Default	pref-chap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp-chap-challenge-length**

Synopsis	Enter the <b>ppp-chap-challenge-length</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-chap-challenge-length</a>
Tree	<a href="#">ppp-chap-challenge-length</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max** *number*

Synopsis	Maximum length for the PPP CHAP challenge
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-chap-challenge-length</a> <i>max</i> <i>number</i>
Tree	<a href="#">max</a>
Range	8 to 64
Default	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**min** *number*

Synopsis	Minimum length for the PPP CHAP challenge
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-chap-challenge-length</a> <i>min</i> <i>number</i>
Tree	<a href="#">min</a>
Range	8 to 64
Default	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp-initial-delay** *boolean*

Synopsis	Select delay timeout before starting the PPP stack
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-initial-delay</a> <i>boolean</i>
Tree	<a href="#">ppp-initial-delay</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ppp-mtu** *number*

Synopsis	Maximum PPP MTU size
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-mtu</a> <i>number</i>
Tree	<a href="#">ppp-mtu</a>
Range	512 to 9212
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ppp-options

Synopsis	Enter the <b>ppp-options</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a>
Tree	<a href="#">ppp-options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## custom-option [protocol](#) *keyword* [option-number](#) *number*

Synopsis	Enter the <b>custom-option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i>
Tree	<a href="#">custom-option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [protocol](#) *keyword*

Synopsis	Protocol for the custom PPP option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i>
Tree	<a href="#">custom-option</a>
Options	lcp, ipcp, ipv6cp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [option-number](#) *number*

Synopsis	PPP option number
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i>
Tree	<a href="#">custom-option</a>
Range	0 to 255
Notes	This element is part of a list key.



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **address** *string*

Synopsis	IP address of the custom PPP option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>ascii-string</b> , <b>empty</b> , or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ascii-string** *string*

Synopsis	ASCII string for the customer PPP option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i> <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>ascii-string</b> , <b>empty</b> , or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **empty**

Synopsis	Configure an empty PPP option.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <i>keyword</i> <a href="#">option-number</a> <i>number</i> <a href="#">empty</a>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>ascii-string</b> , <b>empty</b> , or <b>hex-string</b> .
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hex-string** *string*

Synopsis	Hexadecimal string for the custom PPP option
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">ppp-options</a> <a href="#">custom-option</a> <a href="#">protocol</a> <a href="#">keyword</a> <a href="#">option-number</a> <i>number</i> <b>hex-string</b> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>address</b> , <b>ascii-string</b> , <b>empty</b> , or <b>hex-string</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**re-establish-session** *boolean*

Synopsis	Reconnect and override an existing session
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">re-establish-session</a> <i>boolean</i>
Tree	<a href="#">re-establish-session</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**reject-unconfigured-ncp** *boolean*

Synopsis	Enable/disable reject unconfigured NCP.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">reject-unconfigured-ncp</a> <i>boolean</i>
Tree	<a href="#">reject-unconfigured-ncp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**reply-on-padt** *boolean*

Synopsis	Enable/disable reply on PADT packets.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">reply-on-padt</a> <i>boolean</i>
Tree	<a href="#">reply-on-padt</a>
Default	false

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-timeout** *number*

Synopsis	Session timeout interval
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">session-timeout</a> <i>number</i>
Tree	<a href="#">session-timeout</a>
Range	1 to 31104000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sid-allocation** *keyword*

Synopsis	PPPoE session ID allocation method
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">sid-allocation</a> <i>keyword</i>
Tree	<a href="#">sid-allocation</a>
Description	This command determines the allocation of session IDs for a PPPoE session with a given MAC address that is active on a given SAP.
Options	sequential, random
Default	sequential
Introduced	20.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **unique-sid** *keyword*

Synopsis	Mode in which a unique session ID is allocated
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">ppp-policy</a> <i>string</i> <a href="#">unique-sid</a> <i>keyword</i>
Tree	<a href="#">unique-sid</a>
Description	This command specifies how unique session IDs are assigned to PPPoE sessions that are active on a single SAP.  This command is used with the <b>sid-allocation</b> command to determine the assignment of session IDs to subsequent PPPoE sessions.
Options	per-sap, per-sap-mac, per-msap
Default	per-sap-mac

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe-client-policy** [*name*] *string*

Synopsis	Enter the <b>pppoe-client-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i>
Tree	<a href="#">pppoe-client-policy</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	PPPoE client policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i>
Tree	<a href="#">pppoe-client-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **keepalive**

Synopsis	Enter the <b>keepalive</b> context
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Context	<b>configure</b> <a href="#">subscriber-mgmt pppoe-client-policy</a> <i>string</i> <a href="#">keepalive</a>
Tree	<a href="#">keepalive</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-up-multiplier** *number*

Synopsis	PPPoE keepalive multiplier
Context	<b>configure</b> <a href="#">subscriber-mgmt pppoe-client-policy</a> <i>string</i> <a href="#">keepalive</a> <a href="#">hold-up-multiplier</a> <i>number</i>
Tree	<a href="#">hold-up-multiplier</a>
Range	1 to 5
Default	3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	PPPoE keepalive interval
Context	<b>configure</b> <a href="#">subscriber-mgmt pppoe-client-policy</a> <i>string</i> <a href="#">keepalive</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	10 to 300
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mru** *number*

Synopsis	PPPoE MRU
Context	<b>configure</b> <a href="#">subscriber-mgmt pppoe-client-policy</a> <i>string</i> <a href="#">mru</a> <i>number</i>
Tree	<a href="#">mru</a>
Range	512 to 9154
Default	1492
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mtu number**

Synopsis PPPoE MTU  
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [mtu number](#)  
Tree [mtu](#)  
Range 512 to 9154  
Default 1492  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy reference**

Synopsis Python policy for all messages to and from PPPoE client  
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [python-policy reference](#)  
Tree [python-policy](#)  
Reference **configure** [python python-policy](#) *string*  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **restart-backoff**

Synopsis Enter the **restart-backoff** context  
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [restart-backoff](#)  
Tree [restart-backoff](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **initial-time number**

Synopsis Initial backoff time  
Context **configure** [subscriber-mgmt pppoe-client-policy](#) *string* [restart-backoff](#) *initial-time number*  
Tree [initial-time](#)  
Range 10 to 3600

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Units	seconds
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-time** *number*

Synopsis	Maximum backoff time
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">restart-backoff</a> <b>max-time</b> <i>number</i>
Tree	<a href="#">max-time</a>
Range	10 to 3600
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stack**

Synopsis	Enter the <b>stack</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <b>stack</b>
Tree	<a href="#">stack</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv4** *boolean*

Synopsis	Start IPCP to retrieve an IPv4 address
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">stack</a> <b>ipv4</b> <i>boolean</i>
Tree	<a href="#">ipv4</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6-slaac *boolean***

Synopsis	Start IPv6CP and use SLAAC to retrieve an IPv6 prefix
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">pppoe-client-policy</a> <i>string</i> <a href="#">stack</a> <a href="#">ipv6-slaac</a> <i>boolean</i>
Tree	<a href="#">ipv6-slaac</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-accounting-policy [*name*] *string***

Synopsis	Enter the <b>radius-accounting-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i>
Tree	<a href="#">radius-accounting-policy</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[*name*] *string***

Synopsis	RADIUS-based accounting policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i>
Tree	<a href="#">radius-accounting-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**acct-tunnel-connection-fmt *string***

Synopsis	String sent in the accounting message
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">acct-tunnel-connection-fmt</a> <i>string</i>
Tree	<a href="#">acct-tunnel-connection-fmt</a>
String Length	1 to 253



Default	%n
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### custom-record

Synopsis	Enter the <b>custom-record</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a>
Tree	<a href="#">custom-record</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### queue [*id*] *number*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [*id*] *number*

Synopsis	Queue ID for which counters are collected in the record
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i>
Tree	<a href="#">queue</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### e-counters

Synopsis	Enter the <b>e-counters</b> context
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a>
Tree	<a href="#">e-counters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **in-profile-octets-discarded-count** *boolean*

Synopsis	Include the in-profile octets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in-profile packets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out-profile octets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out-profile packets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **out-profile-packets-forwarded-count** *boolean*

Synopsis Include the out-of-profile packets forwarded count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [e-counters](#) [out-profile-packets-forwarded-count](#) *boolean*  
Tree [out-profile-packets-forwarded-count](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **i-counters**

Synopsis Enter the **i-counters** context  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#)  
Tree [i-counters](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all-octets-offered-count** *boolean*

Synopsis Include the all octets offered count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [all-octets-offered-count](#) *boolean*  
Tree [all-octets-offered-count](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all-packets-offered-count** *boolean*

Synopsis Include all packets offered count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) [number](#) [i-counters](#) [all-packets-offered-count](#) *boolean*

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Tree	<a href="#">all-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-octets-discarded-count** *boolean*

Synopsis	Include the high octets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-octets-offered-count** *boolean*

Synopsis	Include the high octets offered count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-packets-discarded-count** *boolean*

Synopsis	Include the high packets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <i>number</i> <a href="#">i-counters</a> <a href="#">high-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### high-packets-offered-count *boolean*

Synopsis	Include the high packets offered count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">high-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">high-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### in-profile-octets-forwarded-count *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### in-profile-packets-forwarded-count *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### low-octets-discarded-count *boolean*

Synopsis	Include the low octets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">low-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-discarded-count</a>
Default	false

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low-octets-offered-count** *boolean*

Synopsis Include the low octets offered count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#)  
*number* [i-counters](#) **low-octets-offered-count** *boolean*  
Tree [low-octets-offered-count](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low-packets-discarded-count** *boolean*

Synopsis Include the low packets discarded count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#)  
*number* [i-counters](#) **low-packets-discarded-count** *boolean*  
Tree [low-packets-discarded-count](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low-packets-offered-count** *boolean*

Synopsis Include the low packets offered count  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#)  
*number* [i-counters](#) **low-packets-offered-count** *boolean*  
Tree [low-packets-offered-count](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **out-profile-octets-forwarded-count** *boolean*

Synopsis Include the out-of-profile octets forwarded count

Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **uncoloured-octets-offered-count** *boolean*

Synopsis	Include the uncolored octets offered count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">uncoloured-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **uncoloured-packets-offered-count** *boolean*

Synopsis	Include the uncolored packets offered count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">queue</a> <a href="#">number</a> <a href="#">i-counters</a> <a href="#">uncoloured-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">uncoloured-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



## ref-queue

Synopsis	Enter the <b>ref-queue</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a>
Tree	<a href="#">ref-queue</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all

Synopsis	Apply significant change to counters for all queues
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">all</a>
Tree	<a href="#">all</a>
Notes	The following elements are part of a choice: <b>all</b> or <b>id</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## e-counters

Synopsis	Enter the <b>e-counters</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a>
Tree	<a href="#">e-counters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## in-profile-octets-discarded-count *boolean*

Synopsis	Include the in-profile octets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**in-profile-octets-forwarded-count** *boolean*

Synopsis	Include the in-profile octets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**in-profile-packets-discarded-count** *boolean*

Synopsis	Include the in-profile packets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-profile-octets-discarded-count** *boolean*

Synopsis	Include the out-profile octets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-discarded-count</a>

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Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-octets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-profile-packets-discarded-count** *boolean*

Synopsis	Include the out-profile packets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">e-counters</a> <a href="#">out-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## i-counters

Synopsis	Enter the <b>i-counters</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a>
Tree	<a href="#">i-counters</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all-octets-offered-count *boolean*

Synopsis	Include the all octets offered count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">all-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## all-packets-offered-count *boolean*

Synopsis	Include all packets offered count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">all-packets-offered-count</a> <i>boolean</i>
Tree	<a href="#">all-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## high-octets-discarded-count *boolean*

Synopsis	Include the high octets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">high-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">high-octets-discarded-count</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-octets-offered-count** *boolean*

Synopsis Include the high octets offered count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) **high-octets-offered-count** *boolean*

Tree [high-octets-offered-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-packets-discarded-count** *boolean*

Synopsis Include the high packets discarded count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) **high-packets-discarded-count** *boolean*

Tree [high-packets-discarded-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **high-packets-offered-count** *boolean*

Synopsis Include the high packets offered count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) **high-packets-offered-count** *boolean*

Tree [high-packets-offered-count](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **in-profile-octets-forwarded-count** *boolean*

Synopsis Include the in-profile octets forwarded count

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) **in-profile-octets-forwarded-count** *boolean*

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Tree	<a href="#">in-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **in-profile-packets-forwarded-count** *boolean*

Synopsis	Include the in-profile packets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">in-profile-packets-forwarded-count</a> <i>boolean</i>
Tree	<a href="#">in-profile-packets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low-octets-discarded-count** *boolean*

Synopsis	Include the low octets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-octets-discarded-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low-octets-offered-count** *boolean*

Synopsis	Include the low octets offered count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <a href="#">low-octets-offered-count</a> <i>boolean</i>
Tree	<a href="#">low-octets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low-packets-discarded-count** *boolean*

Synopsis	Include the low packets discarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <b>low-packets-discarded-count</b> <i>boolean</i>
Tree	<a href="#">low-packets-discarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **low-packets-offered-count** *boolean*

Synopsis	Include the low packets offered count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <b>low-packets-offered-count</b> <i>boolean</i>
Tree	<a href="#">low-packets-offered-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **out-profile-octets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile octets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <b>out-profile-octets-forwarded-count</b> <i>boolean</i>
Tree	<a href="#">out-profile-octets-forwarded-count</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **out-profile-packets-forwarded-count** *boolean*

Synopsis	Include the out-of-profile packets forwarded count
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">ref-queue</a> <a href="#">i-counters</a> <b>out-profile-packets-forwarded-count</b> <i>boolean</i>
Tree	<a href="#">out-profile-packets-forwarded-count</a>
Default	false

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **uncoloured-octets-offered-count** *boolean*

Synopsis Include the uncolored octets offered count  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [uncoloured-octets-offered-count](#) *boolean*  
 Tree [uncoloured-octets-offered-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **uncoloured-packets-offered-count** *boolean*

Synopsis Include the uncolored packets offered count  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [i-counters](#) [uncoloured-packets-offered-count](#) *boolean*  
 Tree [uncoloured-packets-offered-count](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **id** *reference*

Synopsis Queue ID  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [ref-queue](#) [id](#) *reference*  
 Tree [id](#)  
 Reference **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [custom-record](#) [queue](#) *number*  
 Notes The following elements are part of a choice: **all** or **id**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**significant-change** *number*

Synopsis	Significant change required to generate the record
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">custom-record</a> <a href="#">significant-change</a> <i>number</i>
Tree	<a href="#">significant-change</a>
Range	0 to 4294967295
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**delay-start-time** *number*

Synopsis	Accounting start delay
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">delay-start-time</a> <i>number</i>
Tree	<a href="#">delay-start-time</a>
Range	1 to 10
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**host-accounting**

Synopsis	Enter the <b>host-accounting</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">host-accounting</a>
Tree	<a href="#">host-accounting</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of per-host accounting
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">host-accounting</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**interim-update** *boolean*

Synopsis	Allow interim-update accounting messages to be sent
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">host-accounting</a> <a href="#">interim-update</a> <i>boolean</i>
Tree	<a href="#">interim-update</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**include-radius-attribute**

Synopsis	Enter the <b>include-radius-attribute</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a>
Tree	<a href="#">include-radius-attribute</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**access-loop-options** *boolean*

Synopsis	Include access loop information
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">access-loop-options</a> <i>boolean</i>
Tree	<a href="#">access-loop-options</a>
Default	false

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-authentic** *boolean*

Synopsis Enable/disable include of the acct-authentic attribute.  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-authentic](#) *boolean*  
Tree [acct-authentic](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-delay-time** *boolean*

Synopsis Include the acct-delay-time RADIUS attribute  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-delay-time](#) *boolean*  
Tree [acct-delay-time](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-triggered-reason** *boolean*

Synopsis Include Alc-Acct-Triggered-Reason attribute  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [acct-triggered-reason](#) *boolean*  
Tree [acct-triggered-reason](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **all-authorized-session-addresses** *boolean*

Synopsis Include all address/prefix attributes

Context	<b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute all-authorized-session-addresses</b> <i>boolean</i>
Tree	<a href="#">all-authorized-session-addresses</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**apn boolean**

Synopsis	Enable/disable include of the APN attribute.
Context	<b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute apn</b> <i>boolean</i>
Tree	<a href="#">apn</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bearer-fteid boolean**

Synopsis	Include bearer-fteid attribute
Context	<b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute bearer-fteid</b> <i>boolean</i>
Tree	<a href="#">bearer-fteid</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bonding-active-connections boolean**

Synopsis	Include the RADIUS Alc-Bonding-Active-Connection VSA
Context	<b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute bonding-active-connections</b> <i>boolean</i>
Tree	<a href="#">bonding-active-connections</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**bonding-id** *boolean*

Synopsis	Include the Alc-Bonding-Id VSA
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">bonding-id</a> <i>boolean</i>
Tree	<a href="#">bonding-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**brg-num-active-sessions** *boolean*

Synopsis	Include the RADIUS Alc-BRG-Num-Active-Sessions VSA
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">brg-num-active-sessions</a> <i>boolean</i>
Tree	<a href="#">brg-num-active-sessions</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**called-station-id** *boolean*

Synopsis	Include called-station-id attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">called-station-id</a> <i>boolean</i>
Tree	<a href="#">called-station-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**calling-station-id**

Synopsis	Enable the <b>calling-station-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a>
Tree	<a href="#">calling-station-id</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis	Format of the Calling-Station-ID attribute
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>calling-station-id</b> <b>type</b> <i>keyword</i>
Tree	<b>type</b>
Options	sap-string, mac, sap-id, remote-id, llid
Default	sap-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **circuit-id** *boolean*

Synopsis	Include circuit-id attribute
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>circuit-id</b> <i>boolean</i>
Tree	<b>circuit-id</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **delegated-ipv6-prefix** *boolean*

Synopsis	Include delegated-ipv6-prefix attribute
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>delegated-ipv6-prefix</b> <i>boolean</i>
Tree	<b>delegated-ipv6-prefix</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**detailed-acct-attributes** *boolean*

Synopsis	Include more detailed accounting attributes
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute detailed-acct-attributes</a> <i>boolean</i>
Tree	<a href="#">detailed-acct-attributes</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dhcp-vendor-class-id** *boolean*

Synopsis	Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute dhcp-vendor-class-id</a> <i>boolean</i>
Tree	<a href="#">dhcp-vendor-class-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**error-code** *boolean*

Synopsis	Include detailed error codes
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute error-code</a> <i>boolean</i>
Tree	<a href="#">error-code</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**firewall-info** *boolean*

Synopsis	Include the Firewall Information VSA in AAA protocols
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute firewall-info</a> <i>boolean</i>
Tree	<a href="#">firewall-info</a>
Default	false

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **framed-interface-id** *boolean*

Synopsis Include framed-interface-id attribute  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [framed-interface-id](#) *boolean*  
Tree [framed-interface-id](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **framed-ip-address** *boolean*

Synopsis Include framed-ip-address attribute  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [framed-ip-address](#) *boolean*  
Tree [framed-ip-address](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **framed-ip-netmask** *boolean*

Synopsis Include framed-ip-netmask attribute  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [framed-ip-netmask](#) *boolean*  
Tree [framed-ip-netmask](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **framed-ipv6-prefix** *boolean*

Synopsis Include framed-ipv6-prefix attribute



Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute framed-ipv6-prefix</a> <i>boolean</i>
Tree	<a href="#">framed-ipv6-prefix</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **framed-ipv6-route** *boolean*

Synopsis	Include framed-ipv6-route attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute framed-ipv6-route</a> <i>boolean</i>
Tree	<a href="#">framed-ipv6-route</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **framed-route** *boolean*

Synopsis	Include framed-route attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute framed-route</a> <i>boolean</i>
Tree	<a href="#">framed-route</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **imei** *boolean*

Synopsis	Enable/disable include of the IMEI attribute.
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute imei</a> <i>boolean</i>
Tree	<a href="#">imei</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **imsi** *boolean*

Synopsis	Include the IMSI attribute for FWA sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">imsi</a> <i>boolean</i>
Tree	<a href="#">imsi</a>
Default	false
Introduced	22.2.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-address** *boolean*

Synopsis	Include the IPv6 address attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">ipv6-address</a> <i>boolean</i>
Tree	<a href="#">ipv6-address</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lanext-bridge-id** *boolean*

Synopsis	Include Alc-Bridge-Id in RADIUS accounting packets
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">lanext-bridge-id</a> <i>boolean</i>
Tree	<a href="#">lanext-bridge-id</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext-device-type** *boolean*

Synopsis	Include Alc-HLE-Device-type in accounting packets
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">lanext-device-type</a> <i>boolean</i>
Tree	<a href="#">lanext-device-type</a>

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Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext-route-distinguisher** *boolean*

Synopsis	Include route distinguisher (Alc-RD) in RADIUS packets
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>lanext-route-distinguisher</b> <i>boolean</i>
Tree	<a href="#">lanext-route-distinguisher</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext-route-target** *boolean*

Synopsis	Include route target (Alc-RT) in RADIUS packets
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>lanext-route-target</b> <i>boolean</i>
Tree	<a href="#">lanext-route-target</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **lanext-vni** *boolean*

Synopsis	Enable/disable include of the lanext-vni attribute.
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-accounting-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>lanext-vni</b> <i>boolean</i>
Tree	<a href="#">lanext-vni</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mac-address** *boolean*

Synopsis	Include the client MAC address in the RADIUS message
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">mac-address</a> <i>boolean</i>
Tree	<a href="#">mac-address</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**msisdn** *boolean*

Synopsis	Enable/disable include of the MSISDN attribute.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">msisdn</a> <i>boolean</i>
Tree	<a href="#">msisdn</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**nas-identifier** *boolean*

Synopsis	Enable/disable include of the NAS-Identifier attribute.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-identifier</a> <i>boolean</i>
Tree	<a href="#">nas-identifier</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nas-port**

Synopsis	Enable the <b>nas-port</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port</a>
Tree	<a href="#">nas-port</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bit-spec** *string*

Synopsis RADIUS NAS-Port attribute

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port](#) **bit-spec** *string*

Tree [bit-spec](#)

String Length 1 to 255

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-id**

Synopsis Enable the **nas-port-id** context

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#)

Tree [nas-port-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **prefix-string** *string*

Synopsis String to be prefixed to the NAS-Port-Id attribute

Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [nas-port-id](#) **prefix-string** *string*

Tree [prefix-string](#)

String Length 1 to 8

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **suffix** *keyword*

Synopsis String to be suffixed to the NAS-Port-Id attribute

Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute nas-port-id suffix</a> <i>keyword</i>
Tree	<a href="#">suffix</a>
Options	circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port-type**

Synopsis	Enable the <b>nas-port-type</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute nas-port-type</a>
Tree	<a href="#">nas-port-type</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** (*keyword* | *number*)

Synopsis	Value for RADIUS NAS-Port-Type attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute nas-port-type</a> <a href="#">type</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">type</a>
Range	0 to 255
Options	rfc-aligned
Default	rfc-aligned
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nat-port-range** *boolean*

Synopsis	Include NAT port range attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute nat-port-range</a> <i>boolean</i>
Tree	<a href="#">nat-port-range</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **remote-id** *boolean*

Synopsis Include remote-id attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **remote-id** *boolean*

Tree [remote-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sla-profile** *boolean*

Synopsis Include sla-profile attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **sla-profile** *boolean*

Tree [sla-profile](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **spi-sharing-id** *boolean*

Synopsis Include spi-sharing-id attribute

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **spi-sharing-id** *boolean*

Tree [spi-sharing-id](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **std-acct-attributes** *boolean*

Synopsis Include standard accounting attributes

Context **configure** **subscriber-mgmt** **radius-accounting-policy** *string* **include-radius-attribute** **std-acct-attributes** *boolean*

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Tree	<a href="#">std-acct-attributes</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **steering-profile** *boolean*

Synopsis	Include the RADIUS Alc-Steering-Profile VSA
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute steering-profile</a> <i>boolean</i>
Tree	<a href="#">steering-profile</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *boolean*

Synopsis	Include sub-profile attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute sub-profile</a> <i>boolean</i>
Tree	<a href="#">sub-profile</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subscriber-id** *boolean*

Synopsis	Include subscriber-id attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute subscriber-id</a> <i>boolean</i>
Tree	<a href="#">subscriber-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**tunnel-client-attrs** *boolean*

Synopsis	Enable/disable include of tunnel-client attributes.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">tunnel-client-attrs</a> <i>boolean</i>
Tree	<a href="#">tunnel-client-attrs</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tunnel-server-attrs** *boolean*

Synopsis	Enable/disable include of tunnel-server attributes.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">tunnel-server-attrs</a> <i>boolean</i>
Tree	<a href="#">tunnel-server-attrs</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**uli** *boolean*

Synopsis	Generate the ULI RADIUS attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">uli</a> <i>boolean</i>
Tree	<a href="#">uli</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**user-name** *boolean*

Synopsis	Include the user-name attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">user-name</a> <i>boolean</i>
Tree	<a href="#">user-name</a>
Default	false

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **v6-aggregate-stats** *boolean*

Synopsis Report IPv6 aggregated forwarded octet and packet counters  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [v6-aggregate-stats](#) *boolean*  
Tree [v6-aggregate-stats](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wifi-num-attached-ues** *boolean*

Synopsis Include the RADIUS Alc-Num-Attached-UEs VSA  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [wifi-num-attached-ues](#) *boolean*  
Tree [wifi-num-attached-ues](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wifi-rssi** *boolean*

Synopsis Include 802.11 received signal strength indicator  
Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [include-radius-attribute](#) [wifi-rssi](#) *boolean*  
Tree [wifi-rssi](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wifi-ssid-vlan** *boolean*

Synopsis Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA

Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute wifi-ssid-vlan</a> <i>boolean</i>
Tree	<a href="#">wifi-ssid-vlan</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect-tunnel-home-address** *boolean*

Synopsis	Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">include-radius-attribute xconnect-tunnel-home-address</a> <i>boolean</i>
Tree	<a href="#">xconnect-tunnel-home-address</a>
Default	false
Introduced	16.0.R3
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mcs-interval**

Synopsis	Enter the <b>mcs-interval</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">mcs-interval</a>
Tree	<a href="#">mcs-interval</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** (*keyword* | *number*)

Synopsis	MCS synchronization interval of usage counters
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">mcs-interval</a> <a href="#">interval</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">interval</a>
Description	This command specifies the interval at which the active BNG in a dual-homed deployment synchronizes subscriber accounting data using MCS to the standby BNG. The MCS interval is a statically configured value or equal to the configured RADIUS accounting update-interval.
Range	5 to 60
Units	minutes

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Options	none, use-update-interval
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **queue-instance-accounting**

Synopsis	Enter the <b>queue-instance-accounting</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">queue-instance-accounting</a>
Tree	<a href="#">queue-instance-accounting</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of per-queue instance accounting
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">queue-instance-accounting</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interim-update** *boolean*

Synopsis	Send accounting messages for the queue instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">queue-instance-accounting</a> <a href="#">interim-update</a> <i>boolean</i>
Tree	<a href="#">interim-update</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-server-policy** *reference*

Synopsis	Referenced RADIUS server policy
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Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">radius-server-policy</a> <i>reference</i>
Tree	<a href="#">radius-server-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius server-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### session-accounting

Synopsis	Enter the <b>session-accounting</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">session-accounting</a>
Tree	<a href="#">session-accounting</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### admin-state *keyword*

Synopsis	Administrative state of per-session accounting
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">session-accounting admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### host-update *boolean*

Synopsis	Allow host updates
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">session-accounting host-update</a> <i>boolean</i>
Tree	<a href="#">host-update</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interim-update** *boolean*

Synopsis	Allow interim-update accounting messages to be sent
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">session-accounting interim-update</a> <i>boolean</i>
Tree	<a href="#">interim-update</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-id-format** *keyword*

Synopsis	Format used in accounting session ID attributes
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">session-id-format</a> <i>keyword</i>
Tree	<a href="#">session-id-format</a>
Options	description, number
Default	description
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **triggered-updates**

Synopsis	Enter the <b>triggered-updates</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">triggered-updates</a>
Tree	<a href="#">triggered-updates</a>
Description	Commands in this context configure non-periodic accounting updates that are triggered by specific events.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gtp-change**

Synopsis	Enter the <b>gtp-change</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">triggered-updates gtp-change</a>
Tree	<a href="#">gtp-change</a>

Description	Commands in this context configure which GTP-related changes trigger an interim accounting update.  This command is mutually exclusive with the legacy <b>gtp-mobility</b> command, which triggers interim accounting updates for all changes.
Notes	The following elements are part of a choice: <b>gtp-change</b> or <b>gtp-mobility</b> .
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **s1-release** *boolean*

Synopsis	Send an IU for S1 release (idle) procedure
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">triggered-updates</a> <a href="#">gtp-change</a> <b>s1-release</b> <i>boolean</i>
Tree	<a href="#">s1-release</a>
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **service-request** *boolean*

Synopsis	Send an IU for service request (reactivation) procedure
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">triggered-updates</a> <a href="#">gtp-change</a> <b>service-request</b> <i>boolean</i>
Tree	<a href="#">service-request</a>
Default	false
Introduced	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **teidc-change** *boolean*

Synopsis	Send an IU when GTP-C TEIDs are changed
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-accounting-policy</a> <i>string</i> <a href="#">triggered-updates</a> <a href="#">gtp-change</a> <b>teidc-change</b> <i>boolean</i>
Tree	<a href="#">teidc-change</a>
Description	When configured to <b>true</b> , the router sends an interim accounting update when GTP-C TEIDs are changed. Changes to GTP-C TEIDs typically indicate an MME change.
Default	false

Introduced 23.3.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **teidu-change** *boolean*

Synopsis Send an IU when GTP-U TEIDs are changed  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [triggered-updates](#) [gtp-change](#) [teidu-change](#) *boolean*  
 Tree [teidu-change](#)  
 Description When configured to **true**, the router sends an interim accounting update when GTP-U TEIDs are changed. This update typically happens during mobility, idling, or service request procedures  
 Default false  
 Introduced 23.3.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **uli-change** *boolean*

Synopsis Send an IU when a user location change is detected  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [triggered-updates](#) [gtp-change](#) [uli-change](#) *boolean*  
 Tree [uli-change](#)  
 Default false  
 Introduced 23.3.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-mobility** *boolean*



#### **WARNING:**

This element is deprecated and will be removed in a future release.

Synopsis Send updates for mobility events  
 Context **configure** [subscriber-mgmt](#) [radius-accounting-policy](#) *string* [triggered-updates](#) [gtp-mobility](#) *boolean*  
 Tree [gtp-mobility](#)  
 Default false  
 Notes The following elements are part of a choice: **gtp-change** or **gtp-mobility**.



Introduced	16.0.R5
Deprecated	23.3.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## update-interval

Synopsis	Enter the <b>update-interval</b> context
Context	<b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>update-interval</b>
Tree	<b>update-interval</b>
Description	Commands in this context configure the attributes of the intermediate update interval.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## interval *number*

Synopsis	Intermediate update interval
Context	<b>configure subscriber-mgmt radius-accounting-policy</b> <i>string</i> <b>update-interval</b> <i>interval number</i>
Tree	<b>interval</b>
Description	<p>This command specifies the interval at which accounting data of subscriber hosts is updated in a RADIUS Accounting Interim-Update message. When specifying the accounting mode in the RADIUS accounting policy, the interim-update command for subscriber hosts must be set to true in one of the following context:</p> <ul style="list-style-type: none"> <li>• <b>configure subscriber-mgmt radius-accounting-policy host-accounting</b></li> <li>• <b>configure subscriber-mgmt radius-accounting-policy queue-instance-accounting</b></li> <li>• <b>configure subscriber-mgmt radius-accounting-policy session-accounting</b></li> </ul> <p>A RADIUS-specified interim interval (attribute [85] Acct-Interim-Interval) overrides the CLI configured value.</p>
Range	5 to 259200
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## jitter (*keyword* | *number*)

Synopsis	Maximum random delay for intermediate update interval
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Context	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i> <a href="#">update-interval jitter</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">jitter</a>
Description	This command specifies the absolute maximum random delay introduced on the update interval between two accounting interim update messages. The effective maximum random delay value is the minimum of the configured absolute jitter value and 10% of the configured update-interval.  A value of zero sends the accounting interim update message without introducing an additional random delay.
Range	0 to 3600
Units	seconds
Options	auto
Default	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-authentication-policy** [[name](#)] *string*

Synopsis	Enter the <b>radius-authentication-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i>
Tree	<a href="#">radius-authentication-policy</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	RADIUS authentication policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i>
Tree	<a href="#">radius-authentication-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **fallback**

Synopsis	Enter the <b>fallback</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">fallback</a>
Tree	<a href="#">fallback</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">fallback</a> <a href="#">action</a>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accept**

Synopsis	Automatically accept all authentication requests
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">fallback</a> <a href="#">action</a> <a href="#">accept</a>
Tree	<a href="#">accept</a>
Notes	The following elements are part of a choice: <b>accept</b> or <b>user-db</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-db** *string*

Synopsis	Local user database used to authenticate to the server
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">fallback</a> <a href="#">action</a> <a href="#">user-db</a> <i>string</i>
Tree	<a href="#">user-db</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>accept</b> or <b>user-db</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**force-probing** *boolean*

Synopsis	Enable force probing
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">fallback</a> <a href="#">force-probing</a> <i>boolean</i>
Tree	<a href="#">force-probing</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**include-radius-attribute**

Synopsis	Enter the <b>include-radius-attribute</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a>
Tree	<a href="#">include-radius-attribute</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**access-loop-options** *boolean*

Synopsis	Include access loop information
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">access-loop-options</a> <i>boolean</i>
Tree	<a href="#">access-loop-options</a>
Default	false
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **acct-session-id**

Synopsis Enable the **acct-session-id** context

Context **configure subscriber-mgmt radius-authentication-policy** *string* *include-radius-attribute acct-session-id*

Tree [acct-session-id](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis Format of the accounting session ID attribute

Context **configure subscriber-mgmt radius-authentication-policy** *string* *include-radius-attribute acct-session-id type keyword*

Tree [type](#)

Options host, session

Default host

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **apn** *boolean*

Synopsis Enable/disable include of the APN attribute.

Context **configure subscriber-mgmt radius-authentication-policy** *string* *include-radius-attribute apn boolean*

Tree [apn](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **called-station-id** *boolean*

Synopsis Include called-station-id attribute

Context **configure subscriber-mgmt radius-authentication-policy** *string* *include-radius-attribute called-station-id boolean*

Tree	<a href="#">called-station-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## calling-station-id

Synopsis	Enable the <b>calling-station-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a>
Tree	<a href="#">calling-station-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## type *keyword*

Synopsis	Format of the Calling-Station-ID attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">calling-station-id</a> <i>type</i> <i>keyword</i>
Tree	<a href="#">type</a>
Options	sap-string, mac, sap-id, remote-id, llid
Default	sap-string
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## circuit-id *boolean*

Synopsis	Include circuit-id attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">circuit-id</a> <i>boolean</i>
Tree	<a href="#">circuit-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-options** *boolean*

Synopsis	Generate the DHCP options RADIUS attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute dhcp-options</a> <i>boolean</i>
Tree	<a href="#">dhcp-options</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-vendor-class-id** *boolean*

Synopsis	Include the RADIUS Alc-DHCP-Vendor-Class-Id VSA
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute dhcp-vendor-class-id</a> <i>boolean</i>
Tree	<a href="#">dhcp-vendor-class-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp6-options** *boolean*

Synopsis	Generate the DHCPv6 options RADIUS attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute dhcp6-options</a> <i>boolean</i>
Tree	<a href="#">dhcp6-options</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gprs-negotiated-qos-profile** *boolean*

Synopsis	Generate GPRS negotiated QoS profile RADIUS attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute gprs-negotiated-qos-profile</a> <i>boolean</i>
Tree	<a href="#">gprs-negotiated-qos-profile</a>
Default	false

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **imei** *boolean*

Synopsis Enable/disable include of the IMEI attribute.  
Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **imei** *boolean*  
Tree **imei**  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **imsi** *boolean*

Synopsis Include the IMSI attribute for FWA sessions  
Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **imsi** *boolean*  
Tree **imsi**  
Default false  
Introduced 22.2.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-address** *boolean*

Synopsis Include the client MAC address in the RADIUS message  
Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **include-radius-attribute** **mac-address** *boolean*  
Tree **mac-address**  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **msisdn** *boolean*

Synopsis Enable/disable include of the MSISDN attribute.



Context	<b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute msisdn</b> <i>boolean</i>
Tree	<b>msisdn</b>
Default	false
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **nas-identifier** *boolean*

Synopsis	Enable/disable include of the NAS-Identifier attribute.
Context	<b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute nas-identifier</b> <i>boolean</i>
Tree	<b>nas-identifier</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **nas-port**

Synopsis	Enable the <b>nas-port</b> context
Context	<b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute nas-port</b>
Tree	<b>nas-port</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **bit-spec** *string*

Synopsis	RADIUS NAS-Port attribute
Context	<b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute nas-port bit-spec</b> <i>string</i>
Tree	<b>bit-spec</b>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## nas-port-id

Synopsis	Enable the <b>nas-port-id</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a>
Tree	<a href="#">nas-port-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## prefix-string *string*

Synopsis	String to be prefixed to the NAS-Port-Id attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a> <a href="#">prefix-string</a> <i>string</i>
Tree	<a href="#">prefix-string</a>
String Length	1 to 8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## suffix *keyword*

Synopsis	String to be suffixed to the NAS-Port-Id attribute
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-id</a> <a href="#">suffix</a> <i>keyword</i>
Tree	<a href="#">suffix</a>
Options	circuit-id, remote-id
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## nas-port-type

Synopsis	Enable the <b>nas-port-type</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">include-radius-attribute</a> <a href="#">nas-port-type</a>
Tree	<a href="#">nas-port-type</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **type** (*keyword* | *number*)

Synopsis Value for RADIUS NAS-Port-Type attribute

Context **configure** [subscriber-mgmt radius-authentication-policy](#) *string* [include-radius-attribute nas-port-type](#) *type* (*keyword* | *number*)

Tree [type](#)

Range 0 to 255

Options rfc-aligned

Default rfc-aligned

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe-service-name** *boolean*

Synopsis Generate the pppoe-service-name RADIUS attribute

Context **configure** [subscriber-mgmt radius-authentication-policy](#) *string* [include-radius-attribute pppoe-service-name](#) *boolean*

Tree [pppoe-service-name](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rat-type** *boolean*

Synopsis Generate the RAT type RADIUS attribute

Context **configure** [subscriber-mgmt radius-authentication-policy](#) *string* [include-radius-attribute rat-type](#) *boolean*

Tree [rat-type](#)

Default false

Introduced 16.0.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**remote-id** *boolean*

Synopsis	Include remote-id attribute
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>remote-id</b> <i>boolean</i>
Tree	<a href="#">remote-id</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-session-index** *boolean*

Synopsis	Generate the per-SAP unique session index
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>sap-session-index</b> <i>boolean</i>
Tree	<a href="#">sap-session-index</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**tunnel-server-attrs** *boolean*

Synopsis	Enable/disable include of tunnel-server attributes.
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>tunnel-server-attrs</b> <i>boolean</i>
Tree	<a href="#">tunnel-server-attrs</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**uli** *boolean*

Synopsis	Generate the ULI RADIUS attribute
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>radius-authentication-policy</b> <i>string</i> <b>include-radius-attribute</b> <b>uli</b> <i>boolean</i>
Tree	<a href="#">uli</a>
Default	false

Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wifi-num-attached-ues** *boolean*

Synopsis Include the RADIUS Alc-Num-Attached-UEs VSA  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [wifi-num-attached-ues](#) *boolean*  
Tree [wifi-num-attached-ues](#)  
Default false  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wifi-ssid-vlan** *boolean*

Synopsis Include per-SSID VLAN ID in the Alc-Wlan-SSID-VLAN VSA  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [wifi-ssid-vlan](#) *boolean*  
Tree [wifi-ssid-vlan](#)  
Default false  
Introduced 16.0.R1  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **xconnect-tunnel-home-address** *boolean*

Synopsis Include the Alc-Xconnect-Tunnel-Home-Ipv6 attribute  
Context **configure** [subscriber-mgmt](#) [radius-authentication-policy](#) *string* [include-radius-attribute](#) [xconnect-tunnel-home-address](#) *boolean*  
Tree [xconnect-tunnel-home-address](#)  
Default false  
Introduced 16.0.R5  
Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **password** *string*

Synopsis RADIUS request password

Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### ppp-user-name

Synopsis	Enter the <b>ppp-user-name</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">ppp-user-name</a>
Tree	<a href="#">ppp-user-name</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### domain-name *string*

Synopsis	Domain name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">ppp-user-name</a> <a href="#">domain-name</a> <i>string</i>
Tree	<a href="#">domain-name</a>
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### domain-operation *keyword*

Synopsis	Operation to perform on the PAP or CHAP username
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">ppp-user-name</a> <a href="#">domain-operation</a> <i>keyword</i>
Tree	<a href="#">domain-operation</a>
Description	This command specifies the operation to perform on the PAP or CHAP username. When unconfigured, there is no operation and the PAP or CHAP username is not changed.
Options	append, strip, replace, default
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe-access-method** *keyword*

Synopsis	PPPoE access method
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">pppoe-access-method</a> <i>keyword</i>
Tree	<a href="#">pppoe-access-method</a>
Options	none, padi, pap-chap
Default	padi
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-server-policy** *reference*

Synopsis	Referenced RADIUS server policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">radius-server-policy</a> <i>reference</i>
Tree	<a href="#">radius-server-policy</a>
Reference	<b>configure</b> <a href="#">aaa</a> <a href="#">radius</a> <a href="#">server-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**re-authentication** *boolean*

Synopsis	Enable re-authentication on IPOE renewal
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">re-authentication</a> <i>boolean</i>
Tree	<a href="#">re-authentication</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**send-acct-stop-on-fail**

Synopsis	Enter the <b>send-acct-stop-on-fail</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">send-acct-stop-on-fail</a>
Tree	<a href="#">send-acct-stop-on-fail</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **on-accept-failure** *boolean*

Synopsis Send an accounting stop message when a failure occurs

Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **send-acct-stop-on-fail on-accept-failure** *boolean*

Tree [on-accept-failure](#)

Description When configured to **true**, the system sends an accounting stop message when a failure occurs after the reception of a RADIUS Access-Accept message (such as a duplicate IP address).

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **on-reject** *boolean*

Synopsis Send an accounting stop message for Access-Reject

Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **send-acct-stop-on-fail on-reject** *boolean*

Tree [on-reject](#)

Description When configured to **true**, the system sends an accounting stop message when an Access-Reject message is received.

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **on-request-failure** *boolean*

Synopsis Send an accounting stop message for failures

Context **configure** **subscriber-mgmt** **radius-authentication-policy** *string* **send-acct-stop-on-fail on-request-failure** *boolean*

Tree [on-request-failure](#)

Description When configured to **true**, the system sends an accounting stop message when a RADIUS Access-Request message cannot be sent (for example, there is no server configured, or timeout).

Default false



Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**user-name**

Synopsis	Enter the <b>user-name</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a>
Tree	<a href="#">user-name</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**domain-name** *string*

Synopsis	Domain name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">domain-name</a> <i>string</i>
Tree	<a href="#">domain-name</a>
String Length	1 to 128
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**domain-operation** *keyword*

Synopsis	Operation to perform on the username
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">radius-authentication-policy</a> <i>string</i> <a href="#">user-name</a> <a href="#">domain-operation</a> <i>keyword</i>
Tree	<a href="#">domain-operation</a>
Description	This command specifies the operation to perform on the username. When unconfigured, there is no operation and the username is not changed.
Options	append, strip, replace, default
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**format** *keyword*

Synopsis	User name format in the RADIUS message
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Context	<b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <i>user-name</i> <i>format</i> <i>keyword</i>
Tree	<a href="#">format</a>
Options	mac, circuit-id, tuple, ascii-converted-circuit-id, ascii-converted-tuple, dhcp-client-vendor-opts, mac-giaddr, ppp-user-name
Default	mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gtp-format** *keyword*

Synopsis	Username format used for FWA sessions
Context	<b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <i>user-name</i> <a href="#">gtp-format</a> <i>keyword</i>
Tree	<a href="#">gtp-format</a>
Description	This command specifies the username format to use for FWA sessions. If a PAP message is present in the PCO IE of the Create Session request, the system uses that for authentication instead of the format specified for this command. If you specify a format that includes APN, the separator is an @ character; for example, msisdn@apn.
Options	imsi, imsi-apn, msisdn, msisdn-apn
Default	imsi
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac-format** *string*

Synopsis	MAC address format when contacting a RADIUS server
Context	<b>configure subscriber-mgmt radius-authentication-policy</b> <i>string</i> <i>user-name</i> <a href="#">mac-format</a> <i>string</i>
Tree	<a href="#">mac-format</a>
String Length	2 to 7
Default	aa:
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rip-policy** [*name*] *string*

Synopsis	Enter the <b>rip-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt rip-policy</a> <i>string</i>
Tree	<a href="#">rip-policy</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	RIP policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt rip-policy</a> <i>string</i>
Tree	<a href="#">rip-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication-key** *string*

Synopsis	Authentication key
Context	<b>configure</b> <a href="#">subscriber-mgmt rip-policy</a> <i>string</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 51
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**authentication-type** *keyword*

Synopsis	Authentication type used between RIP neighbors
Context	<b>configure</b> <a href="#">subscriber-mgmt rip-policy</a> <i>string</i> <a href="#">authentication-type</a> <i>keyword</i>
Tree	<a href="#">authentication-type</a>
Options	password, message-digest, message-digest-20
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [subscriber-mgmt rip-policy](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-advertisement-policy** [[name](#)] *string*

Synopsis Enter the **router-advertisement-policy** list instance  
 Context **configure** [subscriber-mgmt router-advertisement-policy](#) *string*  
 Tree [router-advertisement-policy](#)  
 Max. Instances 16  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis Router advertisement policy name  
 Context **configure** [subscriber-mgmt router-advertisement-policy](#) *string*  
 Tree [router-advertisement-policy](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **force-mcast** *keyword*

Synopsis Protocol with forced multicast  
 Context **configure** [subscriber-mgmt router-advertisement-policy](#) *string* [force-mcast](#) *keyword*

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Tree	<a href="#">force-mcast</a>
Options	ip, ip-mac
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **max-advertisement-interval** *number*

Synopsis	Maximum advertisement interval
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">max-advertisement-interval</a> <i>number</i>
Tree	<a href="#">max-advertisement-interval</a>
Range	900 to 1800
Units	seconds
Default	1800
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **min-advertisement-interval** *number*

Synopsis	Minimum advertisement interval
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">min-advertisement-interval</a> <i>number</i>
Tree	<a href="#">min-advertisement-interval</a>
Range	900 to 1350
Units	seconds
Default	900
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a>
Tree	<a href="#">options</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **current-hop-limit** *number*

Synopsis Hop limit to be advertised

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [options](#) [current-hop-limit](#) *number*

Tree [current-hop-limit](#)

Range 0 to 255

Default 64

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dns**

Synopsis Enter the **dns** context

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [options](#) [dns](#)

Tree [dns](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **include-rdnss** *boolean*

Synopsis Include the RDNSS server option 25

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [options](#) [dns](#) [include-rdnss](#) *boolean*

Tree [include-rdnss](#)

Default false

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rdnss-lifetime** (*number* | *keyword*)

Synopsis Maximum time for the RDNSS address to remain valid

Context **configure** [subscriber-mgmt](#) [router-advertisement-policy](#) *string* [options](#) [dns](#) [rdnss-lifetime](#) (*number* | *keyword*)

Tree	<a href="#">rdnss-lifetime</a>
Range	900 to 3600
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **managed-configuration** *boolean*

Synopsis	Managed address configuration flag
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">managed-configuration</a> <i>boolean</i>
Tree	<a href="#">managed-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mtu** (*number* | *keyword*)

Synopsis	Advertised MTU value
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">mtu</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mtu</a>
Range	1280 to 9212
Units	bytes
Options	not-included
Default	not-included
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **other-stateful-configuration** *boolean*

Synopsis	Other stateful configuration flag
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">other-stateful-configuration</a> <i>boolean</i>

Tree	<a href="#">other-stateful-configuration</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **reachable-time** *number*

Synopsis	Reachable time for advertisements
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">reachable-time</a> <i>number</i>
Tree	<a href="#">reachable-time</a>
Range	0 to 3600000
Units	milliseconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retransmit-timer** *number*

Synopsis	Retransmit time in router advertisements from interface
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">retransmit-timer</a> <i>number</i>
Tree	<a href="#">retransmit-timer</a>
Range	0 to 1800000
Units	seconds
Default	0
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-lifetime** (*number* | *keyword*)

Synopsis	Router lifetime
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">options</a> <a href="#">router-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">router-lifetime</a>
Range	2700 to 9000



Units	seconds
Options	no-default-router
Default	4500
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### prefix-options

Synopsis	Enter the <b>prefix-options</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a>
Tree	<a href="#">prefix-options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### stateful

Synopsis	Enter the <b>stateful</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateful</a>
Tree	<a href="#">stateful</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### auto-lifetimes *boolean*

Synopsis	Use automatic lifetimes for stateful prefixes
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateful</a> <a href="#">auto-lifetimes</a> <i>boolean</i>
Tree	<a href="#">auto-lifetimes</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### on-link *boolean*

Synopsis	Assign the prefix to an interface on the specified link
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateful</a> <a href="#">on-link</a> <i>boolean</i>
Tree	<a href="#">on-link</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preferred-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain preferred
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateful</a> <a href="#">preferred-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **valid-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateful</a> <a href="#">valid-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **stateless**

Synopsis	Enter the <b>stateless</b> context
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateless</a>
Tree	<a href="#">stateless</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**on-link** *boolean*

Synopsis	Assign the prefix to an interface on the specified link
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateless</a> <a href="#">on-link</a> <i>boolean</i>
Tree	<a href="#">on-link</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**preferred-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain preferred
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateless</a> <a href="#">preferred-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">preferred-lifetime</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	3600
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**valid-lifetime** (*number* | *keyword*)

Synopsis	Time for a prefix to remain valid
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">router-advertisement-policy</a> <i>string</i> <a href="#">prefix-options</a> <a href="#">stateless</a> <a href="#">valid-lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">valid-lifetime</a>
Range	0 to 4294967294
Units	seconds

Options	infinite
Default	86400
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sap-template** [*name*] *string*

Synopsis	Enter the <b>sap-template</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sap-template</a> <i>string</i>
Tree	<a href="#">sap-template</a>
Description	Commands in this context configure a template for automatically-generated subscriber SAPs that is used when creating CUPS sessions. A template with name "default" is used when no other instance is created, however, the "default" template must be explicitly provisioned.
Max. Instances	256
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	SAP template name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sap-template</a> <i>string</i>
Tree	<a href="#">sap-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sap-template</a> <i>string</i> <a href="#">cpu-protection</a>
Tree	<a href="#">cpu-protection</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## ip-src-monitoring

Synopsis	Apply CPU protection policy on IP sources
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sap-template</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a>
Tree	<a href="#">ip-src-monitoring</a>
Notes	The following elements are part of a choice: <b>ip-src-monitoring</b> or <b>mac-monitoring</b> .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## mac-monitoring

Synopsis	Apply CPU protection policy on MAC sources
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sap-template</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">mac-monitoring</a>
Tree	<a href="#">mac-monitoring</a>
Notes	The following elements are part of a choice: <b>ip-src-monitoring</b> or <b>mac-monitoring</b> .
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## policy-id *reference*

Synopsis	CPU protection policy ID
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sap-template</a> <i>string</i> <a href="#">cpu-protection</a> <a href="#">policy-id</a> <i>reference</i>
Tree	<a href="#">policy-id</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">policy</a> <i>number</i>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sap-template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**dist-cpu-protection** *reference*

Synopsis	Distributed CPU protection policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt sap-template</a> <i>string</i> <b>dist-cpu-protection</b> <i>reference</i>
Tree	<a href="#">dist-cpu-protection</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">dist-cpu-protection</a> <i>policy</i> <i>string</i>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hold-time** (*number* | *keyword*)

Synopsis	Time to hold a SAP after last PFCP session is removed
Context	<b>configure</b> <a href="#">subscriber-mgmt sap-template</a> <i>string</i> <b>hold-time</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">hold-time</a>
Description	This command configures the time for which an SAP will be kept after the last session has been removed. Idle SAPs can be forcefully removed by the command <b>clear subscriber-mgmt sap-template template-name idle-saps</b> .
Range	0   30 to 2592000
Units	seconds
Options	infinite
Default	30
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**shcv-policy** [[name](#)] *string*

Synopsis	Enter the <b>shcv-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i>
Tree	<a href="#">shcv-policy</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[name]** *string*

Synopsis	SHCV policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i>
Tree	<a href="#">shcv-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**layer-3**

Synopsis	Enter the <b>layer-3</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <b>layer-3</b>
Tree	<a href="#">layer-3</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**source-ip-origin** *keyword*

Synopsis	Source IP address to be used for SHCV messages
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">layer-3</a> <b>source-ip-origin</b> <i>keyword</i>
Tree	<a href="#">source-ip-origin</a>
Options	interface – IP address of the interface vrrp – Primary IP address of the VRRP
Default	interface
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **unnumbered-source-ip** *string*

Synopsis Source IPv4 address for unnumbered subscriber hosts

Context **configure** [subscriber-mgmt shcv-policy string layer-3 unnumbered-source-ip string](#)

Tree [unnumbered-source-ip](#)

Description This command configures the source IPv4 address (also known as the sender IP address) used in SHCV ARP requests for unnumbered hosts. When unconfigured, 0.0.0.0 is used as the source IPv4 address in SHCV ARP requests.

Introduced 21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **periodic**

Synopsis Enter the **periodic** context

Context **configure** [subscriber-mgmt shcv-policy string periodic](#)

Tree [periodic](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis Action when periodic connectivity verification fails

Context **configure** [subscriber-mgmt shcv-policy string periodic action keyword](#)

Tree [action](#)

Options alarm, remove

Default alarm

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis Administrative state of periodic connectivity check

Context **configure** [subscriber-mgmt shcv-policy string periodic admin-state keyword](#)

Tree [admin-state](#)



Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **interval** *number*

Synopsis	Time interval which all known sources are verified
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>shcv-policy</b> <i>string</i> <b>periodic</b> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Description	This command specifies the time interval which all known sources are verified. The actual rate is dependent on the number of known hosts and intervals.
Range	1 to 6000
Units	minutes
Default	30
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retry-count** *number*

Synopsis	Number of retransmissions in connectivity verification
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>shcv-policy</b> <i>string</i> <b>periodic</b> <b>retry-count</b> <i>number</i>
Tree	<b>retry-count</b>
Range	1 to 29
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Timeout before connectivity verification retransmitted
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>shcv-policy</b> <i>string</i> <b>periodic</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	1 to 60
Units	seconds

Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## trigger

Synopsis	Enter the <b>trigger</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <b>trigger</b>
Tree	<a href="#">trigger</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-limit-exceeded

Synopsis	Enter the <b>host-limit-exceeded</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger</a> <b>host-limit-exceeded</b>
Tree	<a href="#">host-limit-exceeded</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of trigger for host-limit exceeded
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger</a> <b>host-limit-exceeded</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## retry-count *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger</a> <b>host-limit-exceeded</b> <b>retry-count</b> <i>number</i>

Tree	<a href="#">retry-count</a>
Range	1 to 29
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Timeout before a retransmission
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger host-limit-exceeded</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **inactivity**

Synopsis	Enter the <b>inactivity</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger inactivity</a>
Tree	<a href="#">inactivity</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of the trigger for inactive hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger inactivity</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retry-count** *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger inactivity</a> <a href="#">retry-count</a> <i>number</i>
Tree	<a href="#">retry-count</a>
Range	1 to 29
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout** *number*

Synopsis	Timeout before a retransmission
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger inactivity</a> <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ip-conflict**

Synopsis	Enter the <b>ip-conflict</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger ip-conflict</a>
Tree	<a href="#">ip-conflict</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of the trigger for IP conflict
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger ip-conflict</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

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Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **retry-count** *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	<b>configure</b> <b>subscriber-mgmt shcv-policy</b> <i>string</i> <b>trigger ip-conflict</b> <b>retry-count</b> <i>number</i>
Tree	<b>retry-count</b>
Range	1 to 29
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Timeout before a retransmission
Context	<b>configure</b> <b>subscriber-mgmt shcv-policy</b> <i>string</i> <b>trigger ip-conflict</b> <b>timeout</b> <i>number</i>
Tree	<b>timeout</b>
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **mac-learning**

Synopsis	Enter the <b>mac-learning</b> context
Context	<b>configure</b> <b>subscriber-mgmt shcv-policy</b> <i>string</i> <b>trigger</b> <b>mac-learning</b>
Tree	<b>mac-learning</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of trigger for MAC learning
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger mac-learning admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retry-count** *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger mac-learning retry-count</a> <i>number</i>
Tree	<a href="#">retry-count</a>
Range	1 to 29
Default	2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout** *number*

Synopsis	Timeout before a retransmission
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger mac-learning timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mobility**

Synopsis	Enter the <b>mobility</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy</a> <i>string</i> <a href="#">trigger mobility</a>
Tree	<a href="#">mobility</a>

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Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of trigger for SAP IP/MAC conflict
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">trigger</a> <a href="#">mobility</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retry-count** *number*

Synopsis	Number of retransmissions in periodic connectivity test
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">trigger</a> <a href="#">mobility</a> <b>retry-count</b> <i>number</i>
Tree	<a href="#">retry-count</a>
Range	1 to 29
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout** *number*

Synopsis	Timeout before a retransmission
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">shcv-policy</a> <i>string</i> <a href="#">trigger</a> <a href="#">mobility</a> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vpls**

Synopsis	Enter the <b>vpls</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy string vpls</a>
Tree	<a href="#">vpls</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**source-ip** *string*

Synopsis	Source IPv4 address for connectivity verification
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy string vpls source-ip string</a>
Tree	<a href="#">source-ip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**source-mac** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source MAC address for connectivity verification
Context	<b>configure</b> <a href="#">subscriber-mgmt shcv-policy string vpls source-mac string</a>
Tree	<a href="#">source-mac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** [[name](#)] *string*

Synopsis	Enter the <b>sla-profile</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile string</a>
Tree	<a href="#">sla-profile</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**[name]** *string*

Synopsis	SLA profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Tree	<a href="#">sla-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**control**

Synopsis	Enter the <b>control</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <b>control</b>
Tree	<a href="#">control</a>
Description	Commands in this context determine which sessions can use the SLA profile. By default, only sessions set up by the local system can use the SLA profile, but the SLA profile can also be enabled for sessions set up by a BNG CUPS Control Plane Function (CPF).
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cups** *boolean*

Synopsis	Allow the CUPS control plane to use the profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">control</a> <b>cups</b> <i>boolean</i>
Tree	<a href="#">cups</a>
Description	When configured to <b>true</b> , the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF).
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local** *boolean*

Synopsis	Allow the local control plane to use the profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">control</a> <b>local</b> <i>boolean</i>

Tree	<a href="#">local</a>
Description	When configured to <b>true</b> , the profile can be used by sessions set up by the local system.
Default	true
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **credit-control-policy** *reference*

Synopsis	Credit policy for this SLA profile
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">credit-control-policy</a> <i>reference</i>
Tree	<a href="#">credit-control-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">credit-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **def-instance-sharing** *keyword*

Synopsis	Default SPI sharing method for IPoE or PPPoE sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">def-instance-sharing</a> <i>keyword</i>
Tree	<a href="#">def-instance-sharing</a>
Options	per-sap, per-session
Default	per-sap
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## egress

Synopsis	Enter the <b>egress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress</a>
Tree	<a href="#">egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## bonding-selection

Synopsis	Enter the <b>bonding-selection</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">bonding-selection</a>
Tree	<a href="#">bonding-selection</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## rate-thresholds

Synopsis	Enter the <b>rate-thresholds</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">bonding-selection</a> <a href="#">rate-thresholds</a>
Tree	<a href="#">rate-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## high *number*

Synopsis	High threshold rate percentage
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">bonding-selection</a> <a href="#">rate-thresholds</a> <a href="#">high</a> <i>number</i>
Tree	<a href="#">high</a>
Range	56 to 99
Units	percent
Default	90
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **low number**

Synopsis	Low threshold rate percentage
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection rate-thresholds</a> <a href="#">low number</a>
Tree	<a href="#">low</a>
Range	55 to 98
Units	percent
Default	80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **weight**

Synopsis	Enter the <b>weight</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection weight</a>
Tree	<a href="#">weight</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **change number**

Synopsis	Weight change of the preferred connection
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection weight change</a> <a href="#">number</a>
Tree	<a href="#">change</a>
Range	0 to 10
Units	percent
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **initial number**

Synopsis	Initial weight of the preferred connection
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress bonding-selection weight initial</a> <a href="#">number</a>

Tree	<a href="#">initial</a>
Range	1 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-filter** *reference*

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress ip-filter</a> <i>reference</i>
Tree	<a href="#">ip-filter</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipv6-filter** *reference*

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress ipv6-filter</a> <i>reference</i>
Tree	<a href="#">ipv6-filter</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hs-agg-rate** *number*

Synopsis	Maximum rate for expanded egress HS queues
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos hs-agg-rate</a> <i>number</i>
Tree	<a href="#">hs-agg-rate</a>
Range	1 to 100000000
Units	kilobps
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**qos-marking-from-sap** *boolean*

Synopsis	Set policy where egress QoS marking rules are applied
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos qos-marking-from-sap</a> <i>boolean</i>
Tree	<a href="#">qos-marking-from-sap</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sap-egress**

Synopsis	Enter the <b>sap-egress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress</a>
Tree	<a href="#">sap-egress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hs-queue-stat-mode** *keyword*

Synopsis	Egress HS queue stats mode
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> overrides <a href="#">hs-queue-stat-mode</a> <i>keyword</i>
Tree	<a href="#">hs-queue-stat-mode</a>
Options	v4-v6
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-wrr-group** [*id*] *reference*

Synopsis	Enter the <b>hs-wrr-group</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> overrides <a href="#">hs-wrr-group</a> <i>reference</i>
Tree	<a href="#">hs-wrr-group</a>
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**[id]** *reference*

Synopsis	HS WRR group ID to override in the QoS policy table
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> overrides <a href="#">hs-wrr-group</a> <i>reference</i>
Tree	<a href="#">hs-wrr-group</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-egress</a> <i>string</i> <a href="#">hs-wrr-group</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-class-weight** *number*

Synopsis	Class weight override for WRR group
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> overrides <a href="#">hs-wrr-group</a> <i>reference</i> <a href="#">hs-class-weight</a> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8

Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **rate** (*number* | *keyword*)

Synopsis PIR rate override for WRR group  
 Context **configure** *subscriber-mgmt sla-profile string egress qos sap-egress overrides hs-wrr-group reference rate* (*number* | *keyword*)  
 Tree [rate](#)  
 Range 1 to 2000000000  
 Units kilobps  
 Options max  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **policer** [*id*] *reference*

Synopsis Enter the **policer** list instance  
 Context **configure** *subscriber-mgmt sla-profile string egress qos sap-egress overrides policer reference*  
 Tree [policer](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *reference*

Synopsis Policer ID  
 Context **configure** *subscriber-mgmt sla-profile string egress qos sap-egress overrides policer reference*  
 Tree [policer](#)  
 Reference **configure** *qos sap-egress string policer number*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packet-byte-offset** *number*

Synopsis	Packet byte offset
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <i>reference</i> <a href="#">packet-byte-offset</a> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-64 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate**

Synopsis	Enter the <b>rate</b> context
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Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <a href="#">reference rate</a>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR override for the packet byte offset
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <a href="#">reference rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR override for the packet byte offset
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <a href="#">reference rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**stat-mode** *keyword*

Synopsis	Stat mode for the policer
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides policer</a> <a href="#">reference</a> <a href="#">stat-mode</a> <i>keyword</i>
Tree	<a href="#">stat-mode</a>

Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-profile-cir, offered-limited-capped-cir, offered-profile-capped-cir, v4-v6, offered-total-cir-exceed, offered-four-profile-no-cir, offered-total-cir-four-profile
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **queue** [*id*] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *reference*

Synopsis	Queue ID
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i> <a href="#">queue number</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **avg-frame-overhead** *decimal-number*

Synopsis	Average frame overhead
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">avg-frame-overhead</a> <i>decimal-number</i>
Tree	<a href="#">avg-frame-overhead</a>
Range	0.00 to 100.00
Units	percent
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**high-prio-only** (*number* | *keyword*)

Synopsis	High priority burst size
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">high-prio-only</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">high-prio-only</a>
Range	0 to 100
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**hs-class-weight** *number*

Synopsis	Class-weight override for expanded egress HS queues
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">hs-class-weight</a> <i>number</i>
Tree	<a href="#">hs-class-weight</a>
Range	1   2   4   8
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**hs-wred-queue**

Synopsis	Enter the <b>hs-wred-queue</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">hs-wred-queue</a>
Tree	<a href="#">hs-wred-queue</a>
Introduced	16.0.R4
Platforms	7750 SR-7/12/12e

**policy reference**

Synopsis	Name of the slope-policy override applied to HS queue
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">hs-wred-queue</a> <a href="#">policy</a> <i>reference</i>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">slope-policy</a> <i>string</i>
Introduced	16.0.R4
Platforms	7750 SR-7/12/12e

**hs-wrr-weight** *number*

Synopsis	Maximum rate for expanded egress HS queues
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">hs-wrr-weight</a> <i>number</i>
Tree	<a href="#">hs-wrr-weight</a>
Range	1 to 127
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">sap-egress</a> <a href="#">overrides</a> <a href="#">queue</a> <i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 1073741824
Units	bytes

Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <b>rate</b>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <b>rate cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <b>rate pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**stat-mode** *keyword*

Synopsis	Stat mode for the policer
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress overrides queue reference</a> <a href="#">stat-mode</a> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	SAP-egress QoS policy
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-egress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**port-parent-location** *keyword*

Synopsis	Scheduling type for queued traffic
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos sap-egress port-parent-location</a> <i>keyword</i>
Tree	<a href="#">port-parent-location</a>
Options	port, vport
Default	port
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## overrides

Synopsis Enter the **overrides** context  
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos scheduler-policy overrides](#)  
 Tree [overrides](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## scheduler [[scheduler-name](#)] *reference*

Synopsis Enter the **scheduler** list instance  
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos scheduler-policy overrides](#) [scheduler](#) *reference*  
 Tree [scheduler](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[scheduler-name](#)] *reference*

Synopsis Scheduler policy name  
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos scheduler-policy overrides](#) [scheduler](#) *reference*  
 Tree [scheduler](#)  
 Reference **configure** [qos scheduler-policy](#) *string* [tier number scheduler](#) *string*  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rate

Synopsis Enter the **rate** context  
 Context **configure** [subscriber-mgmt sla-profile](#) *string* [egress qos scheduler-policy overrides](#) [scheduler](#) *reference* [rate](#)



Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cir** (*number* | *keyword*)

Synopsis	Administrative CIR
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">reference</a> <a href="#">rate</a> <a href="#">cir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	sum
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	Administrative PIR
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">reference</a> <a href="#">rate</a> <a href="#">pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <a href="#">reference</a>
Tree	<a href="#">policy-name</a>

Reference	<b>configure qos scheduler-policy</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-ingress-l2tp-dscp** *boolean*

Synopsis	Use outer L2TP header for LAC sessions
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>egress qos use-ingress-l2tp-dscp</b> <i>boolean</i>
Tree	<a href="#">use-ingress-l2tp-dscp</a>
Description	When configured to <b>true</b> , egress classification is based on the outer L2TP header DSCP instead of the inner IP header for LAC sessions. This command is ignored for non-LAC sessions.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **report-rate**

Synopsis	Enter the <b>report-rate</b> context
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>egress report-rate</b>
Tree	<a href="#">report-rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **agg-rate**

Synopsis	Report the aggregate rate
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>egress report-rate agg-rate</b>
Tree	<a href="#">agg-rate</a>
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policer** *number*

Synopsis	Report the rate of the specified policer
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pppoe-actual-rate**

Synopsis	Report rate from the DSL characteristics PPPoE tags
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">pppoe-actual-rate</a>
Tree	<a href="#">pppoe-actual-rate</a>
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **rfc5515-actual-rate**

Synopsis	Report the rate as specified in RFC 5515
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">rfc5515-actual-rate</a>
Tree	<a href="#">rfc5515-actual-rate</a>
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis	Report the rate of the specified scheduler
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">egress report-rate</a> <a href="#">scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>

String Length	1 to 32
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## host-limits

Synopsis	Enter the <b>host-limits</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">host-limits</a>
Tree	<a href="#">host-limits</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">host-limits</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## arp *number*

Synopsis	Maximum number of IPv4 ARP hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">host-limits</a> <a href="#">ipv4</a> <a href="#">arp</a> <i>number</i>
Tree	<a href="#">arp</a>
Description	This command configures the maximum number of IPv4 ARP hosts per SLA profile instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp number**

Synopsis	Maximum number of IPv4 DHCP hosts
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv4 dhcp number</b>
Tree	<b>dhcp</b>
Description	This command configures the maximum number of IPv4 DHCP hosts per SLA profile instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overall number**

Synopsis	Maximum number of IPv4 hosts
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv4 overall number</b>
Tree	<b>overall</b>
Description	This command configures the maximum number of IPv4 hosts per SLA profile instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp number**

Synopsis	Maximum number of IPv4 PPP hosts
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv4 ppp number</b>
Tree	<b>ppp</b>
Description	This command configures the maximum number of IPv4 PPP hosts per SLA profile instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv6**

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure subscriber-mgmt sla-profile string host-limits ipv6</b>
Tree	<a href="#">ipv6</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**overall number**

Synopsis	Maximum number of IPv6 hosts
Context	<b>configure subscriber-mgmt sla-profile string host-limits ipv6 overall number</b>
Tree	<a href="#">overall</a>
Description	This command configures the maximum number of IPv6 hosts per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pd-ipoe-dhcp number**

Synopsis	Maximum number of IPv6 IPoE DHCP PD hosts
Context	<b>configure subscriber-mgmt sla-profile string host-limits ipv6 pd-ipoe-dhcp number</b>
Tree	<a href="#">pd-ipoe-dhcp</a>
Description	This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pd-overall number**

Synopsis	Maximum number of IPv6 DHCP PD hosts
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Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 pd-overall</b> <i>number</i>
Tree	<a href="#">pd-overall</a>
Description	The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pd-ppp-dhcp** *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP PD hosts
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 pd-ppp-dhcp</b> <i>number</i>
Tree	<a href="#">pd-ppp-dhcp</a>
Description	This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ipoe-dhcp** *number*

Synopsis	Maximum number of IPv6 IPoE DHCP WAN hosts
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 wan-ipoe-dhcp</b> <i>number</i>
Tree	<a href="#">wan-ipoe-dhcp</a>
Description	This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per SLA profile instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ipoe-slaac** *number*

Synopsis	Maximum number of IPv6 IPoE SLAAC WAN hosts
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 wan-ipoe-slaac</b> <i>number</i>
Tree	<a href="#">wan-ipoe-slaac</a>
Description	This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per SLA profile instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-overall** *number*

Synopsis	Maximum number of IPv6 WAN hosts
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 wan-overall</b> <i>number</i>
Tree	<a href="#">wan-overall</a>
Description	This command configures the maximum number of IPv6 WAN hosts per SLA profile instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ppp-dhcp** *number*

Synopsis	Maximum number IPv6 PPPoE DHCP WAN hosts
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>host-limits ipv6 wan-ppp-dhcp</b> <i>number</i>
Tree	<a href="#">wan-ppp-dhcp</a>
Description	This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts (IA-NA) per SLA profile instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	16.0.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ppp-slaac** *number*

Synopsis Maximum number of IPv6 PPPoE SLAAC WAN hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits ipv6 wan-ppp-slaac** *number*

Tree [wan-ppp-slaac](#)

Description This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per SLA profile instance.  
The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lac-overall** *number*

Synopsis Maximum number of L2TP LAC hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits lac-overall** *number*

Tree [lac-overall](#)

Description This command configures the maximum number of L2TP LAC hosts per SLA profile instance.  
The operational maximum value may be smaller due to equipped hardware dependencies.

Range 0 to 131071

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overall** *number*

Synopsis Maximum number of subscriber hosts

Context **configure** **subscriber-mgmt sla-profile** *string* **host-limits overall** *number*

Tree [overall](#)

Description This command configures the maximum number of subscriber hosts per SLA profile instance.  
The operational maximum value may be smaller due to equipped hardware dependencies.

Range	1 to 131071
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**remove-oldest** *boolean*

Synopsis	Remove oldest
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">host-limits</a> <b>remove-oldest</b> <i>boolean</i>
Tree	<a href="#">remove-oldest</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**idle-timeout**

Synopsis	Enable the <b>idle-timeout</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <b>idle-timeout</b>
Tree	<a href="#">idle-timeout</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**category** [[category-name](#)] *reference*

Synopsis	Enter the <b>category</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">idle-timeout</a> <b>category</b> <i>reference</i>
Tree	<a href="#">category</a>
Max. Instances	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[category-name]** *reference*

Synopsis	Category name
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">idle-timeout</a> <b>category</b> <i>reference</i>
Tree	<a href="#">category</a>

Description	This command specifies the category name where the queues and policers are defined for the idle-timeout monitoring for subscriber hosts.
Reference	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string category string</i>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **action** *keyword*

Synopsis	Action when the idle-timeout is reached
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string idle-timeout category reference action keyword</i>
Tree	<a href="#">action</a>
Description	This command specifies the action to be executed when the idle-timeout is reached. The action is performed for all hosts associated with the SLA profile instance.
Options	terminate, shcv
Default	terminate
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **timeout** *number*

Synopsis	Time the category can stay below its activity threshold
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string idle-timeout category reference timeout number</i>
Tree	<a href="#">timeout</a>
Range	60 to 15552000
Units	seconds
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **category-map-name** *reference*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Category map name
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">idle-timeout</a> <a href="#">category-map-name</a> <i>reference</i>
Tree	<a href="#">category-map-name</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt category-map</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis	Enter the <b>ingress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress</a>
Tree	<a href="#">ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ip-filter reference

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress ip-filter</a> <i>reference</i>
Tree	<a href="#">ip-filter</a>
Reference	<b>configure</b> <a href="#">filter ip-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6-filter reference

Synopsis	IPv6 filter policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress ipv6-filter</a> <i>reference</i>
Tree	<a href="#">ipv6-filter</a>
Reference	<b>configure</b> <a href="#">filter ipv6-filter</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sap-ingress

Synopsis	Enter the <b>sap-ingress</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress</a>
Tree	<a href="#">sap-ingress</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policer [*id*] *reference*

Synopsis	Enter the <b>policer</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [*id*] *reference*

Synopsis	Policer ID
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Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i>
Tree	<a href="#">policer</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">sap-ingress</a> <i>string</i> <a href="#">policer</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">cbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">sap-ingress</a> <a href="#">overrides</a> <a href="#">policer</a> <i>reference</i> <a href="#">mbs</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs</a>
Range	0 to 268435456
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**packet-byte-offset** *number*

Synopsis	Packet byte offset
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Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b> <i>reference</i> <b>packet-byte-offset</b> <i>number</i>
Tree	<a href="#">packet-byte-offset</a>
Range	-32 to 31
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b> <i>reference</i> <b>rate</b>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR override for the packet byte offset
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b> <i>reference</i> <b>rate cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR override for the packet byte offset
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides policer</b> <i>reference</i> <b>rate pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 2000000000
Units	kilobps

Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **stat-mode** *keyword*

Synopsis	Stat mode for the policer
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides policer</a> <i>reference</i> <b>stat-mode</b> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	no-stats, minimal, offered-profile-no-cir, offered-total-cir, offered-priority-no-cir, offered-profile-cir, offered-priority-cir, offered-limited-profile-cir, offered-profile-capped-cir, offered-limited-capped-cir, v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **queue** [*id*] *reference*

Synopsis	Enter the <b>queue</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[id]** *reference*

Synopsis	Queue ID
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue</a> <i>reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i> <a href="#">queue</a> <i>number</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**cbs** (*number* | *keyword*)

Synopsis	CBS
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>cbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>cbs</b>
Range	0 to 1048576
Units	kilobytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**high-prio-only** (*number* | *keyword*)

Synopsis	High priority burst size
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>high-prio-only</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>high-prio-only</b>
Range	0 to 100
Units	percent
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mbs** (*number* | *keyword*)

Synopsis	MBS
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference</i> <b>mbs</b> ( <i>number</i>   <i>keyword</i> )
Tree	<b>mbs</b>
Range	0 to 1073741824
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference rate</i>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## cir (*number* | *keyword*)

Synopsis	CIR for the queue
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference rate cir (number   keyword)</i>
Tree	<a href="#">cir</a>
Range	0 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pir (*number* | *keyword*)

Synopsis	PIR for the queue
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress qos sap-ingress overrides queue</b> <i>reference rate pir (number   keyword)</i>
Tree	<a href="#">pir</a>
Range	1 to 2000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## stat-mode *keyword*

Synopsis	Stat mode for the policer
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Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress overrides queue reference</a> <a href="#">stat-mode</a> <i>keyword</i>
Tree	<a href="#">stat-mode</a>
Options	v4-v6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis	SAP-ingress QoS policy
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos sap-ingress</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **queuing-type** *keyword*

Synopsis	Queuing type
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress qos sap-ingress queuing-type</a> <i>keyword</i>
Tree	<a href="#">queuing-type</a>
Options	service, shared, multipoint-shared
Default	service
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **report-rate**

Synopsis	Enter the <b>report-rate</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress report-rate</a>
Tree	<a href="#">report-rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## agg-rate

Synopsis	Report the aggregate rate
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress report-rate</a> <a href="#">agg-rate</a>
Tree	<a href="#">agg-rate</a>
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policer *number*

Synopsis	Report the rate of the specified policer
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress report-rate</a> <a href="#">policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pppoe-actual-rate

Synopsis	Report rate from the DSL characteristics PPPoE tags
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress report-rate</a> <a href="#">pppoe-actual-rate</a>
Tree	<a href="#">pppoe-actual-rate</a>
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rfc5515-actual-rate

Synopsis	Report the rate as specified in RFC 5515
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">ingress report-rate</a> <a href="#">rfc5515-actual-rate</a>
Tree	<a href="#">rfc5515-actual-rate</a>

Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis	Report the rate of the specified scheduler
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>ingress report-rate scheduler</b> <i>string</i>
Tree	<b>scheduler</b>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>agg-rate</b> , <b>policer</b> , <b>pppoe-actual-rate</b> , <b>rfc5515-actual-rate</b> , or <b>scheduler</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **one-time-http-redirectation**

Synopsis	Enter the <b>one-time-http-redirectation</b> context
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>one-time-http-redirectation</b>
Tree	<b>one-time-http-redirectation</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ip-filter** *reference*

Synopsis	IPv4 filter policy name
Context	<b>configure</b> <b>subscriber-mgmt sla-profile</b> <i>string</i> <b>one-time-http-redirectation ip-filter</b> <i>reference</i>
Tree	<b>ip-filter</b>
Reference	<b>configure filter ip-filter</b> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pfc-p-mappings**

Synopsis	Enter the <b>pfc-p-mappings</b> context
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Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <a href="#">pfc-mappings</a>
Tree	<a href="#">pfc-mappings</a>
Description	Commands in this context configure the mapping of packet forwarding control protocol (PFCP) QoS IEs (such as QoS enforcement rule (QER) GBR/MBR IEs), to local QoS overrides (such as queue and policer rates).
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### session-qer

Synopsis	Enter the <b>session-qer</b> context
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <a href="#">pfc-mappings</a> <a href="#">session-qer</a>
Tree	<a href="#">session-qer</a>
Description	<p>Commands in this context configure the mapping of the PFCP session QER rate to the local QoS rate.</p> <p>If a signaled PFCP QER rate applies to all data-plane rules, it is interpreted as the session QER rate and is mapped to the QoS overrides in the configuration. Examples of such QER rates are APN-AMBR for 4G FWA sessions and session-AMBR for 5G FWA sessions.</p> <p>A QER that contains a QER correlation ID does not use the QER mapping because it is assumed not to be a per-session construct.</p>
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### downlink

Synopsis	Enter the <b>downlink</b> context
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <a href="#">pfc-mappings</a> <a href="#">session-qer</a> <a href="#">downlink</a>
Tree	<a href="#">downlink</a>
Description	Commands in this context configure the downlink MBR/GBR to QoS override mapping.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### aggregate-rate

Synopsis	Map MBR/GBR to a rate override for the aggregate rate
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Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">downlink aggregate-rate</a>
Tree	<a href="#">aggregate-rate</a>
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **arbiter** *string*

Synopsis	Arbiter target of MBR/GBR override
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">downlink arbiter</a> <i>string</i>
Tree	<a href="#">arbiter</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** *number*

Synopsis	Policer target of MBR/GBR override
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">downlink policer</a> <i>number</i>
Tree	<a href="#">policer</a>
Range	1 to 8
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **queue** *number*

Synopsis	Queue target of MBR/GBR override
Context	<b>configure subscriber-mgmt sla-profile</b> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">downlink queue</a> <i>number</i>

Tree	<a href="#">queue</a>
Range	1 to 8
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis	Scheduler target of MBR/GBR override
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings</a> <a href="#">session-qer</a> <a href="#">downlink scheduler</a> <i>string</i>
Tree	<a href="#">scheduler</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>aggregate-rate</b> , <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **uplink**

Synopsis	Enter the <b>uplink</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings</a> <a href="#">session-qer</a> <a href="#">uplink</a>
Tree	<a href="#">uplink</a>
Description	Commands in this context configure the uplink MBR/GBR to QoS override mapping.
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **arbiter** *string*

Synopsis	Arbiter target of MBR/GBR override
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-mappings</a> <a href="#">session-qer</a> <a href="#">uplink arbiter</a> <i>string</i>
Tree	<a href="#">arbiter</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .



Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policer** *number*

Synopsis	Policer target of MBR/GBR override
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">uplink</a> <a href="#">policer number</a>
Tree	<a href="#">policer</a>
Range	1 to 63
Notes	The following elements are part of a choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **queue** *number*

Synopsis	Queue target of MBR/GBR override
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">uplink</a> <a href="#">queue number</a>
Tree	<a href="#">queue</a>
Range	1 to 32
Notes	The following elements are part of a choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** *string*

Synopsis	Scheduler target of MBR/GBR override
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">pfc-p-mappings</a> <a href="#">session-qer</a> <a href="#">uplink scheduler string</a>
Tree	<a href="#">scheduler</a>
String Length	1 to 32
Notes	The following elements are part of a choice: <b>arbiter</b> , <b>policer</b> , <b>queue</b> , or <b>scheduler</b> .
Introduced	21.10.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## session-limits

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure subscriber-mgmt sla-profile string session-limits</b>
Tree	<a href="#">session-limits</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipoe number

Synopsis	Maximum number of IPoE sessions
Context	<b>configure subscriber-mgmt sla-profile string session-limits ipoe number</b>
Tree	<a href="#">ipoe</a>
Description	This command configures the maximum number of IPoE sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## l2tp

Synopsis	Enter the <b>l2tp</b> context
Context	<b>configure subscriber-mgmt sla-profile string session-limits l2tp</b>
Tree	<a href="#">l2tp</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lns number

Synopsis	Maximum number of L2TP LNS sessions
Context	<b>configure subscriber-mgmt sla-profile string session-limits l2tp lns number</b>
Tree	<a href="#">lns</a>
Description	This command configures the maximum number of L2TP LNS sessions per SLA profile instance.
Range	0 to 131071

Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lts number**

Synopsis	Maximum number of L2TP LTS sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits l2tp lts number</a>
Tree	<a href="#">lts</a>
Description	This command configures the maximum number of L2TP LTS sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**overall number**

Synopsis	Maximum number of L2TP sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits l2tp overall number</a>
Tree	<a href="#">overall</a>
Description	This command configures the maximum number of L2TP sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**overall number**

Synopsis	Maximum number of subscriber sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits overall number</a>
Tree	<a href="#">overall</a>
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pppoe

Synopsis	Enter the <b>pppoe</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits pppoe</a>
Tree	<a href="#">pppoe</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## lac number

Synopsis	Maximum number of PPPoE L2TP LAC sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits pppoe lac number</a>
Tree	<a href="#">lac</a>
Description	This command configures the maximum number of PPPoE L2TP LAC sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local number

Synopsis	Maximum number of PPPoE local terminated sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits pppoe local number</a>
Tree	<a href="#">local</a>
Description	This command configures the maximum number of PPPoE local terminated sessions (PTA) per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## overall number

Synopsis	Maximum number of PPPoE sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sla-profile</a> <i>string</i> <a href="#">session-limits pppoe overall number</a>
Tree	<a href="#">overall</a>

Description	This command configures the maximum number of PPPoE sessions per SLA profile instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **steering-profile** [[name](#)] *string*

Synopsis	Enter the <b>steering-profile</b> list instance
Context	<b>configure subscriber-mgmt steering-profile</b> <i>string</i>
Tree	<a href="#">steering-profile</a>
Max. Instances	32
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Steering profile name
Context	<b>configure subscriber-mgmt steering-profile</b> <i>string</i>
Tree	<a href="#">steering-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure subscriber-mgmt steering-profile</b> <i>string</i> <b>access</b>
Tree	<a href="#">access</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Router instance to be used as an access VAS router
Context	<b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">access</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **network**

Synopsis	Enter the <b>network</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">network</a>
Tree	<a href="#">network</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **next-hop** *string*

Synopsis	Next-hop IP address used for network next-hop
Context	<b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">network</a> <a href="#">next-hop</a> <i>string</i>
Tree	<a href="#">next-hop</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Router instance to be used as an access VAS router
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Context	<b>configure</b> <a href="#">subscriber-mgmt steering-profile</a> <i>string</i> <a href="#">network router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-ident-policy** [[name](#)] *string*

Synopsis	Enter the <b>sub-ident-policy</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i>
Tree	<a href="#">sub-ident-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Subscriber identification policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i>
Tree	<a href="#">sub-ident-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **app-profile-map**

Synopsis	Enter the <b>app-profile-map</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a>
Tree	<a href="#">app-profile-map</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[app-profile-string](#)] *string*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> <b>entry</b> <i>string</i>

Tree	<a href="#">entry</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[app-profile-string]** *string*

Synopsis	Application profile string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> <a href="#">entry</a> <i>string</i>
Tree	<a href="#">entry</a>
String Length	1 to 16
Notes	This element is part of a list key.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **app-profile** *reference*

Synopsis	Application profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> <a href="#">entry</a> <i>string</i> <a href="#">app-profile</a> <i>reference</i>
Tree	<a href="#">app-profile</a>
Reference	<b>configure</b> <a href="#">application-assurance</a> <a href="#">group</a> <i>number</i> <a href="#">partition</a> <i>number</i> <a href="#">policy</a> <a href="#">app-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **use-direct-map-as-default** *boolean*

Synopsis	Enable direct mapping of application profile as default
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">app-profile-map</a> <a href="#">use-direct-map-as-default</a> <i>boolean</i>
Tree	<a href="#">use-direct-map-as-default</a>
Default	false
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**primary**

Synopsis	Enter the <b>primary</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">primary</a>
Tree	<a href="#">primary</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state of script execution
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">primary</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**script-url** *string*

Synopsis	Identification script URL
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">primary</a> <a href="#">script-url</a> <i>string</i>
Tree	<a href="#">script-url</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## secondary

Synopsis	Enter the <b>secondary</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string secondary</a>
Tree	<a href="#">secondary</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis	Administrative state of script execution
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string secondary admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## script-url *string*

Synopsis	Identification script URL
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string secondary script-url string</a>
Tree	<a href="#">script-url</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sla-profile-map

Synopsis	Enter the <b>sla-profile-map</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-ident-policy string sla-profile-map</a>
Tree	<a href="#">sla-profile-map</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**entry** [[sla-profile-string](#)] *string*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sla-profile-map</a> <a href="#">entry</a> <i>string</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[sla-profile-string]** *string*

Synopsis	SLA profile string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sla-profile-map</a> <a href="#">entry</a> <i>string</i>
Tree	<a href="#">entry</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sla-profile** *reference*

Synopsis	SLA profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sla-profile-map</a> <a href="#">entry</a> <i>string</i> <a href="#">sla-profile</a> <i>reference</i>
Tree	<a href="#">sla-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sla-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**use-direct-map-as-default** *boolean*

Synopsis	Allow direct mapping of SLA profile as default
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sla-profile-map</a> <a href="#">use-direct-map-as-default</a> <i>boolean</i>
Tree	<a href="#">use-direct-map-as-default</a>

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **strings-from-option** *number*

Synopsis	IPOE option to get the identification strings
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">strings-from-option</a> <i>number</i>
Tree	<a href="#">strings-from-option</a>
Range	1 to 254
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile-map**

Synopsis	Enter the <b>sub-profile-map</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sub-profile-map</a>
Tree	<a href="#">sub-profile-map</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **entry** [[sub-profile-string](#)] *string*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sub-profile-map</a> <a href="#">entry</a> <i>string</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[sub-profile-string]** *string*

Synopsis	Subscriber identification string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sub-profile-map</a> <a href="#">entry</a> <i>string</i>
Tree	<a href="#">entry</a>
String Length	1 to 32

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile** *reference*

Synopsis	Subscriber profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sub-profile-map</a> <a href="#">entry</a> <i>string</i> <a href="#">sub-profile</a> <i>reference</i>
Tree	<a href="#">sub-profile</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-direct-map-as-default** *boolean*

Synopsis	Allow direct mapping of subscriber profile as default
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">sub-profile-map</a> <a href="#">use-direct-map-as-default</a> <i>boolean</i>
Tree	<a href="#">use-direct-map-as-default</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **tertiary**

Synopsis	Enter the <b>tertiary</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-ident-policy</a> <i>string</i> <a href="#">tertiary</a>
Tree	<a href="#">tertiary</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of script execution
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Context	<b>configure subscriber-mgmt sub-ident-policy</b> <i>string tertiary admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **script-url** *string*

Synopsis	Identification script URL
Context	<b>configure subscriber-mgmt sub-ident-policy</b> <i>string tertiary script-url string</i>
Tree	<a href="#">script-url</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-mcac-policy** [*name*] *string*

Synopsis	Enter the <b>sub-mcac-policy</b> list instance
Context	<b>configure subscriber-mgmt sub-mcac-policy</b> <i>string</i>
Tree	<a href="#">sub-mcac-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **[name]** *string*

Synopsis	Policy name
Context	<b>configure subscriber-mgmt sub-mcac-policy</b> <i>string</i>
Tree	<a href="#">sub-mcac-policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**admin-state** *keyword*

Synopsis	Administrative state of the subscriber MCAC policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**bandwidth**

Synopsis	Enter the <b>bandwidth</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> <a href="#">bandwidth</a>
Tree	<a href="#">bandwidth</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**mandatory** (*number* | *keyword*)

Synopsis	Pre-reserved bandwidth for all mandatory channels
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> <a href="#">bandwidth</a> <a href="#">mandatory</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mandatory</a>
Range	0 to 2147483647
Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

**total** (*number* | *keyword*)

Synopsis	Maximum allowed bandwidth
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> <a href="#">bandwidth</a> <a href="#">total</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">total</a>
Range	0 to 2147483647

Options	unlimited
Default	unlimited
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **sub-profile** [[name](#)] *string*

Synopsis	Enter the <b>sub-profile</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Tree	<a href="#">sub-profile</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[name]** *string*

Synopsis	Subscriber profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i>
Tree	<a href="#">sub-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accounting-policy** *reference*

Synopsis	Accounting policy
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Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">accounting-policy</a> <i>reference</i>
Tree	<a href="#">accounting-policy</a>
Reference	<b>configure</b> <a href="#">log accounting-policy</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **accu-stats-policy** *reference*

Synopsis	Accumulated statistics policy
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">accu-stats-policy</a> <i>reference</i>
Tree	<a href="#">accu-stats-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt accu-stats-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ancp**

Synopsis	Enter the <b>ancp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ancp</a>
Tree	<a href="#">ancp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ancp-policy** *reference*

Synopsis	ANCP policy for this subscriber profile
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ancp</a> <a href="#">ancp-policy</a> <i>reference</i>
Tree	<a href="#">ancp-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt ancp ancp-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **collect-stats** *boolean*

Synopsis	Collect statistics
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Context	<b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>collect-stats</b> <i>boolean</i>
Tree	<b>collect-stats</b>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## control

Synopsis	Enter the <b>control</b> context
Context	<b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>control</b>
Tree	<b>control</b>
Description	Commands in this context determine which sessions can use the subscriber profile. By default, only sessions set up by the local system can use the profile, however, the profile can also be enabled for sessions set up by a BNG CUPS CPF.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## cups *boolean*

Synopsis	Allow the CUPS control plane to use the profile
Context	<b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>control cups</b> <i>boolean</i>
Tree	<b>cups</b>
Description	When configured to <b>true</b> , the profile can be used by sessions set up by a BNG CUPS Control Plane Function (CPF).
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## local *boolean*

Synopsis	Allow the local control plane to use the profile
Context	<b>configure subscriber-mgmt sub-profile</b> <i>string</i> <b>control local</b> <i>boolean</i>
Tree	<b>local</b>
Description	When configured to <b>true</b> , the profile can be used by sessions set up by the local system.
Default	true

Introduced 20.5.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis Text description  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **egress**

Synopsis Enter the **egress** context  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [egress](#)  
 Tree [egress](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lag-per-link-hash**

Synopsis Enter the **lag-per-link-hash** context  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [egress](#) [lag-per-link-hash](#)  
 Tree [lag-per-link-hash](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **class** *number*

Synopsis Class used to select a LAG link  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [egress](#) [lag-per-link-hash](#) *class* *number*  
 Tree [class](#)  
 Range 1 to 3  
 Default 1

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **weight** *number*

Synopsis	Weight associated with SAP when selecting a LAG link
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress lag-per-link-hash</a> <a href="#">weight</a> <i>number</i>
Tree	<a href="#">weight</a>
Range	1 to 1024
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **qos**

Synopsis	Enter the <b>qos</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a>
Tree	<a href="#">qos</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **agg-rate**

Synopsis	Enter the <b>agg-rate</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">agg-rate</a>
Tree	<a href="#">agg-rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **adaptation-rule** *keyword*

Synopsis	Adaptation rule for operational PIR value of subscriber
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">agg-rate</a> <a href="#">adaptation-rule</a> <i>keyword</i>
Tree	<a href="#">adaptation-rule</a>

Description	This command configures the adaptation rule for the PIR value of the subscriber aggregate rate. This rule determines which configured value is adapted to <b>oper-aggregate</b> based on hardware capabilities.
Options	max, min, closest
Default	closest
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **burst-limit** (*number* | *keyword*)

Synopsis	Burst limit of the subscriber aggregate rate
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos agg-rate burst-limit</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">burst-limit</a>
Range	1 to 14000000
Units	bytes
Options	auto
Default	auto
Introduced	21.7.R1
Platforms	7750 SR-1, 7750 SR-s

### **min-resv-bw** *number*

Synopsis	Reserved minimum total rate of all egress queues
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos agg-rate min-resv-bw</a> <i>number</i>
Tree	<a href="#">min-resv-bw</a>
Range	0 to 800000000
Units	kilobps
Default	1
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **queue-frame-based-accounting** *boolean*

Synopsis	Use frame-based accounting to evaluate rate limit
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Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos agg-rate queue-frame-based-accounting</a> <a href="#">boolean</a>
Tree	<a href="#">queue-frame-based-accounting</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**rate number**

Synopsis	Maximum total rate of all egress queues
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos agg-rate rate</a> <a href="#">number</a>
Tree	<a href="#">rate</a>
Range	1 to 800000000
Units	kilobps
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**encap-offset**

Synopsis	Enable the <b>encap-offset</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos encap-offset</a>
Tree	<a href="#">encap-offset</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**type keyword**

Synopsis	Offset type
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos encap-offset type</a> <a href="#">keyword</a>
Tree	<a href="#">type</a>
Options	pppoa-llc, pppoa-null, pppoeoa-llc, pppoeoa-llc-fcs, pppoeoa-llc-tagged, pppoeoa-llc-tagged-fcs, pppoeoa-null, pppoeoa-null-fcs, pppoeoa-null-tagged, pppoeoa-null-tagged-fcs, ipoa-llc, ipoa-null, ipoeoa-llc, ipoeoa-llc-fcs, ipoeoa-llc-tagged, ipoeoa-llc-tagged-fcs, ipoeoa-null, ipoeoa-null-fcs, ipoeoa-null-tagged, ipoeoa-null-tagged-fcs, pppoe, pppoe-tagged, ipoe, ipoe-tagged
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hs-agg-rate** *number*

Synopsis Maximum rate for single egress HS queues  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [egress qos](#) **hs-agg-rate** *number*  
 Tree [hs-agg-rate](#)  
 Range 1 to 100000000  
 Units kilobps  
 Introduced 16.0.R1  
 Platforms 7750 SR-7/12/12e

### **hs-low-burst-max-class** *number*

Synopsis Scheduling classes to map the low burst limit threshold  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [egress qos](#) **hs-low-burst-max-class** *number*  
 Tree [hs-low-burst-max-class](#)  
 Range 1 to 6  
 Default 6  
 Introduced 16.0.R4  
 Platforms 7750 SR-7/12/12e

### **hs-min-resv-bw** *number*

Synopsis Reserved minimum total rate of all egress queues  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [egress qos](#) **hs-min-resv-bw** *number*  
 Tree [hs-min-resv-bw](#)  
 Range 0 to 100000000  
 Units kilobps  
 Default 1  
 Introduced 19.10.R1  
 Platforms 7750 SR-7/12/12e

## **policer-control-policy**

Synopsis	Enter the <b>policer-control-policy</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy</a>
Tree	<a href="#">policer-control-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **overrides**

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **root**

Synopsis	Enable the <b>root</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a>
Tree	<a href="#">root</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## **max-rate** (*number* | *keyword*)

Synopsis	Maximum rate
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <b>max-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 20000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



## priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos policer-control-policy overrides root priority-mbs-thresholds</a>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum threshold separation
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos policer-control-policy overrides root priority-mbs-thresholds min-thresh-separation (<i>number</i>   <i>keyword</i>)</a>
Tree	<a href="#">min-thresh-separation</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## priority [*level*] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos policer-control-policy overrides root priority-mbs-thresholds priority number</a>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [*level*] *number*

Synopsis	Strict priority level
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">egress qos policer-control-policy overrides root priority-mbs-thresholds priority number</a>
Tree	<a href="#">priority</a>

Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis	MBS size
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos policer-control-policy overrides</a> <a href="#">root priority-mbs-thresholds priority</a> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis	Policer control policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos policer-control-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos policer-control-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler-policy**

Synopsis	Enter the <b>scheduler-policy</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy</a>
Tree	<a href="#">scheduler-policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## overrides

Synopsis	Enter the <b>overrides</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a>
Tree	<a href="#">overrides</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## scheduler [[scheduler-name](#)] *reference*

Synopsis	Enter the <b>scheduler</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a> <a href="#">scheduler</a> <i>reference</i>
Tree	<a href="#">scheduler</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [[scheduler-name](#)] *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a> <a href="#">scheduler</a> <i>reference</i>
Tree	<a href="#">scheduler</a>
Reference	<b>configure</b> <a href="#">qos scheduler-policy</a> <i>string</i> <a href="#">tier number scheduler</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">egress qos scheduler-policy overrides</a> <a href="#">scheduler</a> <i>reference</i> <a href="#">rate</a>
Tree	<a href="#">rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**cir** (*number* | *keyword*)

Synopsis	CIR to override administrative CIR used by scheduler
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>reference</i> <a href="#">rate</a> <b>cir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 3200000000
Units	kilobps
Options	sum, max
Default	sum
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pir** (*number* | *keyword*)

Synopsis	PIR to override administrative PIR used by scheduler
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <i>reference</i> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">egress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <b>policy-name</b> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**firewall-policy** *reference*

Synopsis	Firewall policy
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">firewall-policy reference</a>
Tree	<a href="#">firewall-policy</a>
Reference	<b>configure</b> <a href="#">service nat firewall-policy string</a>
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**host-limits**

Synopsis	Enter the <b>host-limits</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">host-limits</a>
Tree	<a href="#">host-limits</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ipv4**

Synopsis	Enter the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">host-limits ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**arp** *number*

Synopsis	Maximum number of IPv4 ARP hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">host-limits ipv4 arp number</a>
Tree	<a href="#">arp</a>
Description	This command configures the maximum number of IPv4 ARP hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071

Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp number**

Synopsis	Maximum number of IPv4 DHCP hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv4 dhcp number</a>
Tree	<a href="#">dhcp</a>
Description	This command configures the maximum number of IPv4 DHCP hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overall number**

Synopsis	Maximum number of IPv4 hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv4 overall number</a>
Tree	<a href="#">overall</a>
Description	This command configures the maximum number of IPv4 hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ppp number**

Synopsis	Maximum number of IPv4 PPP hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv4 ppp number</a>
Tree	<a href="#">ppp</a>
Description	This command configures the maximum number of IPv4 PPP hosts per subscriber instance.

The operational maximum value may be smaller due to equipped hardware dependencies.

Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">host-limits ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## overall number

Synopsis	Maximum number of IPv6 hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">host-limits ipv6 overall number</a>
Tree	<a href="#">overall</a>
Description	This command configures the maximum number of IPv6 hosts per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## pd-ipoe-dhcp number

Synopsis	Maximum number of IPv6 IPoE DHCP PD hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">host-limits ipv6 pd-ipoe-dhcp number</a>
Tree	<a href="#">pd-ipoe-dhcp</a>
Description	This command configures the maximum number of IPv6 IPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance. The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071

Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pd-overall** *number*

Synopsis	Maximum number of IPv6 DHCP PD hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">host-limits</a> <a href="#">ipv6</a> <a href="#">pd-overall</a> <i>number</i>
Tree	<a href="#">pd-overall</a>
Description	The command configures the maximum number of IPv6 DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **pd-ppp-dhcp** *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP PD hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">host-limits</a> <a href="#">ipv6</a> <a href="#">pd-ppp-dhcp</a> <i>number</i>
Tree	<a href="#">pd-ppp-dhcp</a>
Description	This command configures the maximum number of IPv6 PPPoE DHCP Prefix Delegation hosts (IA-PD) per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ipoe-dhcp** *number*

Synopsis	Maximum number of IPv6 IPoE DHCP WAN hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">host-limits</a> <a href="#">ipv6</a> <a href="#">wan-ipoe-dhcp</a> <i>number</i>
Tree	<a href="#">wan-ipoe-dhcp</a>
Description	This command configures the maximum number of IPv6 IPoE DHCP WAN hosts (IA-NA) per subscriber instance.



The operational maximum value may be smaller due to equipped hardware dependencies.

Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ipoe-slaac** *number*

Synopsis	Maximum number of IPv6 IPoE SLAAC WAN hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv6 wan-ipoe-slaac</a> <i>number</i>
Tree	<a href="#">wan-ipoe-slaac</a>
Description	This command configures the maximum number of IPv6 IPoE SLAAC WAN hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-overall** *number*

Synopsis	Maximum number of IPv6 WAN hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv6 wan-overall</a> <i>number</i>
Tree	<a href="#">wan-overall</a>
Description	This command configures the maximum number of IPv6 WAN hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ppp-dhcp** *number*

Synopsis	Maximum number of IPv6 PPPoE DHCP WAN hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv6 wan-ppp-dhcp</a> <i>number</i>
Tree	<a href="#">wan-ppp-dhcp</a>

Description	This command configures the maximum number of IPv6 PPPoE DHCP WAN hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **wan-ppp-slaac** *number*

Synopsis	Maximum number of IPv6 PPPoE SLAAC WAN hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits ipv6 wan-ppp-slaac</a> <i>number</i>
Tree	<a href="#">wan-ppp-slaac</a>
Description	This command configures the maximum number of IPv6 PPPoE SLAAC WAN hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lac-overall** *number*

Synopsis	Maximum number of L2TP LAC hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits lac-overall</a> <i>number</i>
Tree	<a href="#">lac-overall</a>
Description	This command configures the maximum number of L2TP LAC hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	0 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overall** *number*

Synopsis	Maximum number of subscriber hosts
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Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-limits overall</a> <i>number</i>
Tree	<a href="#">overall</a>
Description	This command configures the maximum number of subscriber hosts per subscriber instance.  The operational maximum value may be smaller due to equipped hardware dependencies.
Range	1 to 131071
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **host-tracking-policy** *reference*

Synopsis	Host tracking policy
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">host-tracking-policy</a> <i>reference</i>
Tree	<a href="#">host-tracking-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">host-tracking-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hs-sla-mode** *keyword*

Synopsis	HS board subscriber SLA mode
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">hs-sla-mode</a> <i>keyword</i>
Tree	<a href="#">hs-sla-mode</a>
Options	expanded, single
Default	expanded
Introduced	16.0.R1
Platforms	7750 SR-7/12/12e

### **igmp-policy** *reference*

Synopsis	IGMP policy
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">igmp-policy</a> <i>reference</i>
Tree	<a href="#">igmp-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">igmp-policy</a> <i>string</i>

Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ingress

Synopsis Enter the **ingress** context  
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress](#)  
Tree [ingress](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## qos

Synopsis Enter the **qos** context  
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress](#) [qos](#)  
Tree [qos](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## policer-control-policy

Synopsis Enter the **policer-control-policy** context  
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress](#) [qos](#) [policer-control-policy](#)  
Tree [policer-control-policy](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## overrides

Synopsis Enter the **overrides** context  
Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress](#) [qos](#) [policer-control-policy](#) [overrides](#)  
Tree [overrides](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## root

Synopsis	Enable the <b>root</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a>
Tree	<a href="#">root</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## max-rate (*number* | *keyword*)

Synopsis	Maximum rate
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">max-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">max-rate</a>
Range	1 to 20000000000
Units	kilobps
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## priority-mbs-thresholds

Synopsis	Enter the <b>priority-mbs-thresholds</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a>
Tree	<a href="#">priority-mbs-thresholds</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## min-thresh-separation (*number* | *keyword*)

Synopsis	Minimum threshold separation
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">policer-control-policy</a> <a href="#">overrides</a> <a href="#">root</a> <a href="#">priority-mbs-thresholds</a> <a href="#">min-thresh-separation</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">min-thresh-separation</a>

Range	0 to 16777216
Units	bytes
Options	auto
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority** [*level*] *number*

Synopsis	Enter the <b>priority</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **[level]** *number*

Synopsis	Strict priority level
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> <b>priority</b> <i>number</i>
Tree	<a href="#">priority</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mbs-contribution** (*number* | *keyword*)

Synopsis	MBS size
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">ingress qos policer-control-policy overrides root priority-mbs-thresholds</a> <b>priority</b> <i>number</i> <b>mbs-contribution</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbs-contribution</a>
Range	0 to 16777216
Units	bytes
Options	auto

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy-name** *reference*

Synopsis Policer control policy name  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos policer-control-policy policy-name](#) *reference*  
 Tree [policy-name](#)  
 Reference **configure** [qos policer-control-policy](#) *string*  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **scheduler-policy**

Synopsis Enter the **scheduler-policy** context  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos scheduler-policy](#)  
 Tree [scheduler-policy](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **overrides**

Synopsis Enter the **overrides** context  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos scheduler-policy overrides](#)  
 Tree [overrides](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **scheduler** [[scheduler-name](#)] *reference*

Synopsis Enter the **scheduler** list instance  
 Context **configure** [subscriber-mgmt sub-profile](#) *string* [ingress qos scheduler-policy overrides](#) [scheduler](#) *reference*  
 Tree [scheduler](#)  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### [scheduler-name] *reference*

Synopsis Scheduler policy name

Context **configure** [subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference](#)

Tree [scheduler](#)

Reference **configure** [qos scheduler-policy string tier number scheduler string](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### rate

Synopsis Enter the **rate** context

Context **configure** [subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate](#)

Tree [rate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### cir (*number* | *keyword*)

Synopsis CIR to override administrative CIR used by scheduler

Context **configure** [subscriber-mgmt sub-profile string ingress qos scheduler-policy overrides scheduler reference rate cir \(number | keyword\)](#)

Tree [cir](#)

Range 0 to 3200000000

Units kilobps

Options sum, max

Default sum

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**pir** (*number* | *keyword*)

Synopsis	PIR to override administrative PIR used by scheduler
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">overrides</a> <a href="#">scheduler</a> <a href="#">reference</a> <a href="#">rate</a> <b>pir</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 3200000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**policy-name** *reference*

Synopsis	Scheduler policy name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">ingress</a> <a href="#">qos</a> <a href="#">scheduler-policy</a> <a href="#">policy-name</a> <i>reference</i>
Tree	<a href="#">policy-name</a>
Reference	<b>configure</b> <a href="#">qos</a> <a href="#">scheduler-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**mld-policy** *reference*

Synopsis	MLD policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">mld-policy</a> <i>reference</i>
Tree	<a href="#">mld-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">mld-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nat**

Synopsis	Enter the <b>nat</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <b>nat</b>

Tree	<a href="#">nat</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **access-mode** *keyword*

Synopsis	The subscriber NAT access mode
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string nat access-mode keyword</a>
Tree	<a href="#">access-mode</a>
Options	auto – Automatically derived from the access SAP's anti-spoof type bridged – Force to bridged mode
Default	auto
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **allow-bypass** *boolean*

Synopsis	Allow traffic to bypass NAT
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string nat allow-bypass boolean</a>
Tree	<a href="#">allow-bypass</a>
Description	When configured to <b>true</b> , the system enables L2-Aware NAT subscribers for NAT bypass. When enabled, the IP filter configuration applied in the subscriber profile determines whether the traffic is bypassed.  When configured to <b>false</b> , traffic is subject to L2-Aware NAT operation.
Default	false
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **policy** *reference*

Synopsis	NAT policy associated with the subscriber profile
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string nat policy reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure service nat nat-policy string</b>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **prefix-list** *reference*

Synopsis	NAT prefix list name
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">nat prefix-list</a> <i>reference</i>
Tree	<a href="#">prefix-list</a>
Reference	<b>configure</b> <a href="#">service nat prefix-list</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **pim-policy** *reference*

Synopsis	Protocol Independent Multicast (PIM) policy
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">pim-policy</a> <i>reference</i>
Tree	<a href="#">pim-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt pim-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **preference** *number*

Synopsis	Relative preference value for the subscriber profile
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">preference</a> <i>number</i>
Tree	<a href="#">preference</a>
Range	1 to 10
Default	5
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **radius-accounting**

Synopsis	Enter the <b>radius-accounting</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">radius-accounting</a>
Tree	<a href="#">radius-accounting</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **policy reference**

Synopsis	RADIUS accounting policies
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">radius-accounting policy reference</a>
Tree	<a href="#">policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt radius-accounting-policy</a> <i>string</i>
Max. Instances	5
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-optimized-stop** *boolean*

Synopsis	Optimize PPPoE session accounting stop behavior
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">radius-accounting session-optimized-stop</a> <i>boolean</i>
Tree	<a href="#">session-optimized-stop</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **secondary-shaper-hashing** *boolean*

Synopsis	Include LAG hashing on secondary shaper
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">secondary-shaper-hashing</a> <i>boolean</i>
Tree	<a href="#">secondary-shaper-hashing</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **session-limits**

Synopsis	Enter the <b>session-limits</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">session-limits</a>

Tree	<a href="#">session-limits</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **ipoe number**

Synopsis	Maximum number of IPoE sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string session-limits ipoe number</a>
Tree	<a href="#">ipoe</a>
Description	This command configures the maximum number of IPoE sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **l2tp**

Synopsis	Enter the <b>l2tp</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string session-limits l2tp</a>
Tree	<a href="#">l2tp</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lns number**

Synopsis	Maximum number of L2TP LNS sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string session-limits l2tp lns number</a>
Tree	<a href="#">l2tp lns</a>
Description	This command configures the maximum number of L2TP LNS sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lts number**

Synopsis	Maximum number of L2TP LTS sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">session-limits l2tp lts</a> <i>number</i>
Tree	<a href="#">lts</a>
Description	This command configures the maximum number of L2TP LTS sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**overall number**

Synopsis	Maximum number of L2TP sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">session-limits l2tp overall</a> <i>number</i>
Tree	<a href="#">overall</a>
Description	This command configures the maximum number of L2TP sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**overall number**

Synopsis	Maximum number of subscriber sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile</a> <i>string</i> <a href="#">session-limits overall</a> <i>number</i>
Tree	<a href="#">overall</a>
Description	This command configures the maximum number of subscriber sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**pppoe**

Synopsis	Enter the <b>pppoe</b> context
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Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string session-limits pppoe</a>
Tree	<a href="#">pppoe</a>
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lac number**

Synopsis	Maximum number of PPPoE L2TP LAC sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string session-limits pppoe lac number</a>
Tree	<a href="#">lac</a>
Description	This command configures the maximum number of PPPoE L2TP LAC sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**local number**

Synopsis	Maximum number of PPPoE local-terminated sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string session-limits pppoe local number</a>
Tree	<a href="#">local</a>
Description	This command configures the maximum number of PPPoE local-terminated sessions (PTA) per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**overall number**

Synopsis	Maximum number of PPPoE sessions
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string session-limits pppoe overall number</a>
Tree	<a href="#">overall</a>
Description	This command configures the maximum number of PPPoE sessions per subscriber instance.
Range	0 to 131071
Introduced	20.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sla-profile-map

Synopsis Enter the **sla-profile-map** context  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [sla-profile-map](#)  
 Tree [sla-profile-map](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## entry [[sla-profile-string](#)] *string*

Synopsis Enter the **entry** list instance  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [sla-profile-map](#) **entry** *string*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [\[sla-profile-string\]](#) *string*

Synopsis SLA profile string  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [sla-profile-map](#) **entry** *string*  
 Tree [entry](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## sla-profile *reference*

Synopsis SLA profile  
 Context **configure** [subscriber-mgmt](#) [sub-profile](#) *string* [sla-profile-map](#) **entry** *string* [sla-profile](#) *reference*  
 Tree [sla-profile](#)  
 Reference **configure** [subscriber-mgmt](#) [sla-profile](#) *string*



Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **use-direct-map-as-default** *boolean*

Synopsis	Allow direct mapping of SLA profile as default
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">sla-profile-map</a> <a href="#">use-direct-map-as-default</a> <i>boolean</i>
Tree	<a href="#">use-direct-map-as-default</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-mcac-policy** *reference*

Synopsis	Subscriber MCAC policy
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">sub-mcac-policy</a> <i>reference</i>
Tree	<a href="#">sub-mcac-policy</a>
Reference	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-mcac-policy</a> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s

### **upnp-policy** *reference*

Synopsis	UPnP policy for the subscriber profile
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">sub-profile</a> <i>string</i> <a href="#">upnp-policy</a> <i>reference</i>
Tree	<a href="#">upnp-policy</a>
Description	This command specifies the Universal Plug 'n Play policy (UPnP) IGD service for the subscriber profile. All ESM hosts of the subscriber can use the UPnP protocol to create port mapping. This feature only supports L2-Aware NAT hosts. The UPnP parameters are defined in the referenced UPnP policy configured in the <b>configure service upnp</b> context.
Reference	<b>configure</b> <a href="#">service</a> <a href="#">upnp</a> <i>policy</i> <i>string</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**volume-stats-type** *keyword*

Synopsis	Include non-IP headers in the accounting statistics
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">volume-stats-type</a> <i>keyword</i>
Tree	<a href="#">volume-stats-type</a>
Options	l2, ip
Default	l2
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vport-hashing** *boolean*

Synopsis	Include LAG hashing on Vport
Context	<b>configure</b> <a href="#">subscriber-mgmt sub-profile string</a> <a href="#">vport-hashing</a> <i>boolean</i>
Tree	<a href="#">vport-hashing</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**subscriber-interface-statistics**

Synopsis	Enter the <b>subscriber-interface-statistics</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt subscriber-interface-statistics</a>
Tree	<a href="#">subscriber-interface-statistics</a>
Introduced	21.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**admin-state** *keyword*

Synopsis	Administrative state for statistics collection
Context	<b>configure</b> <a href="#">subscriber-mgmt subscriber-interface-statistics</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## svlan-statistics

Synopsis Enter the **svlan-statistics** context  
Context **configure** [subscriber-mgmt svlan-statistics](#)  
Tree [svlan-statistics](#)  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## admin-state *keyword*

Synopsis Administrative state of statistics collection  
Context **configure** [subscriber-mgmt svlan-statistics admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R4  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## system-behavior

Synopsis Enter the **system-behavior** context  
Context **configure** [subscriber-mgmt system-behavior](#)  
Tree [system-behavior](#)  
Description Commands in this context configure the attributes of system-wide subscriber management behavior.  
Introduced 21.7.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## legacy-dns-nbns *boolean*

Synopsis Restrict authentication origins for name servers  
Context **configure** [subscriber-mgmt system-behavior legacy-dns-nbns](#) *boolean*  
Tree [legacy-dns-nbns](#)

Description	<p>When configured to <b>true</b>, this command enables legacy DNS NBNS behavior, which restricts the supported default extended authentication origins for DNS and NBNS name servers. The main differences include:</p> <ul style="list-style-type: none"> <li>• only support DHCP server as origin for DHCP relay: IPoE DHCPv4/DHCPv6 and PPPoE DHCPv6</li> <li>• Local Address Assignment (LAA) is highest priority origin: IPoE and PPPoE SLAAC DNSv6 and PPPoE DNSv4</li> <li>• no default DNS for IPoE DHCPv4 proxy</li> </ul> <p>When configured to <b>false</b>, this command reverts to the recommended default extended DNS and NBNS name server origin priorities.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## up-resiliency

Synopsis	Enter the <b>up-resiliency</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt up-resiliency</a>
Tree	<a href="#">up-resiliency</a>
Description	Commands in this context configure the inter-UPF resiliency in a CUPS system.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## fate-sharing-group-template [\[name\]](#) *string*

Synopsis	Enter the <b>fate-sharing-group-template</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt up-resiliency fate-sharing-group-template</a> <i>string</i>
Tree	<a href="#">fate-sharing-group-template</a>
Description	Commands in this context configure resiliency parameters per FSG.
Max. Instances	256
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## [\[name\]](#) *string*

Synopsis	FSG template ID
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Context	<b>configure</b> <a href="#">subscriber-mgmt up-resiliency fate-sharing-group-template</a> <i>string</i>
Tree	<a href="#">fate-sharing-group-template</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt up-resiliency fate-sharing-group-template</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **gratuitous-arp** *keyword*

Synopsis	Granularity for sending GARP packets on switchover
Context	<b>configure</b> <a href="#">subscriber-mgmt up-resiliency fate-sharing-group-template</a> <i>string</i> <a href="#">gratuitous-arp</a> <i>keyword</i>
Tree	<a href="#">gratuitous-arp</a>
Options	one-per-outer-tag – Send a single Gratuitous ARP for all q-in-q SAPs sharing the same outer tag on any one of those SAP one-per-sap – Send a single Gratuitous ARP per SAP
Default	one-per-sap
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **path-restoration-state** *keyword*

Synopsis	Method for managing FSGs during headless mode
Context	<b>configure</b> <a href="#">subscriber-mgmt up-resiliency fate-sharing-group-template</a> <i>string</i> <a href="#">path-restoration-state</a> <i>keyword</i>
Tree	<a href="#">path-restoration-state</a>

Description	This command configures how the BNG-UP manages the state of active FSGs, if the BNG-UP becomes headless (PFCP path is in restoration/headless). The BNG-UP can always move all active FSGs to standby, or decide whether to move them to standby based on a series of heuristic tests. If any test indicates that the BNG-UP cannot forward traffic for the FSG, or if another BNG-UP becomes active, the BNG-UP moves the FSG to standby.  This only applies to active FSGs; the BNG-UP never makes a standby FSG active without CPF intervention.
Options	standby – Always change FSG state to standby auto – Change FSG state based on a series of heuristic tests
Default	auto
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## redundant-interface

Synopsis	Enter the <b>redundant-interface</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">redundant-interface</a>
Tree	<a href="#">redundant-interface</a>
Description	Commands in this context configure downstream traffic shunting from a standby BNG-UP to an active BNG-UP. Downstream traffic that is received for standby sessions is sent over the redundant interface to the active BNG-UP. This requires the configuration of the <b>multi-chassis-shunt-id</b> in the service that receives the session traffic.
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## name *string*

Synopsis	Redundant interface name
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">redundant-interface</a> <i>name</i> <i>string</i>
Tree	<a href="#">name</a>
Description	This command configures the name of the redundant interface. It must exist in the service that contains the redundant interface.
String Length	1 to 32
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**service string**

Synopsis	Service that contains the redundant interface
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">redundant-interface</a> <b>service</b> <i>string</i>
Tree	<a href="#">service</a>
Description	This command configures the service that contains the redundant interface. It can be different from the service where the session traffic is terminated.
String Length	1 to 64
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**uplink-forwarding-while-standby boolean**

Synopsis	Allows a standby BNG-UP to forward packets
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">up-resiliency</a> <a href="#">fate-sharing-group-template</a> <i>string</i> <a href="#">uplink-forwarding-while-standby</a> <i>boolean</i>
Tree	<a href="#">uplink-forwarding-while-standby</a>
Description	This command allows a standby BNG-UP to forward uplink traffic. To prevent the possibility of packet replication towards the network, this command should only be enabled if the access network is provisioned not to replicate unicast packets to the BNG-UP.
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**vrgw**

Synopsis	Enter the <b>vrgw</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <b>vrgw</b>
Tree	<a href="#">vrgw</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**brg-profile** [[brg-profile-name](#)] *string*

Synopsis	Enter the <b>brg-profile</b> list instance
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Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i>
Tree	<a href="#">brg-profile</a>
Max. Instances	16
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **[brg-profile-name]** *string*

Synopsis	BRG profile name
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i>
Tree	<a href="#">brg-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **connectivity-verification**

Synopsis	Enter the <b>connectivity-verification</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">connectivity-verification</a>
Tree	<a href="#">connectivity-verification</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **admin-state** *keyword*

Synopsis	Administrative state of BRG connectivity verification
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">connectivity-verification</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR



**count** *number*

Synopsis	Connection attempts before BRG is considered down
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">connectivity-verification count</a> <i>number</i>
Tree	<a href="#">count</a>
Range	1 to 5
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**retry-time** *number*

Synopsis	Wait time before a new connectivity verification cycle
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">connectivity-verification retry-time</a> <i>number</i>
Tree	<a href="#">retry-time</a>
Range	300 to 3600
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**timeout** *number*

Synopsis	Timeout after which a message is considered unanswered
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">connectivity-verification timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	5 to 60
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **hold-time** *number*

Synopsis	The time to hold on to a BRG after it went down
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <b>hold-time</b> <i>number</i>
Tree	<a href="#">hold-time</a>
Range	0   30 to 2592000
Units	seconds
Default	0
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **home-pool**

Synopsis	Enter the <b>home-pool</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <b>home-pool</b>
Tree	<a href="#">home-pool</a>
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lease-time** *number*

Synopsis	Lease time used when allocating addresses from the pool
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <b>home-pool</b> <b>lease-time</b> <i>number</i>
Tree	<a href="#">lease-time</a>
Range	300 to 315446399
Units	seconds
Default	21600
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**option** [*number*] (*number* | *keyword*)

Synopsis	Enter the <b>option</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[number]** (*number* | *keyword*)

Synopsis	DHCP option to send identification strings to client
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">option</a>
Range	1 to 254
Options	subnet-mask, default-router, dns-server, domain-name, netbios-name-server, netbios-node-type, lease-time, lease-renew-time, lease-rebind-time
Notes	This element is part of a list key.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**ascii-string** *string*

Synopsis	ASCII string of the DHCP option
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">ascii-string</a> <i>string</i>
Tree	<a href="#">ascii-string</a>
String Length	1 to 127
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**duration** *number*

Synopsis	DHCP option as time duration.
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">duration</a> <i>number</i>

Tree	<a href="#">duration</a>
Range	10 to 315446399
Units	seconds
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## empty

Synopsis	Empty DHCP option.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">home-pool</a> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <a href="#">empty</a>
Tree	<a href="#">empty</a>
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## hex-string *string*

Synopsis	DHCP option as a hexadecimal string
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">home-pool</a> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <a href="#">hex-string</a> <i>string</i>
Tree	<a href="#">hex-string</a>
String Length	1 to 256
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## ipv4-address *string*

Synopsis	DHCP option as a list of IPv4 addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">home-pool</a> <i>option</i> ( <i>number</i>   <i>keyword</i> ) <a href="#">ipv4-address</a> <i>string</i>
Tree	<a href="#">ipv4-address</a>

Max. Instances	4
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> . This element is ordered by the user.
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **netbios-node-type** *keyword*

Synopsis	DHCP option as NetBIOS node type.
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">home-pool</a> <a href="#">option</a> ( <i>number</i>   <i>keyword</i> ) <a href="#">netbios-node-type</a> <i>keyword</i>
Tree	<a href="#">netbios-node-type</a>
Options	b-node, p-node, m-node, h-node
Notes	The following elements are part of a mandatory choice: <b>ascii-string</b> , <b>duration</b> , <b>empty</b> , <b>hex-string</b> , <b>ipv4-address</b> , or <b>netbios-node-type</b> .
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **standby-ip-lifetime** *number*

Synopsis	The lifetime of the standby IP addresses
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">home-pool</a> <a href="#">standby-ip-lifetime</a> <i>number</i>
Tree	<a href="#">standby-ip-lifetime</a>
Range	300 to 315446399
Units	seconds
Default	21600
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **subnet**

Synopsis	Enter the <b>subnet</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">vrgw</a> <a href="#">brg-profile</a> <i>string</i> <a href="#">home-pool</a> <a href="#">subnet</a>

Tree	<a href="#">subnet</a>
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end string**

Synopsis	Upper bound of the IP address range
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool subnet end</a> <i>string</i>
Tree	<a href="#">end</a>
Default	192.168.0.254
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**prefix string**

Synopsis	Prefix and default-gateway to be used inside the home
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool subnet prefix</a> <i>string</i>
Tree	<a href="#">prefix</a>
Default	192.168.0.1/24
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start string**

Synopsis	Lower bound of the IP address range
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">home-pool subnet start</a> <i>string</i>
Tree	<a href="#">start</a>
Default	192.168.0.2
Introduced	16.0.R7
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**initial-hold-time number**

Synopsis	Hold time for BRG instances created without any hosts
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">initial-hold-time</a> <i>number</i>

Tree	<a href="#">initial-hold-time</a>
Range	0 to 900
Units	seconds
Default	300
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## radius-authentication

Synopsis	Enter the <b>radius-authentication</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-authentication</a>
Tree	<a href="#">radius-authentication</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## password *string*

Synopsis	Password used for authentication
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-authentication password</a> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## server-policy *reference*

Synopsis	Radius servers to be used for authentication
Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw brg-profile</a> <i>string</i> <a href="#">radius-authentication server-policy</a> <i>reference</i>
Tree	<a href="#">server-policy</a>
Reference	<b>configure</b> <a href="#">aaa radius</a> <a href="#">server-policy</a> <i>string</i>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**radius-proxy-server** [**router-instance**] *string name string*

Synopsis	Add a list entry for <b>radius-proxy-server</b>
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>vrgw</b> <b>brg-profile</b> <i>string</i> <b>radius-proxy-server</b> <i>string name string</i>
Tree	<b>radius-proxy-server</b>
Max. Instances	4
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**[router-instance]** *string*

Synopsis	router-instance
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>vrgw</b> <b>brg-profile</b> <i>string</i> <b>radius-proxy-server</b> <i>string name string</i>
Tree	<b>radius-proxy-server</b>
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**name** *string*

Synopsis	RADIUS proxy server name
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>vrgw</b> <b>brg-profile</b> <i>string</i> <b>radius-proxy-server</b> <i>string name string</i>
Tree	<b>radius-proxy-server</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**sla-profile-string** *string*

Synopsis	Default for SLA-profile lookup
Context	<b>configure</b> <b>subscriber-mgmt</b> <b>vrgw</b> <b>brg-profile</b> <i>string</i> <b>sla-profile-string</b> <i>string</i>
Tree	<b>sla-profile-string</b>



String Length 0 to 32  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **sub-profile-string** *string*

Synopsis Default for subscriber-profile lookup  
 Context **configure** [subscriber-mgmt](#) [vrgw](#) [brg-profile](#) *string* **sub-profile-string** *string*  
 Tree [sub-profile-string](#)  
 String Length 0 to 32  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **uplink-initial-wait** *number*

Synopsis Wait time for non-routed uplink to become operational  
 Context **configure** [subscriber-mgmt](#) [vrgw](#) [brg-profile](#) *string* **uplink-initial-wait** *number*  
 Tree [uplink-initial-wait](#)  
 Range 10 to 300  
 Units seconds  
 Default 30  
 Introduced 16.0.R4  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **lanext**

Synopsis Enter the **lanext** context  
 Context **configure** [subscriber-mgmt](#) [vrgw](#) **lanext**  
 Tree [lanext](#)  
 Introduced 16.0.R1  
 Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-target-as-number** *number*

Synopsis AS number to derive RT and RD for the HLE service

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Context	<b>configure</b> <a href="#">subscriber-mgmt vrgw lanext router-target-as-number</a> <i>number</i>
Tree	<a href="#">router-target-as-number</a>
Range	1 to 65535
Introduced	16.0.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## wlan-gw

Synopsis	Enter the <b>wlan-gw</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw</a>
Tree	<a href="#">wlan-gw</a>
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## queries

Synopsis	Enter the <b>queries</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries</a>
Tree	<a href="#">queries</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## tunnel [[name](#)] *string*

Synopsis	Enter the <b>tunnel</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i>
Tree	<a href="#">tunnel</a>
Max. Instances	1024
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## [[name](#)] *string*

Synopsis	Tunnel query name
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i>

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Tree	<a href="#">tunnel</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **access-point-mac-address-learning-status** *keyword*

Synopsis	Matching criteria of tunnels based on learning status
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <a href="#">access-point-mac-address-learning-status</a> <i>keyword</i>
Tree	<a href="#">access-point-mac-address-learning-status</a>
Options	failed, succeeded
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **calculate-counts** *boolean*

Synopsis	Count the number of tunnels matching the criteria
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <a href="#">calculate-counts</a> <i>boolean</i>
Tree	<a href="#">calculate-counts</a>
Default	false
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encapsulation**

Synopsis	Enable the <b>encapsulation</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <a href="#">encapsulation</a>
Tree	<a href="#">encapsulation</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gre boolean**

Synopsis	Controls whether the query returns Soft GRE tunnels
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string encapsulation gre boolean</i>
Tree	<a href="#">gre</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2 boolean**

Synopsis	Enable matching on Layer 2 tunnels
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string encapsulation I2 boolean</i>
Tree	<a href="#">I2</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2tp boolean**

Synopsis	Controls whether the query returns Soft L2TPv3 tunnels
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string encapsulation I2tp boolean</i>
Tree	<a href="#">I2tp</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vxlan boolean**

Synopsis	Controls whether the query returns VXLAN tunnels
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string encapsulation vxlan boolean</i>
Tree	<a href="#">vxlan</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## I2

Synopsis	Enter the <b>I2</b> context
Context	<b>configure subscriber-mgmt wlan-gw queries tunnel</b> <i>string I2</i>
Tree	<a href="#">I2</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **inner-vlan** *number*

Synopsis	Value to match the Layer 2 access point of the tunnel
Context	<b>configure subscriber-mgmt wlan-gw queries tunnel</b> <i>string I2 inner-vlan number</i>
Tree	<a href="#">inner-vlan</a>
Range	0 to 4095
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **outer-vlan** *number*

Synopsis	Layer 2 access point matching with a specified S-VLAN
Context	<b>configure subscriber-mgmt wlan-gw queries tunnel</b> <i>string I2 outer-vlan number</i>
Tree	<a href="#">outer-vlan</a>
Range	0 to 4095
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **sap** *string*

Synopsis	Value to match the L2-AP Access Point of the tunnel
Context	<b>configure subscriber-mgmt wlan-gw queries tunnel</b> <i>string I2 sap string</i>
Tree	<a href="#">sap</a>
String Length	1 to 45
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## I3

Synopsis	Enter the <b>I3</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <b>I3</b>
Tree	<a href="#">I3</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **address-type** *keyword*

Synopsis	Address type to match
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <b>I3</b> <b>address-type</b> <i>keyword</i>
Tree	<a href="#">address-type</a>
Options	ipv4, ipv6
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address as local endpoint to match
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <b>I3</b> <b>local-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-address</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **remote-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address as remote endpoint to match
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <b>I3</b> <b>remote-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">remote-address</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**router-instance** *string*

Synopsis	Router instance to match
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <a href="#">l3</a> <b>router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ues**

Synopsis	Enter the <b>ues</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <b>ues</b>
Tree	<a href="#">ues</a>
Description	Commands in this context filter tunnels based on the properties of UEs that are currently active on the tunnel.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**maximum** *number*

Synopsis	Maximum number of UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <a href="#">ues</a> <b>maximum</b> <i>number</i>
Tree	<a href="#">maximum</a>
Max. Range	0 to 4294967295
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**minimum** *number*

Synopsis	Minimum number of UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string</i> <a href="#">ues</a> <b>minimum</b> <i>number</i>
Tree	<a href="#">minimum</a>
Max. Range	0 to 4294967295
Default	1
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## state

Synopsis	Enable the <b>state</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state</i>
Tree	<a href="#">state</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## cross-connect *boolean*

Synopsis	Match on tunnels with cross-connect UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state cross-connect</i> <i>boolean</i>
Tree	<a href="#">cross-connect</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dsm *boolean*

Synopsis	Match on DSM UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state dsm</i> <i>boolean</i>
Tree	<a href="#">dsm</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## esm *boolean*

Synopsis	Match on ESM UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state esm</i> <i>boolean</i>
Tree	<a href="#">esm</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR



**l2 boolean**

Synopsis	Match on tunnels with L2W UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state l2 boolean</i>
Tree	<a href="#">l2</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**migrant boolean**

Synopsis	Match on tunnels with migrant UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries tunnel</a> <i>string ues state migrant boolean</i>
Tree	<a href="#">migrant</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**ue [name] string**

Synopsis	Enter the <b>ue</b> list instance
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i>
Tree	<a href="#">ue</a>
Description	Commands in this context query for WLAN Gateway UEs where the filter criteria over WLAN-GW UEs are defined. The query can be used to retrieve the state of the UEs matching the configured criteria.
Max. Instances	1024
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[name] string**

Synopsis	UE query name
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i>
Tree	<a href="#">ue</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## address

Synopsis	Enter the <b>address</b> context
Context	<b>configure subscriber-mgmt wlan-gw queries ue</b> <i>string</i> <b>address</b>
Tree	<b>address</b>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp6-na *string*

Synopsis	DHCPv6 IA-NA address to match for UEs
Context	<b>configure subscriber-mgmt wlan-gw queries ue</b> <i>string</i> <b>address dhcp6-na</b> <i>string</i>
Tree	<b>dhcp6-na</b>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## ipv4 *string*

Synopsis	IPv4 address to match for UEs
Context	<b>configure subscriber-mgmt wlan-gw queries ue</b> <i>string</i> <b>address ipv4</b> <i>string</i>
Tree	<b>ipv4</b>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## slaac *string*

Synopsis	SLAAC prefix to match for UEs
Context	<b>configure subscriber-mgmt wlan-gw queries ue</b> <i>string</i> <b>address slaac</b> <i>string</i>
Tree	<b>slaac</b>
Introduced	19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **type** *keyword*

Synopsis Address type to match for UEs

Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string address type keyword*

Tree [type](#)

Options  
 ipv4 – Any IPv4 address  
 ipv6 – Any IPv6 address  
 ipv4-only – IPv4 address only  
 ipv6-only – IPv6 address only  
 ipv4v6 – IPv4 and IPv6 address

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **bridge-domain** *number*

Synopsis Bridge Domain to match for UEs

Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string bridge-domain number*

Tree [bridge-domain](#)

Range 0 to 4294967294

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **connection-state**

Synopsis Enable the **connection-state** context

Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string connection-state*

Tree [connection-state](#)

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **already-signed-in** *boolean*

Synopsis Enable matching on UEs that are already signed in

Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string connection-state already-signed-in boolean*

---

Tree	<a href="#">already-signed-in</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **authorized-only** *boolean*

Synopsis	Enable matching on UEs in an authorized state
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state authorized-only</a> <i>boolean</i>
Tree	<a href="#">authorized-only</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **cross-connect** *boolean*

Synopsis	Enable matching on cross-connected UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state cross-connect</a> <i>boolean</i>
Tree	<a href="#">cross-connect</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **data-triggered** *boolean*

Synopsis	Enable matching on UEs in a data-triggered state
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state data-triggered</a> <i>boolean</i>
Tree	<a href="#">data-triggered</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**delete-pending** *boolean*

Synopsis	Enable matching on UEs in a delete-pending state
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state delete-pending</a> <i>boolean</i>
Tree	<a href="#">delete-pending</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dhcp-triggered** *boolean*

Synopsis	Enable matching on UEs in DHCP-triggered state
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state dhcp-triggered</a> <i>boolean</i>
Tree	<a href="#">dhcp-triggered</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**dsm** *boolean*

Synopsis	Controls whether the query returns UEs in DSM state
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state dsm</a> <i>boolean</i>
Tree	<a href="#">dsm</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**esm** *boolean*

Synopsis	Controls whether the query returns UEs in ESM state
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state esm</a> <i>boolean</i>
Tree	<a href="#">esm</a>
Default	true
Introduced	19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **gtp-authorized** *boolean*

Synopsis Enable matching on UEs in GTP-authorized state

Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* [connection-state gtp-authorized](#) *boolean*

Tree [gtp-authorized](#)

Default true

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-assigned** *boolean*

Synopsis Match on UEs in an IP-assigned state

Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* [connection-state ip-assigned](#) *boolean*

Tree [ip-assigned](#)

Default true

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **ip-assigned-authorized** *boolean*

Synopsis Match on UEs in an IP-assigned and authorized state

Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* [connection-state ip-assigned-authorized](#) *boolean*

Tree [ip-assigned-authorized](#)

Default true

Introduced 19.5.R1

Platforms 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **I2** *boolean*

Synopsis Match on Layer-2 wholesale state for UEs

Context **configure** [subscriber-mgmt wlan-gw queries ue](#) *string* [connection-state I2](#) *boolean*

Tree	<a href="#">l2</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **portal** *boolean*

Synopsis	Controls whether the query returns UEs in portal state
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">connection-state portal</a> <i>boolean</i>
Tree	<a href="#">portal</a>
Default	true
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **mac-address** *string*

Synopsis	MAC address to use for matching on UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">mac-address</a> <i>string</i>
Tree	<a href="#">mac-address</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **soft-quota-exhausted** *boolean*

Synopsis	Send interim update message when the quota is reached
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">soft-quota-exhausted</a> <i>boolean</i>
Tree	<a href="#">soft-quota-exhausted</a>
Default	false
Introduced	21.7.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **tunnel**

Synopsis	Enter the <b>tunnel</b> context
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">tunnel</a>

Tree	<a href="#">tunnel</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **encapsulation** *keyword*

Synopsis	Tunnel type to match for active UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">tunnel encapsulation</a> <i>keyword</i>
Tree	<a href="#">encapsulation</a>
Options	gre, l2tp, l2, vxlan
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **local-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address as local tunnel endpoint to match for UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">tunnel local-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">local-address</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **remote-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis	IP address as remote tunnel endpoint to match for UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">tunnel remote-address</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">remote-address</a>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **router-instance** *string*

Synopsis	Router instance of tunnels to match for UEs
Context	<b>configure</b> <a href="#">subscriber-mgmt wlan-gw queries ue</a> <i>string</i> <a href="#">tunnel router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>



Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **vlan number**

Synopsis	VLAN tag within the tunnel to match for UEs
Context	<b>configure subscriber-mgmt wlan-gw queries ue</b> <i>string</i> <b>vlan number</b>
Tree	<b>vlan</b>
Range	0 to 4095
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **wlan-gw-group**

Synopsis	Enable the <b>wlan-gw-group</b> context
Context	<b>configure subscriber-mgmt wlan-gw queries ue</b> <i>string</i> <b>wlan-gw-group</b>
Tree	<b>wlan-gw-group</b>
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **id number**

Synopsis	WLAN-GW ISA group ID
Context	<b>configure subscriber-mgmt wlan-gw queries ue</b> <i>string</i> <b>wlan-gw-group id number</b>
Tree	<b>id</b>
Range	1 to 4
Notes	This element is mandatory.
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **member number**

Synopsis	The member of the WLAN-GW ISA group
Context	<b>configure subscriber-mgmt wlan-gw queries ue</b> <i>string</i> <b>wlan-gw-group member number</b>
Tree	<b>member</b>

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Range	1 to 1024
Introduced	19.5.R1
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

**virtual-chassis-identifier** *string*

Synopsis	WLAN Gateway virtual chassis ID or dual homing key
Context	<b>configure</b> <a href="#">subscriber-mgmt</a> <a href="#">wlan-gw</a> <a href="#">virtual-chassis-identifier</a> <i>string</i>
Tree	<a href="#">virtual-chassis-identifier</a>
String Length	1 to 16
Introduced	16.0.R4
Platforms	7750 SR, 7750 SR-e, 7750 SR-s, VSR

## 3.46 system commands

```

configure
- system
- alarm-contact-in-power boolean
- alarm-contact-input number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- clear-message string
- description string
- normal-state keyword
- trigger-message string
- alarms
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- max-cleared number
- allow-boot-license-violations boolean
- apply-groups reference
- apply-groups-exclude reference
- bluetooth
- admin-state keyword
- advertising-timeout number
- apply-groups reference
- apply-groups-exclude reference
- device string
- apply-groups reference
- apply-groups-exclude reference
- description string
- module string
- apply-groups reference
- apply-groups-exclude reference
- provisioned-identifier string
- pairing-button boolean
- passkey string
- power-mode keyword
- boot-bad-exec string
- boot-good-exec string
- central-frequency-clock
- apply-groups reference
- apply-groups-exclude reference
- bits
- input
- admin-state keyword
- interface-type keyword
- output
- admin-state keyword
- line-length keyword
- ql-minimum keyword
- source keyword
- sqlch boolean
- ql-override keyword
- ssm-bit number
- gnss
- admin-state keyword
- ql-override keyword
- ptp
- admin-state keyword
- ql-override keyword
- ql-minimum keyword

```

## configure system central-frequency-clock ql-selection

```

- ql-selection boolean
- ref-order
  - fifth keyword
  - first keyword
  - fourth keyword
  - second keyword
  - sixth keyword
  - third keyword
- refl
  - admin-state keyword
  - ql-override keyword
  - source-port string
- ref2
  - admin-state keyword
  - ql-override keyword
  - source-port string
- revert boolean
- synce
  - admin-state keyword
  - ql-override keyword
- wait-to-restore number
- cli-code string
- congestion-management boolean
- contact string
- coordinates string
- cpm-http-redirect
  - apply-groups reference
  - apply-groups-exclude reference
  - optimized-mode boolean
- cron
  - apply-groups reference
  - apply-groups-exclude reference
  - schedule string owner string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - count number
    - day-of-month number
    - description string
    - end-time
      - date-and-time string
      - day keyword
      - time string
    - hour number
    - interval number
    - minute number
    - month (keyword | number)
    - script-policy
      - name string
      - owner string
    - type keyword
    - weekday (keyword | number)
- dhcp6
  - adv-noaddrs-global keyword
  - apply-groups reference
  - apply-groups-exclude reference
- dns
  - address-pref keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - dnssec
    - ad-validation keyword
- efm-oam
  - apply-groups reference

```

configure system efm-oam apply-groups-exclude

- **apply-groups-exclude** *reference*
- **dying-gasp-tx-on-reset** *boolean*
- **grace-tx** *boolean*
- **eth-cfm**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **grace** *boolean*
  - **md-auto-id**
    - **ma-index-range**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **end** *number*
      - **start** *number*
    - **md-index-range**
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **end** *number*
      - **start** *number*
  - **named-display** *boolean*
  - **redundancy**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **mc-lag**
      - **propagate-hold-time** (*number* | *keyword*)
      - **standby-mep** *boolean*
  - **sender-id**
    - **local-name** *string*
    - **type** *keyword*
  - **slm**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **inactivity-timer** *number*
- **fan-control**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cooling-profile** *keyword*
- **grpc**
  - **admin-state** *keyword*
  - **allow-unsecure-connection**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **delay-on-boot** *number*
  - **gnmi**
    - **admin-state** *keyword*
    - **auto-config-save** *boolean*
    - **proto-version** *keyword*
- **gnoi**
  - **cert-mgmt**
    - **admin-state** *keyword*
  - **file**
    - **admin-state** *keyword*
  - **system**
    - **admin-state** *keyword*
- **listening-port** *number*
- **max-msg-size** *number*
- **md-cli**
  - **admin-state** *keyword*
- **rib-api**
  - **admin-state** *keyword*
  - **purge-timeout** *number*
- **tcp-keepalive**
  - **admin-state** *keyword*
  - **idle-time** *number*
  - **interval** *number*

configure system grpc tcp-keepalive retries

```

    - retries number
    - tls-server-profile reference
  - grpc-tunnel
    - apply-groups reference
    - apply-groups-exclude reference
    - delay-on-boot number
    - destination-group string
      - allow-unsecure-connection
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name) port number
        - apply-groups reference
        - apply-groups-exclude reference
        - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
        - originated-qos-marking keyword
        - router-instance string
    - tcp-keepalive
      - admin-state keyword
      - idle-time number
      - interval number
      - retries number
    - tls-client-profile reference
  - tunnel string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - destination-group reference
    - handler string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - port number
      - target-type
        - custom-type string
        - grpc-server
        - ssh-server
    - target-name
      - custom-string string
      - node-name
      - user-agent
  - icmp-vse boolean
  - ip
    - allow-qinq-network-interface boolean
    - apply-groups reference
    - apply-groups-exclude reference
    - enforce-unique-if-index boolean
    - forward-6in4 boolean
    - forward-ip-over-gre boolean
    - ipv6-eh keyword
    - mpls
      - label-stack-statistics-count number
  - l2tp
    - apply-groups reference
    - apply-groups-exclude reference
    - non-multi-chassis-tunnel-id-range
      - end number
      - start number
  - lACP
    - apply-groups reference
    - apply-groups-exclude reference
    - system-priority number

```

## configure system lldp

```

- lldp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - message-fast-tx number
  - message-fast-tx-init number
  - notification-interval number
  - reinit-delay number
  - tx-credit-max number
  - tx-hold-multiplier number
  - tx-interval number
- load-balancing
  - apply-groups reference
  - apply-groups-exclude reference
  - l2tp-load-balancing boolean
  - l4-load-balancing boolean
  - lsr-load-balancing keyword
  - mc-enh-load-balancing boolean
  - service-id-lag-hashing boolean
  - system-ip-load-balancing boolean
- location string
- login-control
  - apply-groups reference
  - apply-groups-exclude reference
  - exponential-backoff boolean
  - ftp
    - inbound-max-sessions number
  - idle-timeout (keyword | number)
  - login-banner boolean
  - login-scripts
    - global-script string
    - per-user-script
      - file-name string
      - user-directory string
  - motd
    - text string
    - url string
  - pre-login-message
    - message string
    - name boolean
- ssh
  - graceful-shutdown boolean
  - inbound-max-sessions number
  - outbound-max-sessions number
  - ttl-security number
- telnet
  - graceful-shutdown boolean
  - inbound-max-sessions number
  - outbound-max-sessions number
  - ttl-security number
- management-interface
  - apply-groups reference
  - apply-groups-exclude reference
  - cli
    - apply-groups reference
    - apply-groups-exclude reference
  - classic-cli
    - allow-immediate boolean
  - rollback
    - apply-groups reference
    - apply-groups-exclude reference
    - local-checkpoints number
    - location string
    - remote-checkpoints number

```

configure system management-interface cli classic-cli rollback rescue

```

- rescue
  - location string
- cli-engine keyword
- md-cli
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-config-save boolean
  - environment
    - command-alias
      - alias string
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - cli-command string
      - description string
      - mount-point (keyword | string)
      - python-script reference
    - command-completion
      - enter boolean
      - space boolean
      - tab boolean
    - console
      - length number
      - width number
    - info-output
      - always-display
        - admin-state boolean
    - message-severity-level
      - cli keyword
    - more boolean
    - progress-indicator
      - admin-state keyword
      - delay number
      - type keyword
    - prompt
      - context boolean
      - newline boolean
      - timestamp boolean
      - uncommitted-changes-indicator boolean
    - python
      - memory-reservation number
      - minimum-available-memory number
      - timeout number
      - time-display keyword
      - time-format keyword
- commit-history number
- configuration-mode keyword
- configuration-save
  - apply-groups reference
  - apply-groups-exclude reference
  - configuration-backups number
  - incremental-saves boolean
- netconf
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-config-save boolean
  - capabilities
    - candidate boolean
  - delay-on-boot number
  - port number
- operations
  - apply-groups reference
  - apply-groups-exclude reference

```



configure system management-interface operations global-timeouts

```

- global-timeouts
  - asynchronous-execution (number | keyword)
  - asynchronous-retention (number | keyword)
  - synchronous-execution (number | keyword)
- remote-management
  - admin-state keyword
  - allow-unsecure-connection
  - apply-groups reference
  - apply-groups-exclude reference
  - client-tls-profile reference
  - connection-timeout number
  - delay-on-boot number
  - device-label string
  - device-name string
  - hello-interval number
  - manager string
    - admin-state keyword
    - allow-unsecure-connection
    - apply-groups reference
    - apply-groups-exclude reference
    - client-tls-profile reference
    - connection-timeout number
    - description string
    - device-label string
    - device-name string
    - manager-address (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name)
    - manager-port number
    - router-instance string
    - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - source-port (number | keyword)
  - router-instance string
  - source-address (ipv4-address-no-zone | ipv6-address-no-zone)
  - source-port (number | keyword)
- schema-path string
- snmp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - engine-id string
  - general-port number
  - max-bulk-duration number
  - packet-size number
  - streaming
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
- yang-modules
  - apply-groups reference
  - apply-groups-exclude reference
  - nmda
    - nmda-support boolean
  - nokia-combined-modules boolean
  - nokia-submodules boolean
  - openconfig-modules boolean
  - shared-model-management boolean
- name string
- network-element-discovery
  - apply-groups reference
  - apply-groups-exclude reference
  - generate-traps boolean
- profile string
  - apply-groups reference
  - apply-groups-exclude reference

```

configure system network-element-discovery profile neid

```

- neid string
- neip
  - apply-groups reference
  - apply-groups-exclude reference
  - auto-generate
    - ipv4
      - vendor-id-value number
    - ipv6
      - vendor-id-value number
  - ipv4 string
  - ipv6 string
  - platform-type string
  - system-mac string
  - vendor-id string
- ospf-dynamic-hostnames boolean
- persistence
  - ancp
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - location keyword
  - application-assurance
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - location keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - dhcp-server
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - location keyword
  - nat-port-forwarding
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - location keyword
  - options
    - apply-groups reference
    - apply-groups-exclude reference
    - dhcp-lease-time-threshold number
  - python-policy-cache
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - location keyword
  - subscriber-mgmt
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - location keyword
- power-management power-zone number
  - apply-groups reference
  - apply-groups-exclude reference
  - mode keyword
  - power-safety-alert number
  - power-safety-level number
- ptp
  - admin-state keyword
  - alternate-profile string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference

```

configure system ptp alternate-profile domain

```

- domain number
- log-announce-interval number
- profile keyword
- announce-receipt-timeout number
- apply-groups reference
- apply-groups-exclude reference
- clock-type keyword
- domain number
- local-priority number
- log-announce-interval number
- network-type keyword
- port reference
  - address string
  - admin-state keyword
  - alternate-profile reference
  - apply-groups reference
  - apply-groups-exclude reference
  - local-priority number
  - log-delay-interval number
  - log-sync-interval number
  - master-only boolean
- priority1 number
- priority2 number
- profile keyword
- ptsf
  - monitor-ptsf-unusable
    - admin-state keyword
- router string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - peer (ipv4-address-no-zone | ipv6-address-no-zone)
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - local-priority number
    - log-sync-interval number
    - peer-limit number
- tx-while-sync-uncertain boolean
- script-control
  - apply-groups reference
  - apply-groups-exclude reference
  - script string owner string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - location string
  - script-policy string owner string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - expire-time (number | keyword)
    - lifetime (number | keyword)
    - lock-override boolean
    - max-completed number
    - python-lifetime number
    - python-script
      - name reference
    - results string
    - script
      - name string
      - owner string
- security

```

## configure system security aaa

- **aaa**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cli-session-group** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **combined-max-sessions** *number*
    - **description** *string*
    - **ssh-max-sessions** *number*
    - **telnet-max-sessions** *number*
  - **health-check** (*number* | *keyword*)
  - **local-profiles**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **profile** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **cli-session-group** *reference*
      - **combined-max-sessions** *number*
      - **default-action** *keyword*
      - **entry** *number*
        - **action** *keyword*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **description** *string*
        - **match** *string*
  - **grpc**
    - **rpc-authorization**
      - **gnmi-capabilities** *keyword*
      - **gnmi-get** *keyword*
      - **gnmi-set** *keyword*
      - **gnmi-subscribe** *keyword*
      - **gnoi-cert-mgmt-cangenerate** *keyword*
      - **gnoi-cert-mgmt-getcert** *keyword*
      - **gnoi-cert-mgmt-install** *keyword*
      - **gnoi-cert-mgmt-revoke** *keyword*
      - **gnoi-cert-mgmt-rotate** *keyword*
      - **gnoi-file-get** *keyword*
      - **gnoi-file-put** *keyword*
      - **gnoi-file-remove** *keyword*
      - **gnoi-file-stat** *keyword*
      - **gnoi-file-transfertoremote** *keyword*
      - **gnoi-system-cancelreboot** *keyword*
      - **gnoi-system-ping** *keyword*
      - **gnoi-system-reboot** *keyword*
      - **gnoi-system-rebootstatus** *keyword*
      - **gnoi-system-setpackage** *keyword*
      - **gnoi-system-switchcontrolprocessor** *keyword*
      - **gnoi-system-time** *keyword*
      - **gnoi-system-traceroute** *keyword*
      - **md-cli-session** *keyword*
      - **rib-api-getversion** *keyword*
      - **rib-api-modify** *keyword*
  - **li** *boolean*
  - **netconf**
    - **base-op-authorization**
      - **action** *boolean*
      - **cancel-commit** *boolean*
      - **close-session** *boolean*
      - **commit** *boolean*
      - **copy-config** *boolean*
      - **create-subscription** *boolean*
      - **delete-config** *boolean*
      - **discard-changes** *boolean*

configure system security aaa local-profiles profile netconf base-op-authorization edit-config

- **edit-config** *boolean*
- **get** *boolean*
- **get-config** *boolean*
- **get-data** *boolean*
- **get-schema** *boolean*
- **kill-session** *boolean*
- **lock** *boolean*
- **validate** *boolean*
- **ssh-max-sessions** *number*
- **telnet-max-sessions** *number*
- **management-interface**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **md-cli**
    - **command-accounting-during-load** *boolean*
  - **output-authorization**
    - **md-interfaces** *boolean*
    - **telemetry-data** *boolean*
- **remote-servers**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ldap**
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **public-key-authentication** *boolean*
    - **route-preference** *keyword*
    - **server** *number*
      - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **port** *number*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **bind-authentication**
        - **password** *string*
        - **root-dn** *string*
      - **search**
        - **base-dn** *string*
      - **server-name** *string*
      - **tls-profile** *reference*
    - **server-retry** *number*
    - **server-timeout** *number*
    - **use-default-template** *boolean*
  - **radius**
    - **access-algorithm** *keyword*
    - **accounting** *boolean*
    - **accounting-port** *number*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **authorization** *boolean*
    - **interactive-authentication** *boolean*
    - **port** *number*
    - **route-preference** *keyword*
    - **server** *number*
      - **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **authenticator** *keyword*
        - **secret** *string*
        - **tls-client-profile** *reference*
      - **server-retry** *number*

configure system security aaa remote-servers radius server-timeout

```

- server-timeout number
- use-default-template boolean
- tacplus
- accounting
  - record-type keyword
- admin-control
  - tacplus-map-to-priv-lvl number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- authorization
  - request-format
    - access-operation-cmd keyword
  - use-priv-lvl boolean
- interactive-authentication boolean
- priv-lvl-map
  - apply-groups reference
  - apply-groups-exclude reference
  - priv-lvl number
    - apply-groups reference
    - apply-groups-exclude reference
    - user-profile-name reference
- route-preference keyword
- server number
  - address (ipv4-address-no-zone | ipv6-address-no-zone)
  - apply-groups reference
  - apply-groups-exclude reference
  - port number
  - secret string
  - server-timeout number
  - use-default-template boolean
- vprn-server
  - apply-groups reference
  - apply-groups-exclude reference
  - inband reference
  - outband reference
  - vprn reference
- user-template keyword
- access
  - console boolean
  - ftp boolean
  - grpc boolean
  - li boolean
  - netconf boolean
- apply-groups reference
- apply-groups-exclude reference
- console
  - login-exec string
- home-directory (sat-url | cflash-without-slot-url)
- profile string
- restricted-to-home boolean
- save-when-restricted boolean
- apply-groups reference
- apply-groups-exclude reference
- cli-script
  - apply-groups reference
  - apply-groups-exclude reference
- authorization
  - cron
    - cli-user reference
  - event-handler
    - cli-user reference
- cpm-filter
  - apply-groups reference

```

configure system security cpm-filter apply-groups-exclude

- **apply-groups-exclude** *reference*
- **default-action** *keyword*
- **ip-filter**
  - **admin-state** *keyword*
  - **entry** *number*
    - **action**
      - **accept**
      - **default**
      - **drop**
      - **queue** *reference*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **log** *reference*
    - **match**
      - **dscp** *keyword*
      - **dst-ip**
        - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
        - **ip-prefix-list** *reference*
        - **mask** *string*
      - **dst-port**
        - **eq** *number*
        - **mask** *number*
        - **port-list** *reference*
        - **range**
          - **end** *number*
          - **start** *number*
      - **fragment** *keyword*
      - **icmp**
        - **code** *number*
        - **type** *number*
      - **ip-option**
        - **mask** *number*
        - **type** *number*
      - **multiple-option** *boolean*
      - **option-present** *boolean*
      - **port**
        - **eq** *number*
        - **mask** *number*
        - **port-list** *reference*
        - **range**
          - **end** *number*
          - **start** *number*
      - **protocol** (*number* | *keyword*)
      - **router-instance** *string*
      - **src-ip**
        - **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)
        - **ip-prefix-list** *reference*
        - **mask** *string*
      - **src-port**
        - **eq** *number*
        - **mask** *number*
        - **port-list** *reference*
        - **range**
          - **end** *number*
          - **start** *number*
      - **tcp-flags**
        - **ack** *boolean*
        - **syn** *boolean*
  - **ipv6-filter**
    - **admin-state** *keyword*
    - **entry** *number*
      - **action**
        - **accept**

configure system security cpm-filter ipv6-filter entry action default

- **default**
- **drop**
- **queue** *reference*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **description** *string*
- **log** *reference*
- **match**
  - **dscp** *keyword*
  - **dst-ip**
    - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
    - **ipv6-prefix-list** *reference*
    - **mask** *string*
  - **dst-port**
    - **eq** *number*
    - **mask** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **extension-header**
    - **hop-by-hop** *boolean*
  - **flow-label** *number*
  - **fragment** *keyword*
  - **icmp**
    - **code** *number*
    - **type** *number*
  - **next-header** (*number* | *keyword*)
  - **port**
    - **eq** *number*
    - **mask** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **router-instance** *string*
  - **src-ip**
    - **address** (*ipv6-prefix-with-host-bits* | *ipv6-address*)
    - **ipv6-prefix-list** *reference*
    - **mask** *string*
  - **src-port**
    - **eq** *number*
    - **mask** *number*
    - **port-list** *reference*
    - **range**
      - **end** *number*
      - **start** *number*
  - **tcp-flags**
    - **ack** *boolean*
    - **syn** *boolean*
- **mac-filter**
  - **admin-state** *keyword*
  - **entry** *number*
  - **action**
    - **accept**
    - **default**
    - **drop**
    - **queue** *reference*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **log** *reference*
  - **match**
    - **cfm-opcode**



configure system security cpm-filter mac-filter entry match cfm-opcode eq

- **eq** *number*
  - **gt** *number*
  - **lt** *number*
  - **range**
    - **end** *number*
    - **start** *number*
  - **dst-mac**
    - **address** *string*
    - **mask** *string*
  - **etype** *string*
  - **frame-type** *keyword*
  - **llc-dsap**
    - **dsap** *number*
    - **mask** *number*
  - **llc-ssap**
    - **mask** *number*
    - **ssap** *number*
  - **service** *reference*
  - **src-mac**
    - **address** *string*
    - **mask** *string*
- **cpm-queue**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **queue** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cbs** *number*
    - **mbs** *number*
    - **rate**
      - **cir** (*number* | *keyword*)
      - **pir** (*number* | *keyword*)
- **cpu-protection**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ip-src-monitoring**
    - **included-protocols**
      - **dhcp** *boolean*
      - **gtp** *boolean*
      - **icmp** *boolean*
      - **igmp** *boolean*
  - **link-specific-rate** (*number* | *keyword*)
  - **policy** *number*
    - **alarm** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **eth-cfm**
      - **entry** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **level start** *number* **end** *number*
        - **opcode start** *number* **end** *number*
        - **pir** (*number* | *keyword*)
    - **out-profile-rate**
      - **log-events** *boolean*
      - **pir** (*number* | *keyword*)
    - **overall-rate** (*number* | *keyword*)
    - **per-source-parameters**
      - **ip-src-monitoring**
        - **limit-dhcp-ci-addr-zero** *boolean*
    - **per-source-rate** (*number* | *keyword*)
  - **port-overall-rate**
    - **action-low-priority** *boolean*

configure system security cpu-protection port-overall-rate pir

- **pir** (*number* | *keyword*)
- **protocol-protection**
  - **allow-sham-links** *boolean*
  - **block-pim-tunneled** *boolean*
- **dist-cpu-protection**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **policy** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **local-monitoring-policer** *string*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **exceed-action** *keyword*
      - **log-events** *keyword*
      - **rate**
        - **kbps**
          - **limit** (*keyword* | *number*)
          - **mbs** *number*
        - **packets**
          - **initial-delay** *number*
          - **limit** (*keyword* | *number*)
          - **within** *number*
- **protocol** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **dynamic-parameters**
    - **detection-time** *number*
    - **exceed-action**
      - **action** *keyword*
      - **hold-down** (*keyword* | *number*)
    - **log-events** *keyword*
    - **rate**
      - **kbps**
        - **limit** (*keyword* | *number*)
        - **mbs** *number*
      - **packets**
        - **initial-delay** *number*
        - **limit** (*keyword* | *number*)
        - **within** *number*
  - **enforcement**
    - **dynamic**
      - **mon-policer-name** *reference*
    - **dynamic-local-mon-bypass**
    - **static**
      - **policer-name** *reference*
- **static-policer** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **description** *string*
  - **detection-time** *number*
  - **exceed-action**
    - **action** *keyword*
    - **hold-down** (*keyword* | *number*)
  - **log-events** *keyword*
  - **rate**
    - **kbps**
      - **limit** (*keyword* | *number*)
      - **mbs** *number*
    - **packets**
      - **initial-delay** *number*
      - **limit** (*keyword* | *number*)

configure system security dist-cpu-protection policy static-policer rate packets within

```

    - within number
  - type keyword
- dot1x
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- radius-policy string
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - retry number
  - server number
    - accounting-port number
    - address string
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-port number
    - secret string
    - type keyword
  - source-address string
  - timeout number
- ftp-server boolean
- hash-control
  - apply-groups reference
  - apply-groups-exclude reference
  - management-interface
    - classic-cli
      - read-algorithm keyword
      - write-algorithm keyword
    - grpc
      - hash-algorithm keyword
    - md-cli
      - hash-algorithm keyword
    - netconf
      - hash-algorithm keyword
- keychains
  - keychain string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - bidirectional
      - entry number
        - admin-state keyword
        - algorithm keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authentication-key string
        - begin-time string
        - option keyword
        - tolerance (number | keyword)
    - description string
    - receive
      - entry number
        - admin-state keyword
        - algorithm keyword
        - apply-groups reference
        - apply-groups-exclude reference
        - authentication-key string
        - begin-time string
        - end-time string
        - tolerance (number | keyword)
    - send
      - entry number
        - admin-state keyword

```

configure system security keychains keychain send entry algorithm

- **algorithm** *keyword*
- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **authentication-key** *string*
- **begin-time** *string*
- **tcp-option-number**
  - **receive** *keyword*
  - **send** *keyword*
- **management**
  - **allow-ftp** *boolean*
  - **allow-grpc** *boolean*
  - **allow-netconf** *boolean*
  - **allow-ssh** *boolean*
  - **allow-telnet** *boolean*
  - **allow-telnet6** *boolean*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **management-access-filter**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **ip-filter**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action** *keyword*
  - **entry** *number*
    - **action** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **log-events** *boolean*
  - **match**
    - **dst-port**
      - **mask** *number*
      - **port** *number*
    - **mgmt-port**
      - **cpm**
      - **lag** *string*
      - **port-id** *string*
    - **protocol** (*number* | *keyword*)
    - **router-instance** *string*
    - **src-ip**
      - **address** (*ipv4-prefix* | *ipv4-address*)
      - **ip-prefix-list** *reference*
      - **mask** *string*
    - **src-port**
      - **mask** *number*
      - **port** *number*
- **ipv6-filter**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action** *keyword*
  - **entry** *number*
    - **action** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **log-events** *boolean*
  - **match**
    - **dst-port**
      - **mask** *number*
      - **port** *number*
    - **flow-label** *number*

configure system security management-access-filter ipv6-filter entry match mgmt-port

- **mgmt-port**
  - **cpm**
  - **lag** *string*
  - **port-id** *string*
  - **next-header** (*number* | *keyword*)
  - **router-instance** *string*
  - **src-ip**
    - **address** (*ipv6-prefix* | *ipv6-address*)
    - **ipv6-prefix-list** *reference*
    - **mask** *string*
  - **src-port**
    - **mask** *number*
    - **port** *number*
- **mac-filter**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **default-action** *keyword*
  - **entry** *number*
    - **action** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **description** *string*
    - **log-events** *boolean*
    - **match**
      - **cfm-opcode**
        - **eq** *number*
        - **gt** *number*
        - **lt** *number*
        - **range**
          - **end** *number*
          - **start** *number*
      - **dot1p**
        - **mask** *number*
        - **priority** *number*
      - **dst-mac**
        - **address** *string*
        - **mask** *string*
      - **etype** *string*
      - **frame-type** *keyword*
      - **llc-dsap**
        - **dsap** *number*
        - **mask** *number*
      - **llc-ssap**
        - **mask** *number*
        - **ssap** *number*
      - **service** *string*
      - **snap-oui** *keyword*
      - **snap-pid** *number*
      - **src-mac**
        - **address** *string*
        - **mask** *string*
  - **per-peer-queuing** *boolean*
  - **pki**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **ca-profile** *string*
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **auto-crl-update**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*

configure system security pki ca-profile auto-crl-update crl-urls

```

- crl-urls
  - url-entry number
    - apply-groups reference
    - apply-groups-exclude reference
    - transmission-profile reference
    - url http-url-path-loose
  - periodic-update-interval number
  - pre-update-time number
  - retry-interval number
  - schedule-type keyword
- cert-file string
- cmpv2
  - accept-unprotected-message
    - error-message boolean
    - pkiconf-message boolean
  - always-set-sender-for-ir boolean
  - http
    - response-timeout number
    - version keyword
  - key-list
    - key string
      - apply-groups reference
      - apply-groups-exclude reference
      - password string
    - recipient-subject string
    - response-signing-cert string
    - response-signing-use-extracert
    - same-recipient-nonce-for-poll-request boolean
    - signing-cert-subject string
  - url
    - service-name string
    - transmission-profile reference
    - url-string http-optional-url-loose
  - use-ca-subject
- crl-file string
- description string
- ocsp
  - responder-url http-optional-url-loose
  - service-name string
  - transmission-profile reference
- revocation-check keyword
- certificate-auto-update string
  - apply-groups reference
  - apply-groups-exclude reference
  - key-file-name string
  - profile reference
- certificate-display-format keyword
- certificate-expiration-warning
  - hours number
  - repeat-hours number
- certificate-update-profile string
  - after-issue number
  - apply-groups reference
  - apply-groups-exclude reference
  - before-expiry number
  - cmpv2
    - ca-profile reference
  - dsa
    - key-size number
  - ecdsa
    - curve keyword
  - est
    - est-profile reference
  - hash-algorithm keyword

```

configure system security pki certificate-update-profile retry-interval

```

- retry-interval number
- rsa
  - key-size number
  - same-as-existing-key
- common-name-list string
  - apply-groups reference
  - apply-groups-exclude reference
  - common-name number
    - apply-groups reference
    - apply-groups-exclude reference
    - cn-type keyword
    - cn-value string
- crl-expiration-warning
  - hours number
  - repeat-hours number
- est-profile string
  - apply-groups reference
  - apply-groups-exclude reference
  - check-id-kp-cmcra-only boolean
  - client-tls-profile string
  - http-authentication
    - password string
    - username string
  - server
    - fqdn string
    - ipv4 string
    - ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)
    - port number
  - transmission-profile string
- imported-format keyword
- maximum-cert-chain-depth number
- python-script
  - apply-groups reference
  - apply-groups-exclude reference
  - authorization
    - cron
      - cli-user reference
    - event-handler
      - cli-user reference
- snmp
  - access string context string security-model keyword security-level keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - notify string
  - prefix-match keyword
  - read string
  - write string
  - apply-groups reference
  - apply-groups-exclude reference
  - attempts
    - apply-groups reference
    - apply-groups-exclude reference
    - count number
    - lockout number
    - time number
  - community string
    - access-permissions keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - source-access-list reference
    - version keyword
  - source-access-list string
    - apply-groups reference
    - apply-groups-exclude reference

```

configure system security snmp source-access-list source-host

- **source-host** *string*
  - **address** (*ipv4-address-no-zone | ipv6-address-no-zone*)
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **usm-community** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **group** *string*
  - **source-access-list** *reference*
- **view** *string subtree string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **mask** *string*
  - **type** *keyword*
- **source-address**
  - **ipv4** *keyword*
    - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **interface-name** *string*
  - **ipv6** *keyword*
    - **address** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
- **ssh**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authentication-method**
    - **client**
      - **public-key-only** *boolean*
    - **server**
      - **public-key-only** *boolean*
  - **client-cipher-list-v2**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cipher** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **name** *keyword*
  - **client-kex-list-v2**
    - **kex** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **name** *keyword*
  - **client-mac-list-v2**
    - **mac** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
    - **name** *keyword*
  - **key-re-exchange**
    - **client**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **mbytes** (*number | keyword*)
      - **minutes** (*number | keyword*)
    - **server**
      - **admin-state** *keyword*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **mbytes** (*number | keyword*)
      - **minutes** (*number | keyword*)
  - **permit-empty-passwords** *boolean*
  - **preserve-key** *boolean*



configure system security ssh server-admin-state

- **server-admin-state** *keyword*
- **server-cipher-list-v2**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cipher** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
- **server-kex-list-v2**
  - **kex** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
- **server-mac-list-v2**
  - **mac** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
- **system-passwords**
  - **admin-password** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
- **tech-support**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **ts-location** (*ts-sat-url* | *cflash-url* | *string*)
- **telnet-server** *boolean*
- **telnet6-server** *boolean*
- **tls**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cert-profile** *string*
    - **admin-state** *keyword*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **entry** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **certificate-file** *string*
      - **key-file** *string*
      - **send-chain**
        - **ca-profile** *reference*
  - **client-cipher-list** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **tls12-cipher** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **name** *keyword*
    - **tls13-cipher** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **name** *keyword*
  - **client-group-list** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **tls13-group** *number*
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **name** *keyword*
  - **client-signature-list** *string*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **tls13-signature** *number*

configure system security tls client-signature-list tls13-signature apply-groups

- **apply-groups** *reference*
- **apply-groups-exclude** *reference*
- **name** *keyword*
- **client-tls-profile** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **cert-profile** *reference*
  - **cipher-list** *reference*
  - **group-list** *reference*
  - **protocol-version** *keyword*
  - **signature-list** *reference*
  - **status-verify**
    - **default-result** *keyword*
  - **trust-anchor-profile** *reference*
- **server-cipher-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tls12-cipher** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
  - **tls13-cipher** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
- **server-group-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tls13-group** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
- **server-signature-list** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **tls13-signature** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **name** *keyword*
- **server-tls-profile** *string*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **authenticate-client**
    - **common-name-list** *reference*
    - **trust-anchor-profile** *reference*
  - **cert-profile** *reference*
  - **cipher-list** *reference*
  - **group-list** *reference*
  - **protocol-version** *keyword*
  - **signature-list** *reference*
  - **status-verify**
    - **default-result** *keyword*
  - **tls-re-negotiate-timer** *number*
- **trust-anchor-profile** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **trust-anchor** *reference*
- **user-params**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **attempts**
    - **count** *number*

## configure system security user-params attempts lockout

- **lockout** *number*
- **time** *number*
- **authentication-order**
  - **exit-on-reject** *boolean*
  - **order** *keyword*
- **local-user**
  - **password**
    - **aging** *number*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **complexity-rules**
      - **allow-user-name** *boolean*
      - **credits**
        - **lowercase** *number*
        - **numeric** *number*
        - **special-character** *number*
        - **uppercase** *number*
      - **minimum-classes** *number*
      - **minimum-length** *number*
      - **repeated-characters** *number*
      - **required**
        - **lowercase** *number*
        - **numeric** *number*
        - **special-character** *number*
        - **uppercase** *number*
    - **hashing** *keyword*
    - **history-size** *number*
    - **minimum-age** *number*
    - **minimum-change** *number*
  - **user** *string*
    - **access**
      - **console** *boolean*
      - **ftp** *boolean*
      - **grpc** *boolean*
      - **li** *boolean*
      - **netconf** *boolean*
      - **snmp** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **cli-engine** *keyword*
    - **console**
      - **cannot-change-password** *boolean*
      - **login-exec** (*sat-url* | *cflash-url* | *ftp-tftp-url* | *filename*)
      - **member** *reference*
      - **new-password-at-login** *boolean*
    - **home-directory** (*sat-url* | *cflash-without-slot-url*)
    - **password** *string*
    - **public-keys**
      - **ecdsa**
        - **ecdsa-key** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **description** *string*
          - **key-value** *string*
      - **rsa**
        - **rsa-key** *number*
          - **apply-groups** *reference*
          - **apply-groups-exclude** *reference*
          - **description** *string*
          - **key-value** *string*
    - **restricted-to-home** *boolean*
    - **save-when-restricted** *boolean*
    - **snmp**
      - **apply-groups** *reference*

configure system security user-params local-user user snmp apply-groups-exclude

```

    - apply-groups-exclude reference
    - authentication
      - authentication-key string
      - authentication-protocol keyword
      - privacy
        - privacy-key string
        - privacy-protocol keyword
      - group string
    - ssh-authentication-method
      - client
        - public-key-only keyword
      - server
        - public-key-only keyword
  - vprn-network-exceptions
    - count number
    - window number
- selective-fib boolean
- software-repository string
  - apply-groups reference
  - apply-groups-exclude reference
  - description string
  - primary-location string
  - secondary-location string
  - tertiary-location string
- switch-fabric
  - apply-groups reference
  - apply-groups-exclude reference
  - failure-recovery
    - admin-state keyword
  - sfm-loss-threshold number
- telemetry
  - apply-groups reference
  - apply-groups-exclude reference
  - destination-group string
    - allow-unsecure-connection
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - destination (ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-
domain-name)
  - port number
    - apply-groups reference
    - apply-groups-exclude reference
    - router-instance string
  - tcp-keepalive
    - admin-state keyword
    - idle-time number
    - interval number
    - retries number
  - tls-client-profile reference
- notification-bundling
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - max-msg-count number
  - max-time-granularity number
- persistent-subscriptions
  - delay-on-boot number
  - subscription string
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - destination-group reference
    - encoding keyword

```

configure system telemetry persistent-subscriptions subscription local-source-address

```

    - local-source-address (ipv4-address-no-zone | ipv6-address-no-zone)
    - mode keyword
    - originated-qos-marking keyword
    - sample-interval number
    - sensor-group reference
  - sensor-groups
    - sensor-group string
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - path string
  - thresholds
    - cflash-cap-alarm-percent string
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number
    - rising-threshold number
    - rmon-event-type keyword
    - startup-alarm keyword
    - cflash-cap-warn-percent string
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number
    - rising-threshold number
    - rmon-event-type keyword
    - startup-alarm keyword
    - kb-memory-use-alarm
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number
    - rising-threshold number
    - rmon-event-type keyword
    - startup-alarm keyword
    - kb-memory-use-warn
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-threshold number
    - interval number
    - rising-threshold number
    - rmon-event-type keyword
    - startup-alarm keyword
  - rmon
    - alarm number
    - apply-groups reference
    - apply-groups-exclude reference
    - falling-event number
    - falling-threshold number
    - interval number
    - owner string
    - rising-event number
    - rising-threshold number
    - sample-type keyword
    - startup-alarm keyword
    - variable-oid string
    - event number
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - event-type keyword
    - owner string
  - time

```

## configure system time apply-groups

```

- apply-groups reference
- apply-groups-exclude reference
- dst-zone string
  - apply-groups reference
  - apply-groups-exclude reference
  - end
    - day keyword
    - hours-minutes string
    - month keyword
    - week keyword
  - offset number
  - start
    - day keyword
    - hours-minutes string
    - month keyword
    - week keyword
- ntp
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
  - authentication-check boolean
  - authentication-key number
    - apply-groups reference
    - apply-groups-exclude reference
    - key string
    - type keyword
  - authentication-keychain reference
  - broadcast reference interface-name string
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-keychain reference
    - key-id reference
    - ttl number
    - version number
  - broadcast-client string interface-name string
    - apply-groups reference
    - apply-groups-exclude reference
    - authenticate boolean
  - multicast
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-keychain reference
    - key-id reference
    - version number
  - multicast-client
    - apply-groups reference
    - apply-groups-exclude reference
    - authenticate boolean
  - ntp-server
    - authenticate boolean
  - peer (ipv4-address-no-zone | ipv6-address-no-zone) router-instance string
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-keychain reference
    - key-id reference
    - prefer boolean
    - version number
  - server (ipv4-address-no-zone | ipv6-address-no-zone | keyword) router-
instance string
    - apply-groups reference
    - apply-groups-exclude reference
    - authentication-keychain reference
    - key-id reference
    - prefer boolean

```

---

configure system time ntp server version

- **version** *number*
- **prefer-local-time** *boolean*
- **sntp**
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **server** (*ipv4-address-no-zone | ipv6-address-no-zone*)
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **interval** *number*
    - **prefer** *boolean*
    - **version** *number*
  - **sntp-state** *keyword*
- **zone**
  - **non-standard**
    - **name** *string*
    - **offset** *string*
  - **standard**
    - **name** *keyword*
- **transmission-profile** *string*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **http-version** *keyword*
  - **ipv4-source-address** *string*
  - **ipv6-source-address** *string*
  - **redirection** *number*
  - **retry** *number*
  - **router-instance** *string*
  - **timeout** *number*
- **usb** *keyword*
  - **admin-state** *keyword*
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*

### 3.46.1 system command descriptions

#### system

Synopsis	Enter the <b>system</b> context
Context	<b>configure system</b>
Tree	<a href="#">system</a>
Description	Commands in this context enable configuring of general system level functions and router management protocols.
Introduced	16.0.R1
Platforms	All

#### alarm-contact-in-power *boolean*

Synopsis	Power the output pin on the CPM alarm interface port
Context	<b>configure system alarm-contact-in-power <i>boolean</i></b>
Tree	<a href="#">alarm-contact-in-power</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-a

#### alarm-contact-input [[input-pin-number](#)] *number*

Synopsis	Enter the <b>alarm-contact-input</b> list instance
Context	<b>configure system alarm-contact-input <i>number</i></b>
Tree	<a href="#">alarm-contact-input</a>
Introduced	16.0.R1
Platforms	7750 SR-a

#### [[input-pin-number](#)] *number*

Synopsis	Alarm contact input pin
Context	<b>configure system alarm-contact-input <i>number</i></b>
Tree	<a href="#">alarm-contact-input</a>
Range	1 to 4



Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-a

### **admin-state** *keyword*

Synopsis	Administrative state of the alarm contact input
Context	<b>configure</b> <a href="#">system</a> <a href="#">alarm-contact-input</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7750 SR-a

### **clear-message** *string*

Synopsis	Text message sent in the log event when an alarm clears
Context	<b>configure</b> <a href="#">system</a> <a href="#">alarm-contact-input</a> <i>number</i> <a href="#">clear-message</a> <i>string</i>
Tree	<a href="#">clear-message</a>
Description	<p>This command configures a text message to be included in the log event that is sent when the system clears an alarm.</p> <p>The system generates the default "Alarm Input Cleared" message if no message is configured. The <b>clear-message</b> string is included in the log event when the pin changes to the normal state.</p>
String Length	1 to 80
Default	Alarm Input Cleared
Introduced	16.0.R1
Platforms	7750 SR-a

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">alarm-contact-input</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 160
Introduced	16.0.R1

Platforms 7750 SR-a

### **normal-state** *keyword*

Synopsis Normal state associated with the alarm contact input

Context **configure** [system](#) [alarm-contact-input](#) *number* [normal-state](#) *keyword*

Tree [normal-state](#)

Options open, closed

Default open

Introduced 16.0.R1

Platforms 7750 SR-a

### **trigger-message** *string*

Synopsis Text message sent in the log event when input changes

Context **configure** [system](#) [alarm-contact-input](#) *number* [trigger-message](#) *string*

Tree [trigger-message](#)

Description This command configures a text message to be included in the log event that is sent when the system generates an alarm.

The system generates the default message "Alarm Input Triggered" if no message is configured. This command's message string is included in the log event when the pin changes from the normal state.

String Length 1 to 80

Default Alarm Input Triggered

Introduced 16.0.R1

Platforms 7750 SR-a

### **alarms**

Synopsis Enter the **alarms** context

Context **configure** [system](#) [alarms](#)

Tree [alarms](#)

Introduced 16.0.R4

Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of the system alarm
Context	<b>configure</b> <a href="#">system</a> <a href="#">alarms</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**max-cleared** *number*

Synopsis	Maximum number of cleared alarms
Context	<b>configure</b> <a href="#">system</a> <a href="#">alarms</a> <b>max-cleared</b> <i>number</i>
Tree	<a href="#">max-cleared</a>
Range	0 to 500
Default	500
Introduced	16.0.R4
Platforms	All

**allow-boot-license-violations** *boolean*

Synopsis	Allow boot license violations in boot-up configuration
Context	<b>configure</b> <a href="#">system</a> <b>allow-boot-license-violations</b> <i>boolean</i>
Tree	<a href="#">allow-boot-license-violations</a>
Default	true
Introduced	16.0.R4
Platforms	All

**bluetooth**

Synopsis	Enter the <b>bluetooth</b> context
Context	<b>configure</b> <a href="#">system</a> <b>bluetooth</b>
Tree	<a href="#">bluetooth</a>
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

**admin-state** *keyword*

Synopsis	Administrative state of the Bluetooth module
Context	<b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.2.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

**advertising-timeout** *number*

Synopsis	Bluetooth advertising timeout
Context	<b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <b>advertising-timeout</b> <i>number</i>
Tree	<a href="#">advertising-timeout</a>
Range	30 to 3600
Units	seconds
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

**device** [[mac-address](#)] *string*

Synopsis	Enter the <b>device</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <b>device</b> <i>string</i>
Tree	<a href="#">device</a>
Max. Instances	5
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

**[mac-address]** *string*

Synopsis	Bluetooth client device MAC address
Context	<b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <b>device</b> <i>string</i>
Tree	<a href="#">device</a>

Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <a href="#">device</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

### **module** [[cpm-slot](#)] *string*

Synopsis	Enter the <b>module</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <a href="#">module</a> <i>string</i>
Tree	<a href="#">module</a>
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

### **[cpm-slot]** *string*

Synopsis	CPM slot on which the module resides
Context	<b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <a href="#">module</a> <i>string</i>
Tree	<a href="#">module</a>
String Length	1
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

### **provisioned-identifier** *string*

Synopsis	Bluetooth module ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">bluetooth</a> <a href="#">module</a> <i>string</i> <a href="#">provisioned-identifier</a> <i>string</i>

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Tree	<a href="#">provisioned-identifier</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

### **pairing-button** *boolean*

Synopsis	Enable the pairing button
Context	<b>configure</b> <a href="#">system bluetooth pairing-button</a> <i>boolean</i>
Tree	<a href="#">pairing-button</a>
Default	false
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

### **passkey** *string*

Synopsis	Bluetooth passkey
Context	<b>configure</b> <a href="#">system bluetooth passkey</a> <i>string</i>
Tree	<a href="#">passkey</a>
String Length	6
Default	123456
Introduced	16.0.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

### **power-mode** *keyword*

Synopsis	Bluetooth module power mode
Context	<b>configure</b> <a href="#">system bluetooth power-mode</a> <i>keyword</i>
Tree	<a href="#">power-mode</a>
Options	manual, automatic
Default	automatic
Introduced	20.2.R1
Platforms	7750 SR-1, 7750 SR-s, 7950 XRS-20e

### **boot-bad-exec** *string*

Synopsis	CLI script file to execute following a failed boot-up
Context	<b>configure</b> <a href="#">system</a> <a href="#">boot-bad-exec</a> <i>string</i>
Tree	<a href="#">boot-bad-exec</a>
Description	This command configures the name of the CLI script file to be run following the failure of a boot-up configuration. <b>Note:</b> This command has no effect in model-driven mode.
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

### **boot-good-exec** *string*

Synopsis	CLI script file to execute following successful boot-up
Context	<b>configure</b> <a href="#">system</a> <a href="#">boot-good-exec</a> <i>string</i>
Tree	<a href="#">boot-good-exec</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

### **central-frequency-clock**

Synopsis	Enter the <b>central-frequency-clock</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a>
Tree	<a href="#">central-frequency-clock</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **bits**

Synopsis	Enter the <b>bits</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a>
Tree	<a href="#">bits</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## input

Synopsis	Enter the <b>input</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">input</a>
Tree	<a href="#">input</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of the BITS input timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">input</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## interface-type *keyword*

Synopsis	Interface type of the BITS timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">interface-type</a> <i>keyword</i>
Tree	<a href="#">interface-type</a>
Options	ds1-esf, ds1-sf, e1-pcm30crc, e1-pcm31crc, g703-2048khz
Default	ds1-esf
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## output

Synopsis	Enter the <b>output</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a>
Tree	<a href="#">output</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**admin-state** *keyword*

Synopsis	Administrative state of BITS output timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**line-length** *keyword*

Synopsis	Line length for the BITS output timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">line-length</a> <i>keyword</i>
Tree	<a href="#">line-length</a>
Options	length-not-applicable, 110, 220, 330, 440, 550, 660
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ql-minimum** *keyword*

Synopsis	Minimum signal quality level for BITSout port
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">ql-minimum</a> <i>keyword</i>
Tree	<a href="#">ql-minimum</a>
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**source** *keyword*

Synopsis	Source of the BITS output timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">source</a> <i>keyword</i>
Tree	<a href="#">source</a>
Options	line-ref, internal-clock
Default	line-ref

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **squelch** *boolean*

Synopsis	Squelch the signal of the BITS output timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">output</a> <a href="#">squelch</a> <i>boolean</i>
Tree	<a href="#">squelch</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ql-override** *keyword*

Synopsis	Override for the quality level of the timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">ql-override</a> <i>keyword</i>
Tree	<a href="#">ql-override</a>
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ssm-bit** *number*

Synopsis	Sa bit to convey SSM information
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">bits</a> <a href="#">ssm-bit</a> <i>number</i>
Tree	<a href="#">ssm-bit</a>
Range	4 to 8
Default	8
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **gnss**

Synopsis	Enter the <b>gnss</b> context
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Context	<b>configure system central-frequency-clock gnss</b>
Tree	<a href="#">gnss</a>
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **admin-state** *keyword*

Synopsis	Administrative state of the gnss timing reference
Context	<b>configure system central-frequency-clock gnss admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **ql-override** *keyword*

Synopsis	Quality level override for a timing reference
Context	<b>configure system central-frequency-clock gnss ql-override</b> <i>keyword</i>
Tree	<a href="#">ql-override</a>
Options	unused, prs, stu, st2, tnc, st3e, st3
Default	unused
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **ptp**

Synopsis	Enter the <b>ptp</b> context
Context	<b>configure system central-frequency-clock ptp</b>
Tree	<a href="#">ptp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the PTP timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ptp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ql-override** *keyword*

Synopsis	Quality level of a timing reference that overrides any value provided by the reference's SSM process
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ptp</a> <b>ql-override</b> <i>keyword</i>
Tree	<a href="#">ql-override</a>
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ql-minimum** *keyword*

Synopsis	Minimum signal quality level for system timing module
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>ql-minimum</b> <i>keyword</i>
Tree	<a href="#">ql-minimum</a>
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**ql-selection** *boolean*

Synopsis	Consider quality level in system and BITS output timing
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>ql-selection</b> <i>boolean</i>

Tree	<a href="#">ql-selection</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ref-order

Synopsis	Enter the <b>ref-order</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref-order</a>
Tree	<a href="#">ref-order</a>
Description	<p>Commands in this context specify the priority order of the synchronous equipment timing subsystem.</p> <p>If a reference source is disabled, this command defines the next reference source for the clock. If all reference sources are disabled, clocking is derived from a local oscillator.</p> <p>If a timing reference is linked to a source port that is operationally down, the port is no longer a qualified, valid reference.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## fifth keyword

Synopsis	Fifth preferred timing reference source
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref-order</a> <i>fifth keyword</i>
Tree	<a href="#">fifth</a>
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## first keyword

Synopsis	First preferred timing reference source
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref-order</a> <i>first keyword</i>
Tree	<a href="#">first</a>
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fourth keyword**

Synopsis	Fourth preferred timing reference source
Context	<b>configure system central-frequency-clock ref-order fourth keyword</b>
Tree	<a href="#">fourth</a>
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **second keyword**

Synopsis	Second preferred timing reference source
Context	<b>configure system central-frequency-clock ref-order second keyword</b>
Tree	<a href="#">second</a>
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sixth keyword**

Synopsis	Sixth preferred timing reference source
Context	<b>configure system central-frequency-clock ref-order sixth keyword</b>
Tree	<a href="#">sixth</a>
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **third keyword**

Synopsis	Third preferred timing reference source
Context	<b>configure system central-frequency-clock ref-order third keyword</b>
Tree	<a href="#">third</a>
Options	ref1, ref2, bits, ptp, none, synce, gnss
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ref1

Synopsis Enter the **ref1** context  
 Context **configure system central-frequency-clock ref1**  
 Tree [ref1](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis Administrative state of the first timing reference  
 Context **configure system central-frequency-clock ref1 admin-state *keyword***  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ql-override *keyword*

Synopsis Quality level override of a timing reference  
 Context **configure system central-frequency-clock ref1 ql-override *keyword***  
 Tree [ql-override](#)  
 Options unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2  
 Default unused  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## source-port *string*

Synopsis Source port for the first timing reference  
 Context **configure system central-frequency-clock ref1 source-port *string***  
 Tree [source-port](#)

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ref2

Synopsis	Enter the <b>ref2</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref2</a>
Tree	<a href="#">ref2</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of the second timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ql-override *keyword*

Synopsis	Quality level override of a timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <a href="#">ql-override</a> <i>keyword</i>
Tree	<a href="#">ql-override</a>
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## source-port *string*

Synopsis	Source port for the second timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">ref2</a> <a href="#">source-port</a> <i>string</i>



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Tree	<a href="#">source-port</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **revert** *boolean*

Synopsis	Revert to higher-priority reference source
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>revert</b> <i>boolean</i>
Tree	<a href="#">revert</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **sync**

Synopsis	Enter the <b>sync</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>sync</b>
Tree	<a href="#">sync</a>
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the SyncE timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>sync</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ql-override** *keyword*

Synopsis	Override the quality level of a timing reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <b>sync</b> <b>ql-override</b> <i>keyword</i>

Tree	<a href="#">ql-override</a>
Options	unused, prs, stu, st2, tnc, st3e, st3, prc, ssua, ssub, sec, eec1, eec2
Default	unused
Introduced	19.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **wait-to-restore** *number*

Synopsis	Time to re-validate a previously failed input reference
Context	<b>configure</b> <a href="#">system</a> <a href="#">central-frequency-clock</a> <a href="#">wait-to-restore</a> <i>number</i>
Tree	<a href="#">wait-to-restore</a>
Range	1 to 12
Units	minutes
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cli-code** *string*

Synopsis	CLLI code value for the system
Context	<b>configure</b> <a href="#">system</a> <a href="#">cli-code</a> <i>string</i>
Tree	<a href="#">cli-code</a>
String Length	11
Introduced	16.0.R1
Platforms	All

### **congestion-management** *boolean*

Synopsis	Enable Virtual Service Router congestion management
Context	<b>configure</b> <a href="#">system</a> <a href="#">congestion-management</a> <i>boolean</i>
Tree	<a href="#">congestion-management</a>
Default	false
Introduced	16.0.R1
Platforms	VSR

**contact** *string*

Synopsis	Contact information for the managed node
Context	<b>configure</b> <a href="#">system</a> <a href="#">contact</a> <i>string</i>
Tree	<a href="#">contact</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**coordinates** *string*

Synopsis	GPS coordinates for the system location
Context	<b>configure</b> <a href="#">system</a> <a href="#">coordinates</a> <i>string</i>
Tree	<a href="#">coordinates</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**cpm-http-redirect**

Synopsis	Enter the <b>cpm-http-redirect</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">cpm-http-redirect</a>
Tree	<a href="#">cpm-http-redirect</a>
Introduced	16.0.R4
Platforms	All

**optimized-mode** *boolean*

Synopsis	Enable optimized mode for CPM HTTP redirect messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">cpm-http-redirect</a> <a href="#">optimized-mode</a> <i>boolean</i>
Tree	<a href="#">optimized-mode</a>
Default	true
Introduced	16.0.R4
Platforms	All

**cron**

Synopsis	Enter the <b>cron</b> context
Context	<b>configure system cron</b>
Tree	<a href="#">cron</a>
Introduced	16.0.R1
Platforms	All

**schedule** [[schedule-name](#)] *string owner string*

Synopsis	Enter the <b>schedule</b> list instance
Context	<b>configure system cron schedule</b> <i>string owner string</i>
Tree	<a href="#">schedule</a>
Max. Instances	255
Introduced	16.0.R1
Platforms	All

**[schedule-name]** *string*

Synopsis	Schedule name
Context	<b>configure system cron schedule</b> <i>string owner string</i>
Tree	<a href="#">schedule</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**owner** *string*

Synopsis	Schedule owner
Context	<b>configure system cron schedule</b> <i>string owner string</i>
Tree	<a href="#">schedule</a>
String Length	1 to 32
MD-CLI	TIMOS CLI
Default	

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the CRON schedule
Context	<b>configure</b> <b>system</b> <b>cron</b> <b>schedule</b> <i>string</i> <b>owner</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**count** *number*

Synopsis	Number of times to repeat a periodic schedule run
Context	<b>configure</b> <b>system</b> <b>cron</b> <b>schedule</b> <i>string</i> <b>owner</b> <i>string</i> <b>count</b> <i>number</i>
Tree	<b>count</b>
Range	1 to 65535
Introduced	16.0.R1
Platforms	All

**day-of-month** *number*

Synopsis	Days in a month when a schedule runs
Context	<b>configure</b> <b>system</b> <b>cron</b> <b>schedule</b> <i>string</i> <b>owner</b> <i>string</i> <b>day-of-month</b> <i>number</i>
Tree	<b>day-of-month</b>
Range	-31 to -1   1 to 31
Max. Instances	62
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**end-time**

Synopsis	Enter the <b>end-time</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">end-time</a>
Tree	<a href="#">end-time</a>
Introduced	16.0.R1
Platforms	All

**date-and-time string**

Synopsis	Date and time to stop triggering the schedule
Context	<b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">end-time</a> <a href="#">date-and-time</a> <i>string</i>
Tree	<a href="#">date-and-time</a>
Notes	The following elements are part of a choice: <b>date-and-time</b> or ( <b>day</b> and <b>time</b> ).
Introduced	16.0.R1
Platforms	All

**day keyword**

Synopsis	Day to stop triggering the schedule
Context	<b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">end-time</a> <a href="#">day</a> <i>keyword</i>
Tree	<a href="#">day</a>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Notes	The following elements are part of a choice: <b>date-and-time</b> or ( <b>day</b> and <b>time</b> ).
Introduced	16.0.R1
Platforms	All

### **time string**

Synopsis	Time to stop triggering the schedule
Context	<b>configure system cron schedule string owner string end-time time string</b>
Tree	<b>time</b>
String Length	5
Notes	The following elements are part of a choice: <b>date-and-time</b> or ( <b>day</b> and <b>time</b> ).
Introduced	16.0.R1
Platforms	All

### **hour number**

Synopsis	Hours within a day when the schedule runs
Context	<b>configure system cron schedule string owner string hour number</b>
Tree	<b>hour</b>
Range	0 to 23
Max.	24
Instances	
Introduced	16.0.R1
Platforms	All

### **interval number**

Synopsis	Time between each periodic schedule run
Context	<b>configure system cron schedule string owner string interval number</b>
Tree	<b>interval</b>
Range	30 to 42949672
Units	seconds
Introduced	16.0.R1
Platforms	All

### **minute number**

Synopsis	Minutes in an hour when the schedule runs
Context	<b>configure system cron schedule string owner string minute number</b>

Tree	<a href="#">minute</a>
Range	0 to 59
Max. Instances	60
Introduced	16.0.R1
Platforms	All

### **month** (*keyword | number*)

Synopsis	Months when the schedule runs
Context	<b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">month</a> ( <i>keyword   number</i> )
Tree	<a href="#">month</a>
Range	1 to 12
Options	january, february, march, april, may, june, july, august, september, october, november, december
Max. Instances	12
Introduced	16.0.R1
Platforms	All

### **script-policy**

Synopsis	Enter the <b>script-policy</b> context
Context	<b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">script-policy</a>
Tree	<a href="#">script-policy</a>
Introduced	16.0.R1
Platforms	All

### **name** *string*

Synopsis	CLI script policy name
Context	<b>configure</b> <a href="#">system cron schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">script-policy</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All



**owner string**

Synopsis	Script policy owner
Context	<b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">script-policy</a> <a href="#">owner</a> <i>string</i>
Tree	<a href="#">owner</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	Schedule type
Context	<b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	periodic, calendar, oneshot
Default	periodic
Introduced	16.0.R1
Platforms	All

**weekday (keyword | number)**

Synopsis	Weekdays when the schedule runs
Context	<b>configure</b> <a href="#">system</a> <a href="#">cron</a> <a href="#">schedule</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">weekday</a> ( <i>keyword   number</i> )
Tree	<a href="#">weekday</a>
Range	1 to 7
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Max. Instances	7
Introduced	16.0.R1
Platforms	All

**dhcp6**

Synopsis	Enter the <b>dhcp6</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">dhcp6</a>

Tree	<a href="#">dhcp6</a>
Introduced	16.0.R4
Platforms	All

### **adv-noaddrs-global** *keyword*

Synopsis	Applications to send NoAddrsAvail in Advertise messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">dhcp6</a> <a href="#">adv-noaddrs-global</a> <i>keyword</i>
Tree	<a href="#">adv-noaddrs-global</a>
Options	esm-relay, server
Max. Instances	2
Introduced	16.0.R4
Platforms	All

### **dns**

Synopsis	Enter the <b>dns</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">dns</a>
Tree	<a href="#">dns</a>
Introduced	16.0.R1
Platforms	All

### **address-pref** *keyword*

Synopsis	Preference in DNS address resolving order
Context	<b>configure</b> <a href="#">system</a> <a href="#">dns</a> <a href="#">address-pref</a> <i>keyword</i>
Tree	<a href="#">address-pref</a>
Options	ipv4-only, ipv6-first
Introduced	16.0.R1
Platforms	All

### **dnssec**

Synopsis	Enter the <b>dnssec</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">dns</a> <a href="#">dnssec</a>

Tree	<a href="#">dnssec</a>
Introduced	16.0.R1
Platforms	All

**ad-validation** *keyword*

Synopsis	Validation of AD-bit presence in DNS server responses
Context	<b>configure</b> <a href="#">system</a> <a href="#">dns</a> <a href="#">dnssec</a> <a href="#">ad-validation</a> <i>keyword</i>
Tree	<a href="#">ad-validation</a>
Options	fall-through – Allow non-DNSSEC responses to fall-through to permit resolution in case of validation failure drop – Drop non-DNSSEC responses in case of validation failure
Introduced	16.0.R1
Platforms	All

**efm-oam**

Synopsis	Enter the <b>efm-oam</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">efm-oam</a>
Tree	<a href="#">efm-oam</a>
Introduced	16.0.R1
Platforms	All

**dying-gasp-tx-on-reset** *boolean*

Synopsis	Generate Information OAM PDU on soft reset notification
Context	<b>configure</b> <a href="#">system</a> <a href="#">efm-oam</a> <a href="#">dying-gasp-tx-on-reset</a> <i>boolean</i>
Tree	<a href="#">dying-gasp-tx-on-reset</a>
Default	false
Introduced	16.0.R1
Platforms	All

**grace-tx** *boolean*

Synopsis	Send Grace TLVs for soft reset graceful recovery events
Context	<b>configure</b> <a href="#">system</a> <a href="#">efm-oam</a> <a href="#">grace-tx</a> <i>boolean</i>

Tree	<a href="#">grace-tx</a>
Description	<p>When configured to <b>true</b>, the system sends the Nokia Vendor specific Grace TLV in the information PDU after an ISSU or a soft reset. The Grace TLV informs a remote peer to ignore the negotiated interval and multiplier and instead use the new timeout interval.</p> <p>By default, the command is disabled at the system level and enabled at the port level. Both the system and port level must be enabled to support grace on a specific port. When configured to <b>true</b>, the EFM-OAM protocol does not enter a non-operational state when both nodes acknowledge the grace function. This feature minimizes service interruption by giving the restarting router time to become operationally and administratively up within the grace period.</p> <p>The peer receiving the Grace TLV must be able to parse and process the vendor-specific messaging. Do not configure grace if the Nokia Vendor Specific Grace TLV is not supported on the remote peer.</p> <p>When configured to <b>false</b>, the Nokia Vendor Specific Grace TLV is not sent.</p>
Default	false
Introduced	16.0.R1
Platforms	All

## eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure system eth-cfm</b>
Tree	<a href="#">eth-cfm</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## grace boolean

Synopsis	Allow system level capability of grace messaging
Context	<b>configure system eth-cfm grace boolean</b>
Tree	<a href="#">grace</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## md-auto-id

Synopsis	Enter the <b>md-auto-id</b> context
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Context	<b>configure</b> <a href="#">system eth-cfm md-auto-id</a>
Tree	<a href="#">md-auto-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ma-index-range

Synopsis	Enable the <b>ma-index-range</b> context
Context	<b>configure</b> <a href="#">system eth-cfm md-auto-id ma-index-range</a>
Tree	<a href="#">ma-index-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## end number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the range
Context	<b>configure</b> <a href="#">system eth-cfm md-auto-id ma-index-range end number</a>
Tree	<a href="#">end</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## start number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the range
Context	<b>configure</b> <a href="#">system eth-cfm md-auto-id ma-index-range start number</a>
Tree	<a href="#">start</a>
Range	1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## md-index-range

Synopsis	Enable the <b>md-index-range</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">md-auto-id</a> <a href="#">md-index-range</a>
Tree	<a href="#">md-index-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## end number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Upper bound of the range
Context	<b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">md-auto-id</a> <a href="#">md-index-range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 4294967295
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## start number



### WARNING:

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Lower bound of the range
Context	<b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">md-auto-id</a> <a href="#">md-index-range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	1 to 4294967295

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **named-display** *boolean*

Synopsis	Enable administrative name display in CLI show outputs
Context	<b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">named-display</a> <i>boolean</i>
Tree	<a href="#">named-display</a>
Description	<p>When configured to <b>true</b>, the system displays the administrative names for domains, associations, and bridge-identifiers in <b>show eth-cfm</b> command outputs in addition to the numerical maintenance domain (MD) index, maintenance association (MA) index, and bridge ID values. The administrative names are displayed underneath the numerical values, each on a separate row.</p> <p>When configured to <b>false</b>, the system only displays the numerical MD index, MA index, and bridge ID values in <b>show eth-cfm</b> command outputs.</p>
Default	false
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **redundancy**

Synopsis	Enter the <b>redundancy</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">redundancy</a>
Tree	<a href="#">redundancy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mc-lag**

Synopsis	Enter the <b>mc-lag</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">eth-cfm</a> <a href="#">redundancy</a> <a href="#">mc-lag</a>
Tree	<a href="#">mc-lag</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**propagate-hold-time** (*number* | *keyword*)

Synopsis	Delay timer value for the fault propagation
Context	<b>configure</b> <a href="#">system eth-cfm redundancy mc-lag propagate-hold-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">propagate-hold-time</a>
Range	1 to 60
Units	seconds
Options	none
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**standby-mep** *boolean*

Synopsis	Allow standby MC-LAG MEPs to act administratively down
Context	<b>configure</b> <a href="#">system eth-cfm redundancy mc-lag standby-mep</a> <i>boolean</i>
Tree	<a href="#">standby-mep</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sender-id**

Synopsis	Enter the <b>sender-id</b> context
Context	<b>configure</b> <a href="#">system eth-cfm sender-id</a>
Tree	<a href="#">sender-id</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**local-name** *string*

Synopsis	Local name used in CFM PDUs
Context	<b>configure</b> <a href="#">system eth-cfm sender-id local-name</a> <i>string</i>
Tree	<a href="#">local-name</a>
String Length	1 to 45
Introduced	16.0.R1



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Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **type** *keyword*

Synopsis ETH-CFM sender ID to be used in CFM PDUs  
Context **configure** [system eth-cfm sender-id type keyword](#)  
Tree [type](#)  
Options system, local  
Default system  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **slm**

Synopsis Enter the **slm** context  
Context **configure** [system eth-cfm slm](#)  
Tree [slm](#)  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **inactivity-timer** *number*

Synopsis SLR inactivity timer to maintain the stale test data  
Context **configure** [system eth-cfm slm inactivity-timer number](#)  
Tree [inactivity-timer](#)  
Range 10 to 100  
Units seconds  
Default 100  
Introduced 16.0.R1  
Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fan-control**

Synopsis Enter the **fan-control** context  
Context **configure** [system fan-control](#)

Tree	<a href="#">fan-control</a>
Description	Commands in this context configure the speed of the router fans. <b>Caution:</b> Only use commands in this context with authorized direction from Nokia technical support.
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **cooling-profile** *keyword*

Synopsis	Cooling profile used to determine fan speeds
Context	<b>configure</b> <a href="#">system</a> <a href="#">fan-control</a> <a href="#">cooling-profile</a> <i>keyword</i>
Tree	<a href="#">cooling-profile</a>
Description	This command configures the cooling profile used to determine the fan speed. Nokia recommends that the default setting be used unless aggressive cooling is explicitly required.
Options	default, aggressive
Default	default
Introduced	23.7.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se

### **grpc**

Synopsis	Enter the <b>grpc</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a>
Tree	<a href="#">grpc</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the gRPC server
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable

Default	disable
Introduced	16.0.R1
Platforms	All

### **allow-unsecure-connection**

Synopsis	Allow connection without secured transport protocol
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">allow-unsecure-connection</a>
Tree	<a href="#">allow-unsecure-connection</a>
Description	When configured, the system allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-server-profile</b> .
Introduced	16.0.R1
Platforms	All

### **delay-on-boot** *number*

Synopsis	Delay for gRPC connections after system boot
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">delay-on-boot</a> <i>number</i>
Tree	<a href="#">delay-on-boot</a>
Description	This command configures the delay timer for gRPC connections. When the timer expires, gRPC becomes operational and connections are accepted. This delay prevents automation from managing the system while it is still converging.  When no delay is configured, connections are accepted after the system boots and gRPC becomes operational.
Range	1 to 3600
Units	seconds
Introduced	23.10.R1
Platforms	All

### **gnmi**

Synopsis	Enter the <b>gnmi</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnmi</a>
Tree	<a href="#">gnmi</a>

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Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the gNMI service
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnmi</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

### **auto-config-save** *boolean*

Synopsis	Automatically save configuration as part of commit
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnmi</a> <b>auto-config-save</b> <i>boolean</i>
Tree	<a href="#">auto-config-save</a>
Description	When configured to <b>true</b> , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default	true
Introduced	16.0.R1
Platforms	All

### **proto-version** *keyword*

Synopsis	gnmi.proto version
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnmi</a> <b>proto-version</b> <i>keyword</i>
Tree	<a href="#">proto-version</a>
Description	This command sets the gnmi.proto version that the GRPC server should use for all gNMI RPCs. Only use options other than <b>latest</b> for backward compatibility with legacy collectors.
Options	latest – Latest supported version v070 – gNMI version 0.7.0
Default	latest
Introduced	23.3.R1

Platforms All

## gnoi

Synopsis Enter the **gnoi** context  
Context **configure** [system grpc gnoi](#)  
Tree [gnoi](#)  
Introduced 19.10.R1  
Platforms All

## cert-mgmt

Synopsis Enter the **cert-mgmt** context  
Context **configure** [system grpc gnoi cert-mgmt](#)  
Tree [cert-mgmt](#)  
Introduced 19.10.R1  
Platforms All

## admin-state *keyword*

Synopsis Administrative state of gNOI CertificateManagement  
Context **configure** [system grpc gnoi cert-mgmt admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 19.10.R1  
Platforms All

## file

Synopsis Enter the **file** context  
Context **configure** [system grpc gnoi file](#)  
Tree [file](#)  
Introduced 21.2.R1  
Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of the gNOI File service
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnoi</a> <a href="#">file</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	All

**system**

Synopsis	Enter the <b>system</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnoi</a> <b>system</b>
Tree	<a href="#">system</a>
Introduced	20.5.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the gNOI System service
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <a href="#">gnoi</a> <a href="#">system</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

**listening-port** *number*

Synopsis	Listening port for the gRPC server
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc</a> <b>listening-port</b> <i>number</i>
Tree	<a href="#">listening-port</a>
Range	1024 to 49151   57400
Default	57400

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Introduced	23.7.R1
Platforms	All

### **max-msg-size** *number*

Synopsis	Maximum size of received message
Context	<b>configure</b> <a href="#">system grpc max-msg-size</a> <i>number</i>
Tree	<a href="#">max-msg-size</a>
Range	1 to 1024
Units	megabytes
Default	512
Introduced	16.0.R1
Platforms	All

### **md-cli**

Synopsis	Enter the <b>md-cli</b> context
Context	<b>configure</b> <a href="#">system grpc md-cli</a>
Tree	<a href="#">md-cli</a>
Introduced	20.5.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the MD-CLI service
Context	<b>configure</b> <a href="#">system grpc md-cli admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

### **rib-api**

Synopsis	Enter the <b>rib-api</b> context
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Context	<b>configure system grpc rib-api</b>
Tree	<a href="#">rib-api</a>
Introduced	16.0.R4
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the RIB API service
Context	<b>configure system grpc rib-api admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

### **purge-timeout** *number*

Synopsis	Time until stale entries are purged
Context	<b>configure system grpc rib-api purge-timeout number</b>
Tree	<a href="#">purge-timeout</a>
Range	1 to 100000
Units	seconds
Introduced	16.0.R4
Platforms	All

### **tcp-keepalive**

Synopsis	Enter the <b>tcp-keepalive</b> context
Context	<b>configure system grpc tcp-keepalive</b>
Tree	<a href="#">tcp-keepalive</a>
Introduced	16.0.R4
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the TCP keepalive algorithm
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc tcp-keepalive</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	All

**idle-time** *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc tcp-keepalive</a> <b>idle-time</b> <i>number</i>
Tree	<a href="#">idle-time</a>
Description	This command configures the amount of time the connection must be idle before TCP keepalives are sent.
Range	1 to 100000
Units	seconds
Default	600
Introduced	16.0.R4
Platforms	All

**interval** *number*

Synopsis	Time between TCP keep-alive probes
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc tcp-keepalive</a> <b>interval</b> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 100000
Units	seconds
Default	15
Introduced	16.0.R4
Platforms	All

**retries** *number*

Synopsis	Number of probe retries before closing the connection
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc tcp-keepalive</a> <b>retries</b> <i>number</i>
Tree	<a href="#">retries</a>
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	16.0.R4
Platforms	All

**tls-server-profile** *reference*

Synopsis	Preferred TLS server profile
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc tls-server-profile</a> <i>reference</i>
Tree	<a href="#">tls-server-profile</a>
Reference	<b>configure</b> <a href="#">system security</a> <a href="#">tls server-tls-profile</a> <i>string</i>
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-server-profile</b> .
Introduced	16.0.R1
Platforms	All

**grpc-tunnel**

Synopsis	Enter the <b>grpc-tunnel</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a>
Tree	<a href="#">grpc-tunnel</a>
Introduced	22.2.R1
Platforms	All

**delay-on-boot** *number*

Synopsis	Delay for gRPC tunnels after system boot
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <b>delay-on-boot</b> <i>number</i>

Tree	<a href="#">delay-on-boot</a>
Description	This command configures the delay timer for gRPC tunnels. When the timer expires, gRPC tunnels become operational and connections are accepted. This delay prevents the system from trying to initiate gRPC tunnels while it is still converging.  When no delay is configured, gRPC tunnels are initiated after the system boots and gRPC becomes operational.
Range	1 to 3600
Units	seconds
Introduced	23.10.R1
Platforms	All

### **destination-group** [[name](#)] *string*

Synopsis	Enter the <b>destination-group</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i>
Tree	<a href="#">destination-group</a>
Description	Commands in this context configure parameters for destination groups.
Max. Instances	4
Introduced	22.2.R1
Platforms	All

### **[name]** *string*

Synopsis	Destination group name
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i>
Tree	<a href="#">destination-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

### **allow-unsecure-connection**

Synopsis	Allow unsecured operation of gRPC connections
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">allow-unsecure-connection</a>

Tree	<a href="#">allow-unsecure-connection</a>
Description	This command allows a gRPC tunnel to run without a secured transport protocol. Data is transferred in unencrypted form.
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-client-profile</b> .
Introduced	22.2.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

### **destination** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) [port](#) *number*

Synopsis	Enter the <b>destination</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">destination</a>
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	22.2.R1
Platforms	All

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

Synopsis	Address of the destination within the destination group
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">destination</a>

String Length	1 to 255
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

### **port number**

Synopsis	TCP port number for the destination
Context	<b>configure system grpc-tunnel destination-group</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <b>port number</b>
Tree	<a href="#">destination</a>
Range	1 to 65535
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

### **local-source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Local IP address of packets sent from the source
Context	<b>configure system grpc-tunnel destination-group</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <b>port number local-source-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-source-address</a>
Introduced	22.2.R1
Platforms	All

### **originated-qos-marking** *keyword*

Synopsis	QoS marking used for gRPC tunnel packets
Context	<b>configure system grpc-tunnel destination-group</b> <i>string destination</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <b>port number originated-qos-marking</b> <i>keyword</i>
Tree	<a href="#">originated-qos-marking</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 22.2.R1  
Platforms All

### **router-instance** *string*

Synopsis Router instance for the destination group  
Context **configure** [system](#) [grpc-tunnel](#) [destination-group](#) *string* [destination](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) [port](#) *number* [router-instance](#) *string*  
Tree [router-instance](#)  
Introduced 22.2.R1  
Platforms All

### **tcp-keepalive**

Synopsis Enter the **tcp-keepalive** context  
Context **configure** [system](#) [grpc-tunnel](#) [destination-group](#) *string* [tcp-keepalive](#)  
Tree [tcp-keepalive](#)  
Introduced 22.2.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the TCP keepalive algorithm  
Context **configure** [system](#) [grpc-tunnel](#) [destination-group](#) *string* [tcp-keepalive](#) [admin-state](#) *keyword*  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 22.2.R1  
Platforms All

### **idle-time** *number*

Synopsis Time until the first TCP keepalive probe is sent  
Context **configure** [system](#) [grpc-tunnel](#) [destination-group](#) *string* [tcp-keepalive](#) [idle-time](#) *number*

Tree	<a href="#">idle-time</a>
Description	This command configures the amount of time the connection must be idle before TCP keepalives are sent.
Range	1 to 100000
Units	seconds
Default	600
Introduced	22.2.R1
Platforms	All

### **interval** *number*

Synopsis	Time between TCP keep-alive probes
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 100000
Units	seconds
Default	15
Introduced	22.2.R1
Platforms	All

### **retries** *number*

Synopsis	Number of probe retries before closing the connection
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i> <a href="#">tcp-keepalive</a> <a href="#">retries</a> <i>number</i>
Tree	<a href="#">retries</a>
Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	22.2.R1
Platforms	All

### **tls-client-profile** *reference*

Synopsis	TLS client profile assigned to the destination group
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Context	<b>configure system grpc-tunnel destination-group</b> <i>string</i> <b>tls-client-profile</b> <i>reference</i>
Tree	<b>tls-client-profile</b>
Reference	<b>configure system security tls client-tls-profile</b> <i>string</i>
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-client-profile</b> .
Introduced	22.2.R1
Platforms	All

### **tunnel** [*name*] *string*

Synopsis	Enter the <b>tunnel</b> list instance
Context	<b>configure system grpc-tunnel tunnel</b> <i>string</i>
Tree	<b>tunnel</b>
Description	Commands in this context configure gRPC-tunnel-related parameters.
Max. Instances	4
Introduced	22.2.R1
Platforms	All

### **[name]** *string*

Synopsis	Tunnel name
Context	<b>configure system grpc-tunnel tunnel</b> <i>string</i>
Tree	<b>tunnel</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the tunnel
Context	<b>configure system grpc-tunnel tunnel</b> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable



Default	disable
Introduced	22.2.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	22.2.R1
Platforms	All

### **destination-group** *reference*

Synopsis	Destination group used in the tunnel
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">destination-group</a> <i>reference</i>
Tree	<a href="#">destination-group</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">destination-group</a> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **handler** [[name](#)] *string*

Synopsis	Enter the <b>handler</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i>
Tree	<a href="#">handler</a>
Description	Commands in this context configure handler parameters for this instance. Multiple handlers can be created for any tunnel.
Max. Instances	8
Introduced	22.2.R1
Platforms	All

**[name]** *string*

Synopsis	Handler name
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i>
Tree	<a href="#">handler</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the handler
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.2.R1
Platforms	All

**port** *number*

Synopsis	TCP port number the handler listens to internally
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65535
Introduced	22.2.R1
Platforms	All

**target-type**

Synopsis	Enter the <b>target-type</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">target-type</a>
Tree	<a href="#">target-type</a>
Introduced	22.2.R1
Platforms	All

### **custom-type** *string*

Synopsis	Custom string for target type
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">target-type</a> <a href="#">custom-type</a> <i>string</i>
Tree	<a href="#">custom-type</a>
Description	This command configures a custom string for the target type. This string can correspond to specific values used by the gRPC tunnel protocol, such as GNMI_GNOI or SSH. If a custom string is defined, the gRPC tunnel client must specify the string to request a session for that handler. The string must be unique within a tunnel.
String Length	1 to 64
Notes	The following elements are part of a choice: <b>custom-type</b> , <b>grpc-server</b> , or <b>ssh-server</b> .
Introduced	22.2.R1
Platforms	All

### **grpc-server**

Synopsis	Target type set to GNMI_GNOI
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">target-type</a> <a href="#">grpc-server</a>
Tree	<a href="#">grpc-server</a>
Description	When configured, this command assigns the gRPC server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of GNMI_GNOI.
Notes	The following elements are part of a choice: <b>custom-type</b> , <b>grpc-server</b> , or <b>ssh-server</b> .
Introduced	22.2.R1
Platforms	All

### **ssh-server**

Synopsis	Target type is SSH
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <a href="#">handler</a> <i>string</i> <a href="#">target-type</a> <a href="#">ssh-server</a>
Tree	<a href="#">ssh-server</a>
Description	When configured, this command assigns the SSH server as a handler for all tunnels sessions. At the gRPC tunnel protocol level, this corresponds to a value of SSH.
Notes	The following elements are part of a choice: <b>custom-type</b> , <b>grpc-server</b> , or <b>ssh-server</b> .
Introduced	22.2.R1
Platforms	All

## target-name

Synopsis	Enter the <b>target-name</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <b>target-name</b>
Tree	<a href="#">target-name</a>
Introduced	22.2.R1
Platforms	All

## custom-string *string*

Synopsis	Custom target name
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <b>target-name</b> <a href="#">custom-string</a> <i>string</i>
Tree	<a href="#">custom-string</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>custom-string</b> , <b>node-name</b> , or <b>user-agent</b> .
Introduced	22.2.R1
Platforms	All

## node-name

Synopsis	Set the node name as target name
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <b>target-name</b> <a href="#">node-name</a>
Tree	<a href="#">node-name</a>
Description	When configured, this command uses the node name as the target name. The node name is configured by the <b>configure system name</b> command.
Notes	The following elements are part of a choice: <b>custom-string</b> , <b>node-name</b> , or <b>user-agent</b> .
Introduced	22.2.R1
Platforms	All

## user-agent

Synopsis	Set the user agent as the target name
Context	<b>configure</b> <a href="#">system</a> <a href="#">grpc-tunnel</a> <a href="#">tunnel</a> <i>string</i> <b>target-name</b> <a href="#">user-agent</a>
Tree	<a href="#">user-agent</a>

Description	When configured, this command uses the user agent as the target name. The agent is a string consisting of <i>node-name:vendor.model:software-version</i> .
Notes	The following elements are part of a choice: <b>custom-string</b> , <b>node-name</b> , or <b>user-agent</b> .
Introduced	22.2.R1
Platforms	All

### **icmp-vse** *boolean*

Synopsis	Enable vendor-specific extensions to ICMP
Context	<b>configure</b> <a href="#">system icmp-vse</a> <i>boolean</i>
Tree	<a href="#">icmp-vse</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ip**

Synopsis	Enter the <b>ip</b> context
Context	<b>configure</b> <a href="#">system ip</a>
Tree	<a href="#">ip</a>
Introduced	16.0.R1
Platforms	All

### **allow-qinq-network-interface** *boolean*

Synopsis	Allow QinQ encapsulation for network interfaces
Context	<b>configure</b> <a href="#">system ip allow-qinq-network-interface</a> <i>boolean</i>
Tree	<a href="#">allow-qinq-network-interface</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **enforce-unique-if-index** *boolean*

Synopsis	Force creation of globally unique IP interface indexes
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Context	<b>configure system ip enforce-unique-if-index</b> <i>boolean</i>
Tree	<a href="#">enforce-unique-if-index</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **forward-6in4** *boolean*

Synopsis	Allow forwarding of IPv6 over IPv4 to system IP address
Context	<b>configure system ip forward-6in4</b> <i>boolean</i>
Tree	<a href="#">forward-6in4</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **forward-ip-over-gre** *boolean*

Synopsis	Allow forwarding of IP over GRE to system IP address
Context	<b>configure system ip forward-ip-over-gre</b> <i>boolean</i>
Tree	<a href="#">forward-ip-over-gre</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **ipv6-eh** *keyword*

Synopsis	Number of IPv6 extension headers parsed in line cards
Context	<b>configure system ip ipv6-eh</b> <i>keyword</i>
Tree	<a href="#">ipv6-eh</a>
Options	max, limited
Default	max
Introduced	20.5.R1
Platforms	All

## mpls

Synopsis	Enter the <b>mpls</b> context
Context	<b>configure system ip mpls</b>
Tree	<a href="#">mpls</a>
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## label-stack-statistics-count *number*

Synopsis	Collect traffic statistics on labels of the MPLS stack
Context	<b>configure system ip mpls label-stack-statistics-count <i>number</i></b>
Tree	<a href="#">label-stack-statistics-count</a>
Range	1 to 2
Default	1
Introduced	19.10.R3
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## l2tp

Synopsis	Enter the <b>l2tp</b> context
Context	<b>configure system l2tp</b>
Tree	<a href="#">l2tp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

## non-multi-chassis-tunnel-id-range

Synopsis	Enter the <b>non-multi-chassis-tunnel-id-range</b> context
Context	<b>configure system l2tp non-multi-chassis-tunnel-id-range</b>
Tree	<a href="#">non-multi-chassis-tunnel-id-range</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**end number**

Synopsis	Upper bound of the range
Context	<b>configure system l2tp non-multi-chassis-tunnel-id-range end number</b>
Tree	<a href="#">end</a>
Range	0 to 16383
Default	16383
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**start number**

Synopsis	Lower bound of the range
Context	<b>configure system l2tp non-multi-chassis-tunnel-id-range start number</b>
Tree	<a href="#">start</a>
Range	0 to 16383
Default	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**lACP**

Synopsis	Enter the <b>lACP</b> context
Context	<b>configure system lACP</b>
Tree	<a href="#">lACP</a>
Introduced	16.0.R1
Platforms	All

**system-priority number**

Synopsis	LACP system priority on aggregated Ethernet interfaces
Context	<b>configure system lACP system-priority number</b>
Tree	<a href="#">system-priority</a>
Range	1 to 65535
Default	32768
Introduced	16.0.R1



Platforms All

## lldp

Synopsis Enter the **lldp** context  
 Context **configure system lldp**  
 Tree **lldp**  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of LLDP  
 Context **configure system lldp admin-state** *keyword*  
 Tree **admin-state**  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

### **message-fast-tx** *number*

Synopsis Interval at which LLDP frames are transmitted  
 Context **configure system lldp message-fast-tx** *number*  
 Tree **message-fast-tx**  
 Description This command configures the interval at which LLDP frames are transmitted on behalf of the LLDP during a fast transmission period.  
 Range 1 to 3600  
 Units seconds  
 Default 1  
 Introduced 16.0.R1  
 Platforms All

**message-fast-tx-init** *number*

Synopsis	PDU's to transmit during the fast transmission period
Context	<b>configure</b> <a href="#">system lldp message-fast-tx-init</a> <i>number</i>
Tree	<a href="#">message-fast-tx-init</a>
Range	1 to 8
Default	4
Introduced	16.0.R1
Platforms	All

**notification-interval** *number*

Synopsis	Minimum interval between change notifications
Context	<b>configure</b> <a href="#">system lldp notification-interval</a> <i>number</i>
Tree	<a href="#">notification-interval</a>
Range	5 to 3600
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

**reinit-delay** *number*

Synopsis	Time required before re-initializing LLDP on a port
Context	<b>configure</b> <a href="#">system lldp reinit-delay</a> <i>number</i>
Tree	<a href="#">reinit-delay</a>
Range	1 to 10
Units	seconds
Default	2
Introduced	16.0.R1
Platforms	All

**tx-credit-max** *number*

Synopsis	Maximum consecutive LLDPDUs that can be transmitted
Context	<b>configure</b> <a href="#">system lldp tx-credit-max</a> <i>number</i>

Tree	<a href="#">tx-credit-max</a>
Range	1 to 100
Default	5
Introduced	16.0.R1
Platforms	All

### **tx-hold-multiplier** *number*

Synopsis	Transmit interval multiplier
Context	<b>configure</b> <a href="#">system lldp tx-hold-multiplier</a> <i>number</i>
Tree	<a href="#">tx-hold-multiplier</a>
Range	2 to 10
Default	4
Introduced	16.0.R1
Platforms	All

### **tx-interval** *number*

Synopsis	LLDP transmit interval
Context	<b>configure</b> <a href="#">system lldp tx-interval</a> <i>number</i>
Tree	<a href="#">tx-interval</a>
Range	5 to 32768
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

## **load-balancing**

Synopsis	Enter the <b>load-balancing</b> context
Context	<b>configure</b> <a href="#">system load-balancing</a>
Tree	<a href="#">load-balancing</a>
Description	Commands in this context configure the interface per-flow load-balancing options that apply to traffic entering this interface and egressing over a LAG or ECMP on system egress. This setting is per interface.

Load-balancing options configured at the interface level overwrite load-balancing options configured at the system level.

Introduced 16.0.R1  
 Platforms All

### **I2tp-load-balancing** *boolean*

Synopsis Include L2TP header information for load balancing  
 Context **configure** [system load-balancing i2tp-load-balancing](#) *boolean*  
 Tree [i2tp-load-balancing](#)  
 Default false  
 Introduced 16.0.R4  
 Platforms All

### **I4-load-balancing** *boolean*

Synopsis Use load balancing based on Layer 4 fields  
 Context **configure** [system load-balancing i4-load-balancing](#) *boolean*  
 Tree [i4-load-balancing](#)  
 Introduced 16.0.R1  
 Platforms All

### **lsr-load-balancing** *keyword*

Synopsis Algorithm for system-wide LSR load balancing  
 Context **configure** [system load-balancing lsr-load-balancing](#) *keyword*  
 Tree [lsr-load-balancing](#)  
 Options lbl-only, lbl-ip, ip-only, eth-encap-ip, lbl-ip-l4-teid, lbl-eth-ip-l4-teid, lbl-ip-or-teid  
 Introduced 16.0.R1  
 Platforms All

### **mc-enh-load-balancing** *boolean*

Synopsis Enable enhanced egress multicast load balancing  
 Context **configure** [system load-balancing mc-enh-load-balancing](#) *boolean*  
 Tree [mc-enh-load-balancing](#)

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Default	false
Introduced	16.0.R1
Platforms	All

### **service-id-lag-hashing** *boolean*

Synopsis	Enable enhanced VLL LAG service ID hashing
Context	<b>configure</b> <a href="#">system load-balancing service-id-lag-hashing</a> <i>boolean</i>
Tree	<a href="#">service-id-lag-hashing</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **system-ip-load-balancing** *boolean*

Synopsis	Use system IP address for ECMP and LAG load balancing
Context	<b>configure</b> <a href="#">system load-balancing system-ip-load-balancing</a> <i>boolean</i>
Tree	<a href="#">system-ip-load-balancing</a>
Introduced	16.0.R1
Platforms	All

### **location** *string*

Synopsis	Site location of the system
Context	<b>configure</b> <a href="#">system location</a> <i>string</i>
Tree	<a href="#">location</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **login-control**

Synopsis	Enter the <b>login-control</b> context
Context	<b>configure</b> <a href="#">system login-control</a>
Tree	<a href="#">login-control</a>

Introduced 16.0.R1  
Platforms All

### **exponential-backoff** *boolean*

Synopsis Enable exponential-backoff of the login prompt  
Context **configure** [system login-control exponential-backoff](#) *boolean*  
Tree [exponential-backoff](#)  
Default false  
Introduced 16.0.R1  
Platforms All

### **ftp**

Synopsis Enter the **ftp** context  
Context **configure** [system login-control ftp](#)  
Tree [ftp](#)  
Introduced 16.0.R1  
Platforms All

### **inbound-max-sessions** *number*

Synopsis Maximum number of concurrent inbound FTP sessions  
Context **configure** [system login-control ftp inbound-max-sessions](#) *number*  
Tree [inbound-max-sessions](#)  
Range 0 to 5  
Default 3  
Introduced 16.0.R1  
Platforms All

### **idle-timeout** (*keyword* | *number*)

Synopsis Idle timeout for FTP, console, or Telnet sessions  
Context **configure** [system login-control idle-timeout](#) (*keyword* | *number*)  
Tree [idle-timeout](#)

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Range	1 to 1440
Units	minutes
Options	none
Default	30
Introduced	16.0.R1
Platforms	All

### **login-banner** *boolean*

Synopsis	Display login banner
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-banner</a> <i>boolean</i>
Tree	<a href="#">login-banner</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **login-scripts**

Synopsis	Enter the <b>login-scripts</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a>
Tree	<a href="#">login-scripts</a>
Introduced	16.0.R1
Platforms	All

### **global-script** *string*

Synopsis	URL of the global CLI login script
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a> <a href="#">global-script</a> <i>string</i>
Tree	<a href="#">global-script</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

## per-user-script

Synopsis	Enter the <b>per-user-script</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a> <a href="#">per-user-script</a>
Tree	<a href="#">per-user-script</a>
Introduced	16.0.R1
Platforms	All

## file-name *string*

Synopsis	File name of the per-user login script
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a> <a href="#">per-user-script</a> <a href="#">file-name</a> <i>string</i>
Tree	<a href="#">file-name</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

## user-directory *string*

Synopsis	Directory name of user-defined login script
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">login-scripts</a> <a href="#">per-user-script</a> <a href="#">user-directory</a> <i>string</i>
Tree	<a href="#">user-directory</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

## motd

Synopsis	Enter the <b>motd</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">motd</a>
Tree	<a href="#">motd</a>
Introduced	16.0.R1
Platforms	All



### **text string**

Synopsis	Message of the day displayed after console login
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">motd</a> <b>text</b> <i>string</i>
Tree	<a href="#">text</a>
String Length	1 to 900
Notes	The following elements are part of a choice: <b>text</b> or <b>url</b> .
Introduced	16.0.R1
Platforms	All

### **url string**

Synopsis	URL of the location of message of the day
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">motd</a> <b>url</b> <i>string</i>
Tree	<a href="#">url</a>
String Length	1 to 180
Notes	The following elements are part of a choice: <b>text</b> or <b>url</b> .
Introduced	16.0.R1
Platforms	All

### **pre-login-message**

Synopsis	Enter the <b>pre-login-message</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">login-control</a> <a href="#">pre-login-message</a>
Tree	<a href="#">pre-login-message</a>
Description	Commands in this context configure a message to display before logging in to the router using Telnet, SSH, or the console port.  Only one message can be configured. If a new pre-login message is configured, the new message overwrites the previous message.  <b>Note:</b> The pre-login message is displayed on both active and standby systems.
Introduced	16.0.R1
Platforms	All

### **message string**

Synopsis	Message displayed before the login prompt
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Context	<b>configure system login-control pre-login-message message</b> <i>string</i>
Tree	<a href="#">message</a>
Description	This command configures the pre-login message. Any printable, 7-bit ASCII characters can be used. If the string contains special characters (#, \$, spaces, and so on), the entire string must be enclosed within double quotes. Some special characters can be used to format the message text. Use the newline (\n) character to create multiline messages. A newline (\n) character in the message moves to the beginning of the next line by sending ASCII/UTF-8 characters 0xA (LF) and 0xD (CR) to the client terminal. A carriage return (\r) character in the message sends the ASCII/UTF-8 character 0xD (CR) to the client terminal.
String Length	1 to 900
Introduced	16.0.R1
Platforms	All

**name** *boolean*

Synopsis	Display the system name before the pre-login message
Context	<b>configure system login-control pre-login-message name</b> <i>boolean</i>
Tree	<a href="#">name</a>
Default	false
Introduced	16.0.R1
Platforms	All

**ssh**

Synopsis	Enter the <b>ssh</b> context
Context	<b>configure system login-control ssh</b>
Tree	<a href="#">ssh</a>
Introduced	16.0.R1
Platforms	All

**graceful-shutdown** *boolean*

Synopsis	Allow graceful shutdown of SSH sessions
Context	<b>configure system login-control ssh graceful-shutdown</b> <i>boolean</i>
Tree	<a href="#">graceful-shutdown</a>
Default	true

Introduced 16.0.R1  
Platforms All

### **inbound-max-sessions** *number*

Synopsis Maximum number of concurrent inbound sessions  
Context **configure** [system login-control ssh inbound-max-sessions](#) *number*  
Tree [inbound-max-sessions](#)  
Range 0 to 50  
Default 5  
Introduced 16.0.R1  
Platforms All

### **outbound-max-sessions** *number*

Synopsis Maximum number of concurrent outbound sessions  
Context **configure** [system login-control ssh outbound-max-sessions](#) *number*  
Tree [outbound-max-sessions](#)  
Range 0 to 15  
Default 5  
Introduced 16.0.R1  
Platforms All

### **ttl-security** *number*

Synopsis Minimum TTL value for incoming packets  
Context **configure** [system login-control ssh ttl-security](#) *number*  
Tree [ttl-security](#)  
Range 1 to 255  
Introduced 16.0.R1  
Platforms All

### **telnet**

Synopsis Enter the **telnet** context

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Context	<b>configure</b> <a href="#">system login-control telnet</a>
Tree	<a href="#">telnet</a>
Introduced	16.0.R1
Platforms	All

### **graceful-shutdown** *boolean*

Synopsis	Allow graceful shutdown of Telnet sessions
Context	<b>configure</b> <a href="#">system login-control telnet graceful-shutdown</a> <i>boolean</i>
Tree	<a href="#">graceful-shutdown</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **inbound-max-sessions** *number*

Synopsis	Maximum number of concurrent inbound sessions
Context	<b>configure</b> <a href="#">system login-control telnet inbound-max-sessions</a> <i>number</i>
Tree	<a href="#">inbound-max-sessions</a>
Range	0 to 50
Default	5
Introduced	16.0.R1
Platforms	All

### **outbound-max-sessions** *number*

Synopsis	Maximum number of concurrent outbound sessions
Context	<b>configure</b> <a href="#">system login-control telnet outbound-max-sessions</a> <i>number</i>
Tree	<a href="#">outbound-max-sessions</a>
Range	0 to 15
Default	5
Introduced	16.0.R1
Platforms	All

### **ttl-security** *number*

Synopsis	Minimum TTL value for incoming packets
Context	<b>configure</b> <a href="#">system login-control telnet ttl-security</a> <i>number</i>
Tree	<a href="#">ttl-security</a>
Range	1 to 255
Introduced	16.0.R1
Platforms	All

### **management-interface**

Synopsis	Enter the <b>management-interface</b> context
Context	<b>configure</b> <a href="#">system management-interface</a>
Tree	<a href="#">management-interface</a>
Description	Commands in this context configure the capabilities of router management interfaces such as CLI and NETCONF.
Introduced	16.0.R1
Platforms	All

### **cli**

Synopsis	Enter the <b>cli</b> context
Context	<b>configure</b> <a href="#">system management-interface cli</a>
Tree	<a href="#">cli</a>
Description	Commands in this context configure the CLI management interfaces.
Introduced	16.0.R1
Platforms	All

### **classic-cli**

Synopsis	Enter the <b>classic-cli</b> context
Context	<b>configure</b> <a href="#">system management-interface cli classic-cli</a>
Tree	<a href="#">classic-cli</a>
Description	Commands in this context configure the classic CLI management interface.
Introduced	16.0.R1
Platforms	All

### **allow-immediate** *boolean*

Synopsis	Allow writable access in classic CLI configure branch
Context	<b>configure</b> <a href="#">system management-interface cli classic-cli allow-immediate</a> <i>boolean</i>
Tree	<a href="#">allow-immediate</a>
Description	<p>When configured to <b>true</b>, this command enables write access in the classic CLI configuration branch without having to use the classic CLI <b>candidate edit</b> functionality.</p> <p>When configured to <b>false</b>, this command blocks write access and configuration changes in the classic CLI configuration branch, and the classic CLI configuration branch is read-only. This enforces using the classic CLI <b>candidate edit</b> functionality, including <b>candidate commit</b>, to modify the router configuration, instead of allowing immediate line-by-line configuration changes.</p>
Default	true
Introduced	16.0.R1
Platforms	All

### **rollback**

Synopsis	Enter the <b>rollback</b> context
Context	<b>configure</b> <a href="#">system management-interface cli classic-cli rollback</a>
Tree	<a href="#">rollback</a>
Description	Commands in this context control classic CLI configuration rollback functionality, such as the maximum number of rollback checkpoints the system maintains. Configuration rollback allows the operator to revert to previous router configuration states while minimizing impacts to services.
Introduced	16.0.R1
Platforms	All

### **local-checkpoints** *number*

Synopsis	Maximum number of rollback files on local storage
Context	<b>configure</b> <a href="#">system management-interface cli classic-cli rollback local-checkpoints</a> <i>number</i>
Tree	<a href="#">local-checkpoints</a>
Range	1 to 50
Default	10
Introduced	16.0.R1

Platforms All

### **location** *string*

Synopsis Path and filename prefix for rollback checkpoint files

Context **configure** [system](#) [management-interface](#) [cli](#) [classic-cli](#) [rollback](#) [location](#) *string*

Tree [location](#)

Description This command configures the local (for example, compact flash) or remote location and name of the classic CLI rollback checkpoint files. The filename must not contain a suffix. The suffixes for rollback checkpoint files are, for example, .rb, .rb.1, .rb.2, and so on. The suffixes are automatically appended to rollback checkpoint files.

String Length 1 to 180

Introduced 16.0.R1

Platforms All

### **remote-checkpoints** *number*

Synopsis Maximum rollback files saved at a remote location

Context **configure** [system](#) [management-interface](#) [cli](#) [classic-cli](#) [rollback](#) [remote-checkpoints](#) *number*

Tree [remote-checkpoints](#)

Range 1 to 200

Default 10

Introduced 16.0.R1

Platforms All

### **rescue**

Synopsis Enter the **rescue** context

Context **configure** [system](#) [management-interface](#) [cli](#) [classic-cli](#) [rollback](#) [rescue](#)

Tree [rescue](#)

Introduced 16.0.R1

Platforms All

### **location string**

Synopsis	Location of the rescue configuration file
Context	<b>configure</b> <a href="#">system management-interface cli classic-cli rollback rescue location string</a>
Tree	<a href="#">location</a>
Description	This command configures the local or remote location and filename of the classic CLI rescue configuration file. The suffix (.rc) is automatically appended to the filename when a rescue configuration file is saved. Trivial FTP (TFTP) is not supported for remote locations.
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

### **cli-engine keyword**

Synopsis	System-wide CLI engine access
Context	<b>configure</b> <a href="#">system management-interface cli cli-engine keyword</a>
Tree	<a href="#">cli-engine</a>
Description	This command configures the system-wide CLI engine. The operator can configure one or both engines. For the configuration to take effect, exit the running CLI session and start a new session after committing the new value.
Options	classic-cli, md-cli
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **md-cli**

Synopsis	Enter the <b>md-cli</b> context
Context	<b>configure</b> <a href="#">system management-interface cli md-cli</a>
Tree	<a href="#">md-cli</a>
Description	Commands in this context configure the MD-CLI management interface.
Introduced	16.0.R1
Platforms	All



## **auto-config-save** *boolean*

Synopsis	Automatically save configuration as part of commit
Context	<b>configure</b> <a href="#">system management-interface cli md-cli auto-config-save</a> <i>boolean</i>
Tree	<a href="#">auto-config-save</a>
Description	When configured to <b>true</b> , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default	true
Introduced	16.0.R1
Platforms	All

## **environment**

Synopsis	Enter the <b>environment</b> context
Context	<b>configure</b> <a href="#">system management-interface cli md-cli environment</a>
Tree	<a href="#">environment</a>
Introduced	16.0.R1
Platforms	All

## **command-alias**

Synopsis	Enter the <b>command-alias</b> context
Context	<b>configure</b> <a href="#">system management-interface cli md-cli environment command-alias</a>
Tree	<a href="#">command-alias</a>
Introduced	21.7.R1
Platforms	All

## **alias** [[alias-name](#)] *string*

Synopsis	Enter the <b>alias</b> list instance
Context	<b>configure</b> <a href="#">system management-interface cli md-cli environment command-alias alias</a> <i>string</i>
Tree	<a href="#">alias</a>
Description	Commands in this context create aliases to existing MD-CLI commands or to Python applications.

Aliases may be mounted for use globally or for selected context paths. Arguments and output modifiers may be provided to aliases at configuration or run time.

Introduced	21.7.R1
Platforms	All

### **[alias-name]** *string*

Synopsis	Alias name
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i>
Tree	<a href="#">alias</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the alias
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command controls the administrative state of the MD-CLI alias.  MD-CLI aliases that are administratively disabled cannot be executed, are not displayed in command completion, and do not appear in ? help.
Options	enable, disable
Default	disable
Introduced	21.10.R1
Platforms	All

### **cli-command** *string*

Synopsis	CLI command to run when executing the alias
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <b>cli-command</b> <i>string</i>
Tree	<a href="#">cli-command</a>

String Length	1 to 255
Notes	The following elements are part of a mandatory choice: <b>cli-command</b> or <b>python-script</b> .
Introduced	21.7.R1
Platforms	All

### **description** *string*

Synopsis	Alias description
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 110
Introduced	21.7.R1
Platforms	All

### **mount-point** [[path](#)] (*keyword* | *string*)

Synopsis	Add a list entry for <b>mount-point</b>
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">mount-point</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">mount-point</a>
Min. Instances	1
Introduced	21.7.R1
Platforms	All

### [[path](#)] (*keyword* | *string*)

Synopsis	Mount point where the alias is available
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">command-alias</a> <a href="#">alias</a> <i>string</i> <a href="#">mount-point</a> ( <i>keyword</i>   <i>string</i> )
Tree	<a href="#">mount-point</a>
String Length	1 to 255
Options	global
Notes	This element is part of a list key.
Introduced	21.7.R1

Platforms All

### **python-script** *reference*

Synopsis Python script to run when executing the alias

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-alias](#) [alias](#) [string](#) **python-script** *reference*

Tree [python-script](#)

Reference **configure** [python](#) [python-script](#) *string*

Notes The following elements are part of a mandatory choice: **cli-command** or **python-script**.

Introduced 21.7.R1

Platforms All

### **command-completion**

Synopsis Enter the **command-completion** context

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-completion](#)

Tree [command-completion](#)

Introduced 16.0.R1

Platforms All

### **enter** *boolean*

Synopsis Complete the command when the Enter key is pressed

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-completion](#) [enter](#) *boolean*

Tree [enter](#)

Default true

Introduced 16.0.R1

Platforms All

### **space** *boolean*

Synopsis Complete the command when the Space key is pressed

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [command-completion](#) [space](#) *boolean*

Tree	<a href="#">space</a>
Default	true
Introduced	16.0.R1
Platforms	All

**tab** *boolean*

Synopsis	Complete the command when the Tab key is pressed
Context	<b>configure</b> <a href="#">system management-interface cli md-cli environment command-completion tab boolean</a>
Tree	<a href="#">tab</a>
Default	true
Introduced	16.0.R1
Platforms	All

**console**

Synopsis	Enter the <b>console</b> context
Context	<b>configure</b> <a href="#">system management-interface cli md-cli environment console</a>
Tree	<a href="#">console</a>
Introduced	16.0.R1
Platforms	All

**length** *number*

Synopsis	Number of lines displayed on the console
Context	<b>configure</b> <a href="#">system management-interface cli md-cli environment console length number</a>
Tree	<a href="#">length</a>
Range	24 to 512
Default	24
Introduced	16.0.R1
Platforms	All

**width** *number*

Synopsis	Number of columns displayed on the console
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Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">console</a> <a href="#">width</a> <i>number</i>
Tree	<a href="#">width</a>
Range	80 to 512
Default	80
Introduced	16.0.R1
Platforms	All

## info-output

Synopsis	Enter the <b>info-output</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">info-output</a>
Tree	<a href="#">info-output</a>
Introduced	22.2.R1
Platforms	All

## always-display

Synopsis	Enter the <b>always-display</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">info-output</a> <a href="#">always-display</a>
Tree	<a href="#">always-display</a>
Description	Commands in this context specify elements that are always displayed in the <b>info</b> output, regardless of whether the <b>detail</b> option is used.
Introduced	22.2.R1
Platforms	All

## admin-state *boolean*

Synopsis	Always display admin-state elements
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">info-output</a> <a href="#">always-display</a> <a href="#">admin-state</a> <i>boolean</i>
Tree	<a href="#">admin-state</a>
Description	When configured to <b>true</b> , the values of the <b>admin-state</b> elements in <b>info</b> output (without the <b>detail</b> option) are always displayed, even if they are the default values.
Default	false
Introduced	22.2.R1

Platforms All

## message-severity-level

Synopsis Enter the **message-severity-level** context

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [message-severity-level](#)

Tree [message-severity-level](#)

Introduced 16.0.R1

Platforms All

## cli keyword

Synopsis Message severity threshold for CLI messages

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [message-severity-level](#)  
[cli](#) *keyword*

Tree [cli](#)

Options warning, info

Default info

Introduced 16.0.R1

Platforms All

## more boolean

Synopsis Activate the pager when output is longer than a screen

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [more](#) *boolean*

Tree [more](#)

Default true

Introduced 16.0.R1

Platforms All

## progress-indicator

Synopsis Enter the **progress-indicator** context

Context **configure** [system](#) [management-interface](#) [cli](#) [md-cli](#) [environment](#) [progress-indicator](#)

Tree [progress-indicator](#)

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the progress indicator

Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [progress-indicator](#)  
[admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **delay** *number*

Synopsis Delay before the progress indicator is displayed

Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [progress-indicator](#)  
[delay](#) *number*

Tree [delay](#)

Range 0 to 10000

Units milliseconds

Default 1000

Introduced 16.0.R1

Platforms All

### **type** *keyword*

Synopsis Progress indicator output style

Context **configure** [system](#) [management-interface cli](#) [md-cli](#) [environment](#) [progress-indicator](#) [type](#)  
[keyword](#)

Tree [type](#)

Options dots

Default dots

Introduced 16.0.R1

Platforms All



## prompt

Synopsis	Enter the <b>prompt</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a>
Tree	<a href="#">prompt</a>
Introduced	16.0.R1
Platforms	All

## context *boolean*

Synopsis	Show the current command context in the prompt
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> <a href="#">context</a> <i>boolean</i>
Tree	<a href="#">context</a>
Default	true
Introduced	16.0.R1
Platforms	All

## newline *boolean*

Synopsis	Add a new line before every prompt line
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> <a href="#">newline</a> <i>boolean</i>
Tree	<a href="#">newline</a>
Default	true
Introduced	16.0.R1
Platforms	All

## timestamp *boolean*

Synopsis	Show the timestamp before the first prompt line
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> <a href="#">timestamp</a> <i>boolean</i>
Tree	<a href="#">timestamp</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **uncommitted-changes-indicator** *boolean*

Synopsis	Show an asterisk (*) when uncommitted changes exist
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">prompt</a> <a href="#">uncommitted-changes-indicator</a> <i>boolean</i>
Tree	<a href="#">uncommitted-changes-indicator</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **python**

Synopsis	Enter the <b>python</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">python</a>
Tree	<a href="#">python</a>
Description	Commands in this context customize Python settings used with the Python 3 interpreter in MD-CLI applications such as pyexec, command aliases, EHS, and CRON.
Introduced	21.10.R1
Platforms	All

### **memory-reservation** *number*

Synopsis	Memory reserved per Python interpreter
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">python</a> <a href="#">memory-reservation</a> <i>number</i>
Tree	<a href="#">memory-reservation</a>
Range	1 to 500
Units	megabytes
Introduced	21.10.R1
Platforms	All

### **minimum-available-memory** *number*

Synopsis	Minimum memory requirement to run a Python interpreter
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">cli</a> <a href="#">md-cli</a> <a href="#">environment</a> <a href="#">python</a> <a href="#">minimum-available-memory</a> <i>number</i>

Tree	<a href="#">minimum-available-memory</a>
Range	5 to 50
Units	percent
Introduced	21.10.R1
Platforms	All

### **timeout** *number*

Synopsis	Maximum run time before a Python application is stopped
Context	<b>configure</b> <a href="#">system management-interface cli md-cli environment python timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	30 to 86400
Units	seconds
Default	3600
Introduced	21.10.R1
Platforms	All

### **time-display** *keyword*

Synopsis	Time zone to display time
Context	<b>configure</b> <a href="#">system management-interface cli md-cli environment time-display</a> <i>keyword</i>
Tree	<a href="#">time-display</a>
Description	<p>This command configures the time zone for a timestamp displayed in outputs, such as event logs and <b>show</b> commands for the current CLI session.</p> <p>In event logs, the selected time is used to control the timestamps in the CLI output of <b>show log log-id</b> and in YANG state in the /state/log/log-id branch (for logs such as session, cli, memory, SNMP, and NETCONF).</p> <p>Also see the <b>configure log log-id time-format</b> command.</p>
Options	local, utc
Default	local
Introduced	16.0.R1
Platforms	All

### **time-format** *keyword*

Synopsis	Format to display the date and time
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Context	<b>configure system management-interface cli md-cli environment time-format</b> <i>keyword</i>
Tree	<a href="#">time-format</a>
Description	This command specifies the format of the time display in the prompt, configuration, state, and certain <b>show</b> command output in the current CLI session.
Options	iso-8601, rfc-1123, rfc-3339
Default	rfc-3339
Introduced	20.5.R1
Platforms	All

### **commit-history** *number*

Synopsis	Number of commit history IDs to store
Context	<b>configure system management-interface commit-history</b> <i>number</i>
Tree	<a href="#">commit-history</a>
Description	This command sets the number of IDs to store in the commit history. Setting the value to 0 disables the commit history.
Range	0 to 200
Default	50
Introduced	21.10.R1
Platforms	All

### **configuration-mode** *keyword*

Synopsis	Management interfaces allowed to edit the configuration
Context	<b>configure system management-interface configuration-mode</b> <i>keyword</i>
Tree	<a href="#">configuration-mode</a>
Description	<p>This command controls which of the classic or model-driven management interfaces can modify the configuration of the router.</p> <p>Any management interface can be used in any configuration mode (to gather state information or perform operations, for example), but only specific management interfaces (CLI, NETCONF, and so on) are allowed to edit the configuration of the router in different modes. For example, only classic CLI and SNMP can be used to edit the configuration when in classic mode.</p>
Options	classic, model-driven, mixed
Introduced	16.0.R1
Platforms	All

**configuration-save**

Synopsis	Enter the <b>configuration-save</b> context
Context	<b>configure</b> <a href="#">system management-interface configuration-save</a>
Tree	<a href="#">configuration-save</a>
Description	Commands in this context configure the attributes for saved configuration files.
Introduced	16.0.R1
Platforms	All

**configuration-backups** *number*

Synopsis	Maximum number of configuration versions maintained
Context	<b>configure</b> <a href="#">system management-interface configuration-save configuration-backups</a> <i>number</i>
Tree	<a href="#">configuration-backups</a>
Description	<p>This command configures the maximum number of saved configuration file versions the router maintains.</p> <p>When the configuration is saved, configuration file names are appended with a numeric extension. Each subsequent configuration save creates a new configuration file version with an incremented numeric extension until the maximum count is reached, after which the next configuration save overwrites the oldest file version.</p> <p>Each persistent index file is updated at the same time as the associated configuration file. The system synchronizes the active and standby CPM for all configurations and their associated persistent index files.</p>
Range	1 to 200
Default	50
Introduced	16.0.R1
Platforms	All

**incremental-saves** *boolean*

Synopsis	Use incremental saved configuration files
Context	<b>configure</b> <a href="#">system management-interface configuration-save incremental-saves</a> <i>boolean</i>
Tree	<a href="#">incremental-saves</a>
Description	When configured to <b>true</b> , the system saves each commit to the <b>configure</b> configuration region in a separate incremental saved configuration file, which allows for faster commits, instead of saving a complete saved configuration file each time.

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Default	true
Introduced	22.7.R1
Platforms	All

## **netconf**

Synopsis	Enter the <b>netconf</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">netconf</a>
Tree	<a href="#">netconf</a>
Introduced	16.0.R1
Platforms	All

## **admin-state** *keyword*

Synopsis	Administrative state of NETCONF
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">netconf</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## **auto-config-save** *boolean*

Synopsis	Automatically save configuration as part of commit
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">netconf</a> <a href="#">auto-config-save</a> <i>boolean</i>
Tree	<a href="#">auto-config-save</a>
Description	When configured to <b>true</b> , the system automatically writes the running configuration to the save configuration file as part of a successful commit operation.
Default	true
Introduced	16.0.R1
Platforms	All

## capabilities

Synopsis	Enter the <b>capabilities</b> context
Context	<b>configure system management-interface netconf capabilities</b>
Tree	<a href="#">capabilities</a>
Description	Commands in this context configure explicit capabilities for the NETCONF server.
Introduced	16.0.R1
Platforms	All

## candidate *boolean*

Synopsis	Allow the NETCONF server to access candidate datastore
Context	<b>configure system management-interface netconf capabilities candidate <i>boolean</i></b>
Tree	<a href="#">candidate</a>
Description	<p>When configured to <b>true</b>, this command allows the SR OS NETCONF server to access the candidate configuration datastore. Configuring this command to <b>true</b> also enables using <b>commit</b> and <b>discard-changes</b>.</p> <p>When <b>configure system management-interface configuration-mode</b> is set to <b>classic</b>, the candidate capability is disabled, even if this command is configured to <b>true</b>.</p> <p>When configured to <b>false</b>, this command disables the SR OS NETCONF server from accessing the candidate datastore. If the candidate is disabled, requests that reference the candidate datastore return an error, and when a NETCONF client establishes a new session, the candidate capability is not advertised in the SR OS NETCONF Hello message.</p>
Default	true
Introduced	16.0.R1
Platforms	All

## delay-on-boot *number*

Synopsis	Delay for NETCONF connections after system boot
Context	<b>configure system management-interface netconf delay-on-boot <i>number</i></b>
Tree	<a href="#">delay-on-boot</a>
Description	<p>This command configures the delay timer for NETCONF connections. When the timer expires, NETCONF becomes operational and connections are accepted. This delay prevents automation from managing the system while it is still converging.</p> <p>When no delay is configured, connections are accepted after the system boots and NETCONF becomes operational.</p>

Range	1 to 3600
Units	seconds
Introduced	23.10.R1
Platforms	All

### **port number**

Synopsis	Port on which NETCONF server listens for connections
Context	<b>configure</b> <a href="#">system management-interface netconf port number</a>
Tree	<a href="#">port</a>
Description	<p>This command specifies the port on which the SR OS NETCONF server listens for new connections. One port can be configured for NETCONF management.</p> <p>The configured port applies to both non-VPRN and VPRN management. New NETCONF connections are able to use the configured port.</p> <p>For NETCONF connections not using VPRN management, active NETCONF connections are not disconnected if the connection port changes. For NETCONF connections using VPRN management, active NETCONF connections are disconnected if the connection port changes.</p>
Range	22   830
Default	830
Introduced	19.10.R1
Platforms	All

### **operations**

Synopsis	Enter the <b>operations</b> context
Context	<b>configure</b> <a href="#">system management-interface operations</a>
Tree	<a href="#">operations</a>
Description	Commands in this context configure parameters associated with operational commands in model-driven interfaces.
Introduced	21.5.R1
Platforms	All

### **global-timeouts**

Synopsis	Enter the <b>global-timeouts</b> context
Context	<b>configure</b> <a href="#">system management-interface operations global-timeouts</a>



Tree	<a href="#">global-timeouts</a>
Description	<p>Commands in this context configure system timeout parameters for operational commands.</p> <p>Timeout parameters provide default system-level control for various types of operational commands in model-driven interfaces. The timeout values are used when specific execution and retention timeouts are not requested for a specific operation.</p>
Introduced	21.5.R1
Platforms	All

### **asynchronous-execution** (*number* | *keyword*)

Synopsis	Timeout for asynchronous operation execution
Context	<b>configure</b> <a href="#">system management-interface operations global-timeouts asynchronous-execution</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">asynchronous-execution</a>
Description	<p>This command configures the period of time that operations launched as “asynchronous” are allowed to execute before being automatically stopped by the SR OS.</p> <p>An asynchronous operation is not deleted from the system when it is stopped. See the <b>asynchronous-retention</b> command.</p> <p>If a specific execution timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.</p> <p><b>Note:</b> This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the <b>ping</b> operation also has its own timeout parameter).</p>
Range	1 to 604800
Units	seconds
Options	never
Default	3600
Introduced	21.5.R1
Platforms	All

### **asynchronous-retention** (*number* | *keyword*)

Synopsis	Timeout for asynchronous operation data retention
Context	<b>configure</b> <a href="#">system management-interface operations global-timeouts asynchronous-retention</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">asynchronous-retention</a>

Description	This command configures the period of time that data related to operations launched as “asynchronous” is retained in the system. After the retention timeout expires, all information related to the operation is deleted, including any status information and result data.  If a specific retention timeout is not included in the request for a particular asynchronous operation, this system-level timeout applies.
Range	1 to 604800
Units	seconds
Options	never
Default	86400
Introduced	21.5.R1
Platforms	All

### **synchronous-execution** (*number* | *keyword*)

Synopsis	Timeout for synchronous operation execution
Context	<b>configure</b> <a href="#">system management-interface operations global-timeouts synchronous-execution</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">synchronous-execution</a>
Description	This command configures the period of time that operations launched as “synchronous” (the default method for all operations) are allowed to execute before they are automatically stopped, and their associated data is deleted.  If a specific execution timeout is not included in the request for a particular synchronous operation, this system-level timeout applies.  <b>Note:</b> This execution timeout is part of the general global operations infrastructure and is separate and independent from any operation-specific timeouts (for example, the <b>ping</b> operation also has its own timeout parameter).  <b>Caution:</b> If this command is set with a specific time value, MD-CLI operations are subject to the timeout and are interrupted if they execute longer than the time value. This situation can arise because the timeout also applies to operations requested in the MD-CLI interface (for example, <b>ping</b> , <b>file dir</b> , and so on).
Range	1 to 604800
Units	seconds
Options	never
Default	never
Introduced	21.5.R1
Platforms	All

## remote-management

Synopsis	Enter the <b>remote-management</b> context
Context	<b>configure</b> <a href="#">system management-interface remote-management</a>
Tree	<a href="#">remote-management</a>
Description	Commands in this context configure the SR OS node to use the remote management service. Configuring remote management enables the SR OS node to report itself to a remote manager service running on a remote server, so that it is included in the dynamic list of available nodes. The manager service streamlines the management of multiple SR OS nodes running different SR OS versions using the same client application providing a similar shell to the MD-CLI.
Introduced	20.5.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of remote management registration
Context	<b>configure</b> <a href="#">system management-interface remote-management admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

## allow-unsecure-connection

Synopsis	Allow connection without secured transport protocol
Context	<b>configure</b> <a href="#">system management-interface remote-management allow-unsecure-connection</a>
Tree	<a href="#">allow-unsecure-connection</a>
Description	When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>client-tls-profile</b> .
Introduced	20.5.R1
Platforms	All

**client-tls-profile** *reference*

Synopsis	TLS client profile name
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">client-tls-profile</a> <i>reference</i>
Tree	<a href="#">client-tls-profile</a>
Description	This command specifies the client TLS profile to all remote managers.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i>
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>client-tls-profile</b> .
Introduced	20.5.R1
Platforms	All

**connection-timeout** *number*

Synopsis	Time without a response before manager declared down
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">connection-timeout</a> <i>number</i>
Tree	<a href="#">connection-timeout</a>
Range	1 to 3600
Units	seconds
Default	60
Introduced	20.5.R1
Platforms	All

**delay-on-boot** *number*

Synopsis	Delay for remote management after system boot
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <a href="#">delay-on-boot</a> <i>number</i>
Tree	<a href="#">delay-on-boot</a>
Description	<p>This command configures the delay timer for remote management connections over gRPC. When the timer expires, remote management becomes operational and connections are accepted. This delay prevents automation from managing the system while it is still converging.</p> <p>When no delay is configured, remote management connections are accepted after the system boots and gRPC becomes operational.</p>
Range	1 to 3600

Units	seconds
Introduced	23.10.R1
Platforms	All

### **device-label** *string*

Synopsis	Device label supplied to the remote manager
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <b>device-label</b> <i>string</i>
Tree	<a href="#">device-label</a>
Description	This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

### **device-name** *string*

Synopsis	Device name supplied to the remote manager
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <b>device-name</b> <i>string</i>
Tree	<a href="#">device-name</a>
Description	This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network.  When unconfigured, the default system name is used.
String Length	1 to 64
Introduced	20.5.R1
Platforms	All

### **hello-interval** *number*

Synopsis	Time between hello messages from SR OS node to manager
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface</a> <a href="#">remote-management</a> <b>hello-interval</b> <i>number</i>
Tree	<a href="#">hello-interval</a>
Range	10 to 216000
Units	seconds
Default	600

Introduced 20.5.R1  
 Platforms All

### **manager** [[manager-name](#)] *string*

Synopsis Enter the **manager** list instance

Context **configure** [system management-interface remote-management manager](#) *string*

Tree [manager](#)

Description Commands in this context configure options for a specific manager.  
 Commands configured in this context take precedence over command values specified directly in the **configure management-interface remote-management** context.  
 If a command is not configured in this context, the command setting is inherited from the higher level context.

Max. Instances 2

Introduced 20.5.R1

Platforms All

### **[manager-name]** *string*

Synopsis Remote management manager name

Context **configure** [system management-interface remote-management manager](#) *string*

Tree [manager](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 20.5.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of remote management registration

Context **configure** [system management-interface remote-management manager](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced	20.5.R1
Platforms	All

### **allow-unsecure-connection**

Synopsis	Allow connection without secured transport protocol
Context	<b>configure</b> <a href="#">system management-interface remote-management manager</a> <i>string</i> <a href="#">allow-unsecure-connection</a>
Tree	<a href="#">allow-unsecure-connection</a>
Description	When configured, the system allows an unsecured connection to the remote managers; the TCP connection is not encrypted. This includes username and password information.
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>client-tls-profile</b> .
Introduced	20.5.R1
Platforms	All

### **client-tls-profile** *reference*

Synopsis	TLS client profile name assigned to the remote manager
Context	<b>configure</b> <a href="#">system management-interface remote-management manager</a> <i>string</i> <a href="#">client-tls-profile</a> <i>reference</i>
Tree	<a href="#">client-tls-profile</a>
Reference	<b>configure</b> <a href="#">system security tls client-tls-profile</a> <i>string</i>
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>client-tls-profile</b> .
Introduced	20.5.R1
Platforms	All

### **connection-timeout** *number*

Synopsis	Time without response before manager is declared down
Context	<b>configure</b> <a href="#">system management-interface remote-management manager</a> <i>string</i> <a href="#">connection-timeout</a> <i>number</i>
Tree	<a href="#">connection-timeout</a>
Range	1 to 3600
Units	seconds

Introduced 20.5.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string*  
[description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 20.5.R1  
 Platforms All

### **device-label** *string*

Synopsis Device label supplied to the remote manager  
 Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string* [device-label](#) *string*  
 Tree [device-label](#)  
 Description This command specifies a metadata label that is supplied to the manager. This label is used to group devices or network nodes with a common purpose or goal.  
 String Length 1 to 64  
 Introduced 20.5.R1  
 Platforms All

### **device-name** *string*

Synopsis Device name supplied to the remote manager  
 Context **configure** [system](#) [management-interface](#) [remote-management](#) [manager](#) *string* [device-name](#) *string*  
 Tree [device-name](#)  
 Description This command specifies a device name that is supplied to the manager. The name identifies a specific SR OS node in the network.  
 When unconfigured, the default system name is used.  
 String Length 1 to 64  
 Introduced 20.5.R1



Platforms All

### **manager-address** (*ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name*)

Synopsis Destination IP address of the manager

Context **configure system management-interface remote-management manager** *string manager-address* (*ipv4-address-no-zone | ipv6-address-no-zone | fully-qualified-domain-name*)

Tree [manager-address](#)

String Length 1 to 255

Introduced 20.5.R1

Platforms All

### **manager-port** *number*

Synopsis Destination TCP port for gRPC connections to manager

Context **configure system management-interface remote-management manager** *string manager-port* *number*

Tree [manager-port](#)

Range 1 to 65535

Default 57400

Introduced 20.5.R1

Platforms All

### **router-instance** *string*

Synopsis Reference to a router or VPRN service name

Context **configure system management-interface remote-management manager** *string router-instance* *string*

Tree [router-instance](#)

Introduced 20.5.R1

Platforms All

### **source-address** (*ipv4-address-no-zone | ipv6-address-no-zone*)

Synopsis Source IP address for connection to the manager

Context	<b>configure system management-interface remote-management manager</b> <i>string</i> <b>source-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	20.5.R1
Platforms	All

### **source-port** (*number* | *keyword*)

Synopsis	Source TCP destination port number
Context	<b>configure system management-interface remote-management manager</b> <i>string</i> <b>source-port</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">source-port</a>
Range	1 to 65535
Options	grpc-default
Introduced	20.5.R1
Platforms	All

### **router-instance** *string*

Synopsis	Router name or VPRN service name
Context	<b>configure system management-interface remote-management router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
Default	management
Introduced	20.5.R1
Platforms	All

### **source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Source IP address for connection to the manager
Context	<b>configure system management-interface remote-management source-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">source-address</a>
Introduced	20.5.R1
Platforms	All

**source-port** (*number* | *keyword*)

Synopsis	Source TCP port number to connection to the manager
Context	<b>configure</b> <a href="#">system management-interface remote-management source-port</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">source-port</a>
Range	1 to 65535
Options	grpc-default
Default	grpc-default
Introduced	20.5.R1
Platforms	All

**schema-path** *string*

Synopsis	Schema path URL
Context	<b>configure</b> <a href="#">system management-interface schema-path</a> <i>string</i>
Tree	<a href="#">schema-path</a>
Description	<p>This command specifies the schema path where the SR OS YANG modules can be placed by the user before using a &lt;get-schema&gt; request. Nokia recommends that the URL string not exceed 135 characters for the &lt;get-schema&gt; request to work correctly with all schema files.</p> <p>If this command is not configured, the software upgrade process manages the YANG schema files to ensure the schema files are synchronized with the software image on both the primary and standby CPM.</p>
String Length	1 to 180
Introduced	16.0.R4
Platforms	All

**snmp**

Synopsis	Enter the <b>snmp</b> context
Context	<b>configure</b> <a href="#">system management-interface snmp</a>
Tree	<a href="#">snmp</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the SNMP agent
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface snmp</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	<p>This command administratively enables or disables SNMP agent operations. Disabling SNMP does not prevent the agent from sending SNMP notifications to configured SNMP trap destinations.</p> <p>In classic and mixed configuration mode, the agent is administratively disabled in the event of a reboot when the processing of the configuration file fails to complete or when an SNMP persistent index file fails while the <b>bof system persistent-indices</b> command is set to <b>true</b>. This prevents an SNMP-based management system from accessing and possibly synchronizing with a partially booted or incomplete network element. This auto-disable behavior is not applicable to model-driven configuration mode.</p>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**engine-id** *string*

Synopsis	SNMP engine ID that identifies the SNMPv3 node
Context	<b>configure</b> <a href="#">system</a> <a href="#">management-interface snmp</a> <b>engine-id</b> <i>string</i>
Tree	<a href="#">engine-id</a>
Description	<p>This command sets the SNMP engine ID that uniquely identifies the SNMPv3 node.</p> <p>If unconfigured, the system uses an engine ID based on the information from the system backplane.</p> <p>If the SNMP engine ID is changed, the current configuration must be saved and a reboot must be executed. Otherwise, the previously configured SNMP communities and logger trap-target notify communities will not be valid for the new engine ID.</p> <p><b>Note:</b> Changing the SNMP engine ID invalidates all SNMPv3 MD5 and SHA security digest keys, which may render the node unmanageable.</p> <p>When replacing a chassis, configure the new router to use the same engine ID as the previous router. This preserves SNMPv3 security keys and allows management stations to use their existing authentication keys for the new router.</p> <p>Ensure that the engine ID of each router is unique. A management domain can only maintain one instance of a specific engine ID.</p>
String Length	10 to 64
Introduced	16.0.R1
Platforms	All

### **general-port** *number*

Synopsis	Port number used to send general SNMP messages
Context	<b>configure</b> <a href="#">system management-interface snmp general-port</a> <i>number</i>
Tree	<a href="#">general-port</a>
Description	This command configures the port number used to receive SNMP request messages and send replies.  For the port used for SNMP notifications, configure the <b>configure log snmp-trap-group trap-target port</b> command.
Range	0   1 to 65535
Default	161
Introduced	16.0.R1
Platforms	All

### **max-bulk-duration** *number*

Synopsis	Maximum process duration before responses are returned
Context	<b>configure</b> <a href="#">system management-interface snmp max-bulk-duration</a> <i>number</i>
Tree	<a href="#">max-bulk-duration</a>
Description	This command sets the maximum duration to process an SNMP request before bulk responses are returned to avoid a timeout on the management system when a lot of information is returned in the response.
Range	100 to 5000
Units	milliseconds
Introduced	23.3.R1
Platforms	All

### **packet-size** *number*

Synopsis	Maximum SNMP packet size generated by the node
Context	<b>configure</b> <a href="#">system management-interface snmp packet-size</a> <i>number</i>
Tree	<a href="#">packet-size</a>
Range	484 to 9216
Default	1500
Introduced	16.0.R1
Platforms	All

## streaming

Synopsis	Enter the <b>streaming</b> context
Context	<b>configure</b> <a href="#">system management-interface snmp streaming</a>
Tree	<a href="#">streaming</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of SNMP streaming
Context	<b>configure</b> <a href="#">system management-interface snmp streaming admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Description	This command enables or disables the proprietary SNMP request and response bundling as well as the TCP-based transport mechanism for optimizing network management of the router nodes. In higher latency networks, synchronizing router MIBs from network management using streaming takes less time than synchronizing using classic SNMP UDP requests. Streaming operates on TCP port 1491 and runs over IPv4 or IPv6.
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## yang-modules

Synopsis	Enter the <b>yang-modules</b> context
Context	<b>configure</b> <a href="#">system management-interface yang-modules</a>
Tree	<a href="#">yang-modules</a>
Description	Commands in this context determine the system support of the Nokia YANG models. The settings affect the data sent in a NETCONF <hello>, data populated in the RFC 6022 /netconf-state/schemas list, data returned in a <get-schema> request, and data populated in the RFC 8525 /yang-library. See "NETCONF monitoring" and "YANG library" in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR System Management Guide</i> for more information.
Introduced	16.0.R1
Platforms	All

## nmda

Synopsis	Enter the <b>nmda</b> context
Context	<b>configure</b> <a href="#">system management-interface yang-modules nmda</a>
Tree	<a href="#">nmda</a>
Description	Commands in this context configure the attributes for the Network Management Datastores Architecture (NMDA).
Introduced	21.7.R1
Platforms	All

## nmda-support *boolean*

Synopsis	Advertise NMDA support over NETCONF
Context	<b>configure</b> <a href="#">system management-interface yang-modules nmda nmda-support boolean</a>
Tree	<a href="#">nmda-support</a>
Description	<p>When configured to <b>true</b>, this command enables the advertisement of NMDA support over NETCONF through the use of YANG library 1.1.</p> <p>When configured to <b>false</b>, this command disables NMDA advertisement over NETCONF and YANG library 1.0 is used.</p>
Default	false
Introduced	21.7.R1
Platforms	All

## nokia-combined-modules *boolean*

Synopsis	Support access to combined Nokia YANG models
Context	<b>configure</b> <a href="#">system management-interface yang-modules nokia-combined-modules boolean</a>
Tree	<a href="#">nokia-combined-modules</a>
Description	<p>When configured to <b>true</b>, the system supports the combined Nokia YANG files for both configuration and state data in the NETCONF server.</p> <p>When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to <b>true</b>.</p> <p>When configured to <b>false</b>, access to the combined Nokia YANG files is not supported.</p> <p>This command and the <b>nokia-submodules</b> command cannot both be set to <b>true</b> at the same time.</p>

Introduced	16.0.R4
Platforms	All

### **nokia-submodules** *boolean*

Synopsis	Support submodule-based packaging of Nokia YANG models
Context	<b>configure</b> <a href="#">system management-interface yang-modules nokia-submodules</a> <i>boolean</i>
Tree	<a href="#">nokia-submodules</a>
Description	<p>When configured to <b>true</b>, the system supports the alternative submodule-based packaging of the Nokia YANG files for both configuration and state data in the NETCONF server.</p> <p>When the system is operating in classic configuration mode, attempts to access (read or write) the configuration using the Nokia configuration modules or namespace via NETCONF result in errors, even if this command is set to <b>true</b>.</p> <p>When configured to <b>false</b>, access to the submodule-based packaging of the Nokia YANG files is not supported.</p> <p>This command and the <b>nokia-combined-modules</b> command cannot both be set to <b>true</b> at the same time.</p>
Introduced	21.2.R1
Platforms	All

### **openconfig-modules** *boolean*

Synopsis	Support access to OpenConfig YANG models
Context	<b>configure</b> <a href="#">system management-interface yang-modules openconfig-modules</a> <i>boolean</i>
Tree	<a href="#">openconfig-modules</a>
Description	When configured to <b>true</b> , this command allows access to OpenConfig YANG models in all model-driven interfaces.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **shared-model-management** *boolean*

Synopsis	Allow multiple models to configure the same elements
Context	<b>configure</b> <a href="#">system management-interface yang-modules shared-model-management</a> <i>boolean</i>
Tree	<a href="#">shared-model-management</a>



Description	When configured to <b>true</b> , the router allows Nokia and third-party models to configure the same elements in model-driven interfaces. When configured to <b>false</b> , only one model can be used to configure the same element.
Default	true
Introduced	23.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**name *string***

Synopsis	Administrative name assigned to the system
Context	<b>configure</b> <a href="#">system</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**network-element-discovery**

Synopsis	Enter the <b>network-element-discovery</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a>
Tree	<a href="#">network-element-discovery</a>
Introduced	19.5.R1
Platforms	All

**generate-traps *boolean***

Synopsis	Generate NE discovery traps
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">generate-traps</a> <i>boolean</i>
Tree	<a href="#">generate-traps</a>
Default	false
Introduced	19.5.R1
Platforms	All

**profile** [*name*] *string*

Synopsis	Enter the <b>profile</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i>
Tree	<a href="#">profile</a>
Max. Instances	1
Introduced	19.5.R1
Platforms	All

**[name]** *string*

Synopsis	Profile name
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i>
Tree	<a href="#">profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

**neid** *string*

Synopsis	Network element ID of the advertised node
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> <a href="#">neid</a> <i>string</i>
Tree	<a href="#">neid</a>
String Length	7 to 8
Introduced	19.5.R1
Platforms	All

**neip**

Synopsis	Enter the <b>neip</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> <a href="#">neip</a>
Tree	<a href="#">neip</a>
Introduced	19.5.R1
Platforms	All

## auto-generate

Synopsis	Enter the <b>auto-generate</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> <a href="#">neip</a> <a href="#">auto-generate</a>
Tree	<a href="#">auto-generate</a>
Introduced	21.2.R1
Platforms	All

## ipv4

Synopsis	Enable the <b>ipv4</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> <a href="#">neip</a> <a href="#">auto-generate</a> <a href="#">ipv4</a>
Tree	<a href="#">ipv4</a>
Introduced	21.2.R1
Platforms	All

## vendor-id-value *number*

Synopsis	Most significant byte if the NE IPv4 address
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> <a href="#">neip</a> <a href="#">auto-generate</a> <a href="#">ipv4</a> <a href="#">vendor-id-value</a> <i>number</i>
Tree	<a href="#">vendor-id-value</a>
Range	1 to 255
Default	140
Introduced	21.2.R1
Platforms	All

## ipv6

Synopsis	Enable the <b>ipv6</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery</a> <a href="#">profile</a> <i>string</i> <a href="#">neip</a> <a href="#">auto-generate</a> <a href="#">ipv6</a>
Tree	<a href="#">ipv6</a>
Introduced	21.2.R1
Platforms	All

**vendor-id-value** *number*

Synopsis	Most significant byte of the NE IPv6 address
Context	<b>configure</b> <a href="#">system network-element-discovery profile</a> <i>string</i> <a href="#">neip auto-generate ipv6 vendor-id-value</a> <i>number</i>
Tree	<a href="#">vendor-id-value</a>
Range	1 to 255
Default	140
Introduced	21.2.R1
Platforms	All

**ipv4** *string*

Synopsis	NEIP IPv4 address
Context	<b>configure</b> <a href="#">system network-element-discovery profile</a> <i>string</i> <a href="#">neip ipv4</a> <i>string</i>
Tree	<a href="#">ipv4</a>
Introduced	19.5.R1
Platforms	All

**ipv6** *string*

Synopsis	NEIP IPv6 address
Context	<b>configure</b> <a href="#">system network-element-discovery profile</a> <i>string</i> <a href="#">neip ipv6</a> <i>string</i>
Tree	<a href="#">ipv6</a>
Introduced	19.5.R1
Platforms	All

**platform-type** *string*

Synopsis	Platform name and chassis type to be advertised
Context	<b>configure</b> <a href="#">system network-element-discovery profile</a> <i>string</i> <a href="#">platform-type</a> <i>string</i>
Tree	<a href="#">platform-type</a>
String Length	1 to 255
Introduced	19.5.R1
Platforms	All

**system-mac** *string*

Synopsis	MAC address of the advertised node
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery profile</a> <i>string</i> <a href="#">system-mac</a> <i>string</i>
Tree	<a href="#">system-mac</a>
Introduced	19.5.R1
Platforms	All

**vendor-id** *string*

Synopsis	Vendor ID to be advertised
Context	<b>configure</b> <a href="#">system</a> <a href="#">network-element-discovery profile</a> <i>string</i> <a href="#">vendor-id</a> <i>string</i>
Tree	<a href="#">vendor-id</a>
String Length	1 to 255
Default	Nokia
Introduced	19.5.R1
Platforms	All

**ospf-dynamic-hostnames** *boolean*

Synopsis	Process received OSPF dynamic hostname information
Context	<b>configure</b> <a href="#">system</a> <a href="#">ospf-dynamic-hostnames</a> <i>boolean</i>
Tree	<a href="#">ospf-dynamic-hostnames</a>
Description	When configured to <b>true</b> , OSPF dynamic hostnames are enabled. The router receiving the new dynamic hostname within the OSPF Router Information (RI) LSA is instructed to process the received dynamic hostname information.  When configured to <b>false</b> , dynamic hostname information is not processed.
Default	false
Introduced	20.2.R1
Platforms	All

**persistence**

Synopsis	Enter the <b>persistence</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">persistence</a>
Tree	<a href="#">persistence</a>

Description	<p>Commands in this context configure persistence on the system.</p> <p>The persistence feature enables the system to retain state information learned through DHCP snooping across reboots. This information includes data such as the IP address and MAC binding information, lease-length information, and ingress SAP information (required for VPLS snooping to identify the ingress interface).</p> <p>If persistence is enabled when there are no DHCP relay or snooping commands enabled, the system creates an empty file.</p>
Introduced	16.0.R1
Platforms	All

## ancp

Synopsis	Enter the <b>ancp</b> context
Context	<b>configure system persistence ancp</b>
Tree	<a href="#">ancp</a>
Introduced	16.0.R1
Platforms	All

## description *string*

Synopsis	Text description
Context	<b>configure system persistence ancp description <i>string</i></b>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

## location *keyword*

Synopsis	CPM flash card where the information is stored
Context	<b>configure system persistence ancp location <i>keyword</i></b>
Tree	<a href="#">location</a>
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	All

## application-assurance

Synopsis	Enter the <b>application-assurance</b> context
Context	<b>configure</b> <a href="#">system persistence application-assurance</a>
Tree	<a href="#">application-assurance</a>
Description	Commands in this context configure AA persistence on the system.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## description *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system persistence application-assurance description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## location *keyword*

Synopsis	CPM flash card where the information is stored
Context	<b>configure</b> <a href="#">system persistence application-assurance location keyword</a>
Tree	<a href="#">location</a>
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

## dhcp-server

Synopsis	Enter the <b>dhcp-server</b> context
Context	<b>configure</b> <a href="#">system persistence dhcp-server</a>
Tree	<a href="#">dhcp-server</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">system persistence dhcp-server description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**location keyword**

Synopsis	CPM flash card where the information is stored
Context	<b>configure</b> <a href="#">system persistence dhcp-server location</a> <i>keyword</i>
Tree	<a href="#">location</a>
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**nat-port-forwarding**

Synopsis	Enter the <b>nat-port-forwarding</b> context
Context	<b>configure</b> <a href="#">system persistence nat-port-forwarding</a>
Tree	<a href="#">nat-port-forwarding</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">system persistence nat-port-forwarding description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR



### **location** *keyword*

Synopsis	CPM flash card where the information is stored
Context	<b>configure</b> <a href="#">system persistence nat-port-forwarding location</a> <i>keyword</i>
Tree	<a href="#">location</a>
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **options**

Synopsis	Enter the <b>options</b> context
Context	<b>configure</b> <a href="#">system persistence options</a>
Tree	<a href="#">options</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **dhcp-lease-time-threshold** *number*

Synopsis	DHCP lease time limit to be eligible for persistence
Context	<b>configure</b> <a href="#">system persistence options dhcp-lease-time-threshold</a> <i>number</i>
Tree	<a href="#">dhcp-lease-time-threshold</a>
Range	1 to 631152000
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

### **python-policy-cache**

Synopsis	Enter the <b>python-policy-cache</b> context
Context	<b>configure</b> <a href="#">system persistence python-policy-cache</a>
Tree	<a href="#">python-policy-cache</a>
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">system persistence python-policy-cache description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**location keyword**

Synopsis	CPM flash card where the information is stored
Context	<b>configure</b> <a href="#">system persistence python-policy-cache location keyword</a>
Tree	<a href="#">location</a>
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	All

**subscriber-mgmt**

Synopsis	Enter the <b>subscriber-mgmt</b> context
Context	<b>configure</b> <a href="#">system persistence subscriber-mgmt</a>
Tree	<a href="#">subscriber-mgmt</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">system persistence subscriber-mgmt description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**location** *keyword*

Synopsis	CPM flash card where the information is stored
Context	<b>configure</b> <a href="#">system</a> <a href="#">persistence</a> <a href="#">subscriber-mgmt</a> <a href="#">location</a> <i>keyword</i>
Tree	<a href="#">location</a>
Options	cf1, cf2, cf3
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, VSR

**power-management** [power-zone](#) *number*

Synopsis	Enter the <b>power-management</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">power-management</a> <a href="#">power-zone</a> <i>number</i>
Tree	<a href="#">power-management</a>
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**power-zone** *number*

Synopsis	Power zone
Context	<b>configure</b> <a href="#">system</a> <a href="#">power-management</a> <a href="#">power-zone</a> <i>number</i>
Tree	<a href="#">power-management</a>
Range	1 to 2
MD-CLI	1
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**mode** *keyword*

Synopsis	Power capacity mode algorithm
Context	<b>configure</b> <a href="#">system</a> <a href="#">power-management</a> <a href="#">power-zone</a> <i>number</i> <a href="#">mode</a> <i>keyword</i>
Tree	<a href="#">mode</a>
Options	none, basic, advanced
Default	basic

Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **power-safety-alert** *number*

Synopsis	Power capacity to trigger a safety alert event
Context	<b>configure</b> <a href="#">system</a> <a href="#">power-management</a> <a href="#">power-zone</a> <i>number</i> <a href="#">power-safety-alert</a> <i>number</i>
Tree	<a href="#">power-safety-alert</a>
Range	0 to 120000
Units	watts
Default	0
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **power-safety-level** *number*

Synopsis	Minimum threshold to power off devices
Context	<b>configure</b> <a href="#">system</a> <a href="#">power-management</a> <a href="#">power-zone</a> <i>number</i> <a href="#">power-safety-level</a> <i>number</i>
Tree	<a href="#">power-safety-level</a>
Range	0 to 100
Units	percent
Default	100
Introduced	16.0.R1
Platforms	7750 SR-1s, 7750 SR-2s, 7750 SR-2se, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **ptp**

Synopsis	Enter the <b>ptp</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a>
Tree	<a href="#">ptp</a>
Description	Commands in this context configure Precision Time Control (PTP) parameters based on <i>IEEE 1588-2008, Precision Time Protocol</i> . The context is only supported on control assemblies that support 1588.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of PTP
Context	<b>configure system ptp admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**alternate-profile** [*name*] *string*

Synopsis	Enter the <b>alternate-profile</b> list instance
Context	<b>configure system ptp alternate-profile</b> <i>string</i>
Tree	<a href="#">alternate-profile</a>
Description	<p>Commands in this context create an alternate profile configuration for use in PTP messaging.</p> <p>The alternate profile can be used at the edge of a network to provide PTP time or frequency distribution outward to external PTP clocks.</p> <p>The alternate profile cannot be deleted if it is configured as the profile under a PTP port.</p>
Max. Instances	6
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[name]** *string*

Synopsis	Alternate profile name
Context	<b>configure system ptp alternate-profile</b> <i>string</i>
Tree	<a href="#">alternate-profile</a>
Description	<p>This command configures an alternate profile name.</p> <p>The strings "Primary" and "primary" cannot be used for the alternate-profile name.</p>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the alternate PTP profile

Context **configure** [system](#) [ptp](#) [alternate-profile](#) *string* **admin-state** *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **domain** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Alternate profile PTP domain number

Context **configure** [system](#) [ptp](#) [alternate-profile](#) *string* **domain** *number*

Tree [domain](#)

Range 0 to 255

Default 24

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **log-announce-interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis PTP announce message interval in log form

Context **configure** [system](#) [ptp](#) [alternate-profile](#) *string* **log-announce-interval** *number*

Tree [log-announce-interval](#)

Description This command configures the announce message interval used for multicast messages within the alternate profile.

For multicast messages used on PTP Ethernet ports, this command configures the message interval used for announce messages transmitted by the local node.

This value has no impact on the interval used for the BTCA, which is controlled by the value defined for the primary profile.

Range	-3 to 4
Default	-3
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **profile** *keyword*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Standard based profile used within an alternate profile
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">alternate-profile</a> <i>string</i> <a href="#">profile</a> <i>keyword</i>
Tree	<a href="#">profile</a>
Description	This command specifies the standard based profile that is used as the basis for the alternate profile.  This setting controls the contents of PTP messages sent on ports and peers using this alternate profile.
Options	g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016
Default	g8275dot1-2014
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **announce-receipt-timeout** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Expired intervals count before timeout event declared
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">announce-receipt-timeout</a> <i>number</i>
Tree	<a href="#">announce-receipt-timeout</a>

Description	This command configures the number of Announce message intervals that must expire with no received Announce messages before declaring an ANNOUNCE_RECEIPT_TIMEOUT event.
Range	2 to 10
Default	3
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### clock-type *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Clock type
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">clock-type</a> <i>keyword</i>
Tree	<a href="#">clock-type</a>
Options	slave-only, master-only, boundary
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### domain *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP domain
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">domain</a> <i>number</i>
Tree	<a href="#">domain</a>
Description	<p>This command configures the PTP domain. The default and valid range of the domain depend on the configured PTP profile.</p> <ul style="list-style-type: none"> <li>• IEEE 1588-2008 - domain range of 0 to 255 (default 0)</li> <li>• G.8265.1 - domain range of 0 to 255 (default 4)</li> <li>• G.8275.1 - domain range of 24 to 43 (default 24)</li> </ul>



- G.8275.2 - domain range of 0 to 255 (default 44)

Range	0 to 255
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **local-priority** *number*

Synopsis	PTP clock local priority
Context	<b>configure system ptp local-priority</b> <i>number</i>
Tree	<a href="#">local-priority</a>
Description	<p>This command configures the local priority used to choose between PTP time Transmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the local clock (<b>ptp</b> context). See G.8275.1 or G.8275.2 for detailed information.</p>
Range	1 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **log-announce-interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Announce message interval in log form
Context	<b>configure system ptp log-announce-interval</b> <i>number</i>
Tree	<a href="#">log-announce-interval</a>
Description	<p>This command configures the Announce message interval used for both unicast and multicast messages.</p> <p>For unicast messages, the Announce message interval is requested during unicast negotiation to any peer. This controls the Announce message rate sent from remote peers to the local node. It does not affect the announce message rate that may be sent from the local node to remote peers. Remote peers may request an Announce message rate within the acceptable grant range.</p>

For multicast messages used on PTP Ethernet ports, this command specifies the message interval used for Announce messages transmitted by the local node.

This value also defines the interval between executions of the BTCA within the node.

To minimize BTCA driven reconfigurations, IEEE recommends that the announce interval should be consistent across the entire 1588 network.

Range	-3 to 4
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **network-type** *keyword*

Synopsis	PTP network type
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">network-type</a> <i>keyword</i>
Tree	<a href="#">network-type</a>
Description	This command configures the codeset to be used for the encoding of QL values into PTP clockClass values and vice versa when the profile is configured for G.8265.1 or G.8275.2.  This setting only applies to the range of values observed in the clockClass values transmitted out of the node in Announce messages. The router supports the reception of any valid value in Table 1/G.8265.1 and Table2/G.8275.2.
Options	sonet, sdh
Default	sdh
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port** [[port-id](#)] *reference*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">port</a> <i>reference</i>
Tree	<a href="#">port</a>
Description	Commands in this context configure PTP over Ethernet on the physical port. The PTP process transmits and receives PTP messages through the port using Ethernet encapsulation (as opposed to UDP/IPv4 encapsulation).  Frames are transmitted with no VLAN tags, even if the port is configured for dot1q or qinq modes for encap-type. The received frames from the external PTP clock must also be untagged.  Two reserved multicast addresses are allocated for PTP messages (see Annex F IEEE Std 1588-2008). Either address can be configured for the PTP messages sent through the port.

A PTP port cannot be created if the PTP profile is configured for G.8265.1.

If the port supports 1588 port-based timestamping, Synchronous Ethernet must be enabled on the MDA when PTP over Ethernet is enabled.

De-provisioning of the card or MDA containing the specified port is not permitted while the port is configured within PTP.

Changing the encapsulation or the port type of the Ethernet port is not permitted when PTP Ethernet Multicast operation is configured on the port.

To allocate an Ethernet satellite client port as a PTP port, the Ethernet satellite must first be enabled for the transparent clock function. For more information, see the **configure satellite ethernet-satellite ptp-tc** command.

The SyncE/1588 ports of the CPM and CCMs can be specified as PTP ports. These use the 'A/3' and 'B/3' designation and both must be specified as two PTP ports if both are used. The active CPM sends and receives messages on both ports if they are specified and enabled.

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[port-id]** *reference*

Synopsis	Ethernet PTP port ID
Context	<b>configure system ptp port</b> <i>reference</i>
Tree	<a href="#">port</a>
Reference	<b>configure port</b> <i>string</i>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **address** *string*

Synopsis	Destination MAC address of the transmitted PTP messages
Context	<b>configure system ptp port</b> <i>reference</i> <b>address</b> <i>string</i>
Tree	<a href="#">address</a>
Description	This command specifies the destination MAC address of the transmitted PTP messages. IEEE Std 1588-2008 Annex F defines two reserved addresses for 1588 messages, which include: <ul style="list-style-type: none"> <li>• <b>01-1B-19-00-00-00</b> — all except the peer delay mechanism messages</li> <li>• <b>01-80-C2-00-00-0E</b> — peer delay mechanism messages</li> </ul>

Both addresses are supported for reception, independent of the address configured by this command.

Default	01:1B:19:00:00:00
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the PTP port
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">port</a> <i>reference</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **alternate-profile** *reference*

Synopsis	Alternate profile for the PTP port
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">port</a> <i>reference</i> <b>alternate-profile</b> <i>reference</i>
Tree	<a href="#">alternate-profile</a>
Description	This command creates the alternate profile that is used in communications with the port or peer. If no alternate profile is specified, the primary profile is used.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <b>alternate-profile</b> <i>string</i>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **local-priority** *number*

Synopsis	PTP port local priority
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">port</a> <i>reference</i> <b>local-priority</b> <i>number</i>
Tree	<a href="#">local-priority</a>
Description	This command configures the local priority used to choose between PTP time Transmitters in the best time Transmitter clock algorithm (BTCA). This setting applies when the PTP profile is either configured for G.8275.1 or G.8275.2 and is ignored for any other profile.

For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (**ptp port** context). See G.8275.1 or G.8275.2 for detailed information.

Range	1 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **log-delay-interval** *number*

Synopsis	Minimum interval for Delay_Req messages in log form
Context	<b>configure system ptp port reference log-delay-interval</b> <i>number</i>
Tree	<a href="#">log-delay-interval</a>
Description	<p>This command configures the minimum interval used for multicast Delay_Req messages for the port. For ports in a slave state, the interval is used, unless the parent port indicates a longer interval. For a port in master state, the interval is advertised to external slave ports as the minimum acceptable interval for Delay_Req messages from the slave ports.</p> <p>The router supports the 1588 standard requirement for a port in slave state to check the logMessageInterval field of received multicast Delay_Resp messages. If the value of the logMessageInterval field of the messages is greater than the value configured locally for the generation of Delay_Req messages, the slave must use the longer interval for the generation of Delay_Req messages.</p> <p>The interval value is specified as the logarithm to the base 2.</p>
Range	-6 to 0
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **log-sync-interval** *number*

Synopsis	Interval for transmission of Sync messages in log form
Context	<b>configure system ptp port reference log-sync-interval</b> <i>number</i>
Tree	<a href="#">log-sync-interval</a>
Description	<p>This command configures the interval used for Sync messages transmitted by the local node when the port is in master state.</p> <p>The interval value is specified as the logarithm to the base 2.</p>
Range	-6 to 0
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **master-only** *boolean*

Synopsis Restrict the local port to master state

Context **configure system ptp port reference master-only boolean**

Tree [master-only](#)

Description When configured to **true**, the local port is restricted to master state only, ensuring that the system does not obtain synchronization from attached external devices.  
This command is supported only when the PTP profile is set for G.8275.1 or G.8275.2.

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority1** *number*

Synopsis Priority1 of the local clock

Context **configure system ptp priority1 number**

Tree [priority1](#)

Description This command configures the priority1 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008.  
This value is used by the Best Master Clock Algorithm to determine which clock should provide timing for the network and is advertised in Announce messages.

Range 0 to 255

Default 128

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **priority2** *number*

Synopsis Priority2 of the local clock

Context **configure system ptp priority2 number**

Tree [priority2](#)

Description This command configures the priority2 parameter of the local clock. The setting is used when the profile is configured for IEEE 1588-2008, G.8275.1, or G.8275.2.  
This value is used by the Best Master Clock algorithm to determine which clock should provide timing for the network and is advertised in Announce messages.

Range	0 to 255
Default	128
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **profile** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	PTP profile
Context	<b>configure system ptp profile</b> <i>keyword</i>
Tree	<a href="#">profile</a>
Description	<p>This command configures the profile to be used for the internal PTP clock. It defines the Best timeTransmitter Clock Algorithm (BTCA) behavior.</p> <p>Profile changes may affect the settings of other configuration elements, such as the clock type and default settings for the delay interval, announce interval, and the Sync interval.</p> <p>The following clock types are supported for the indicated profiles:</p> <ul style="list-style-type: none"> <li>• G.8265.1: slave only, master only</li> <li>• IEEE 1588 2008: slave only, master only, boundary</li> <li>• G.8275.1: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver)</li> <li>• G.8275.2: slave only, boundary, master only (master only, only if the platform includes an embedded GNSS receiver)</li> </ul>
Options	g8265dot1-2010, ieee1588-2008, g8275dot1-2014, g8275dot2-2016
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ptsf**

Synopsis	Enter the <b>ptsf</b> context
Context	<b>configure system ptp ptsf</b>

Tree	<a href="#">ptsf</a>
Description	Commands in this context configure the attributes of Packet Timing Signal Fail (PTSF).
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## monitor-ptsf-unusable

Synopsis	Enter the <b>monitor-ptsf-unusable</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">ptsf</a> <a href="#">monitor-ptsf-unusable</a>
Tree	<a href="#">monitor-ptsf-unusable</a>
Description	<p>Commands in this context configure monitoring of neighbor clocks for the PTSF-unusable state (condition) when the profile is set to g8275dot1-2014.</p> <p>When administratively enabled, the local clock monitors the noise level of PTP event messages between external neighbor PTP ports and the local clock. If it detects a high variation in the network path between the external neighbor port and the local port, it considers the neighbor port unusable. Announce messages from the neighbor are discarded and excluded from the BTCA and the port cannot be selected as the parent clock. The unusable condition must be manually cleared.</p> <p>When administratively disabled, the monitor PTSF function of the PTP clock clears PTSF-unusable states from all neighbor PTP ports. If no PTP messages are received from a neighbor for 15 minutes, the neighbor information is purged and the PTSF-unusable state is cleared.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of PTSF unusable monitoring
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp</a> <a href="#">ptsf</a> <a href="#">monitor-ptsf-unusable</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## router [[router-instance](#)] *string*

Synopsis	Enter the <b>router</b> list instance
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Context	<b>configure system ptp router</b> <i>string</i>
Tree	<b>router</b>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[router-instance]** *string*

Synopsis	Router name or VPRN service name
Context	<b>configure system ptp router</b> <i>string</i>
Tree	<b>router</b>
MD-CLI	Base
Default	
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of PTP on the router instance
Context	<b>configure system ptp router</b> <i>string admin-state keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **peer** [*ip-address*] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure system ptp router</b> <i>string peer (ipv4-address-no-zone   ipv6-address-no-zone)</i>
Tree	<b>peer</b>
Description	Commands in this context configure a remote PTP peer.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the remote PTP peer
Context	<b>configure system ptp router</b> <i>string peer</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the PTP peer
Context	<b>configure system ptp router</b> <i>string peer</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**local-priority** *number*

Synopsis	PTP peer local priority
Context	<b>configure system ptp router</b> <i>string peer</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">local-priority</a> <i>number</i>
Tree	<a href="#">local-priority</a>
Description	<p>This command configures the local priority for the peer, which is used to choose between PTP timeTransmitters in the best timeTransmitter clock algorithm (BTCA). This setting applies when the PTP profile is configured for G.8265.1, G.8275.1, or G.8275.2 and is ignored for any other profile.</p> <p>For G.8265.1, this command configures the priority used to choose between time Transmitter clocks with the same quality (see G.8265.1 for more details).</p> <p>For G.8275.1 or G.8275.2, this command configures the localPriority parameter associated with the Announce messages received from the external clocks (<b>ptp router peer</b> context). See G.8275.1 or G.8275.2 for detailed information.</p>
Range	1 to 255
Default	128

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **log-sync-interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PTP peer interval for Sync messages in log form
Context	<b>configure system ptp router</b> <i>string peer</i> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>log-sync-interval</b> <i>number</i>
Tree	<b>log-sync-interval</b>
Description	This command configures the message interval used for Sync and Delay_Resp messages that are requested during unicast negotiation to the peer. The setting controls messages sent from remote peers to the local node but the packet rate from the local node to remote peers is not affected. Remote peers may request a packet rate within the acceptable range.  The interval value is specified as the logarithm to the base 2.
Range	-6 to 0
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **peer-limit** *number*

Synopsis	Number of discovered peers allowed for routing instance
Context	<b>configure system ptp router</b> <i>string peer-limit</i> <i>number</i>
Tree	<b>peer-limit</b>
Description	This command specifies the maximum number of discovered peers permitted within the routing instance. This ensures that a routing instance does not consume all the possible discovered peers and prevents the routing instance from blocking discovered peers in other routing instances.  The sum of all peer limit values for all routing instances cannot exceed the maximum number of discovered peers supported by the system.
Range	0 to 512
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tx-while-sync-uncertain** *boolean*

Synopsis	Send Announce messages while clock is unsynchronized
Context	<b>configure</b> <a href="#">system</a> <a href="#">ptp tx-while-sync-uncertain</a> <i>boolean</i>
Tree	<a href="#">tx-while-sync-uncertain</a>
Description	<p>When configured to <b>true</b>, the local PTP clock transmits Announce messages to downstream clocks to indicate it has not yet stabilized on the recovered synchronization source (upstream clocks or GM clock). While the PTP clock is unsynchronized, the Sync Uncertain state is true.</p> <p>When configured to <b>false</b>, the local PTP clock does not send Announce messages to downstream clocks to indicate it is not synchronized to a valid timing source. If the Sync Uncertain state of the clock is true while this command is configured to <b>false</b>, unicast negotiation grant requests are not granted and current grants are canceled.</p>
Default	true
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**script-control**

Synopsis	Enter the <b>script-control</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a>
Tree	<a href="#">script-control</a>
Introduced	16.0.R1
Platforms	All

**script** [[script-name](#)] *string* *owner* *string*

Synopsis	Enter the <b>script</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <i>owner</i> <i>string</i>
Tree	<a href="#">script</a>
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

**[script-name]** *string*

Synopsis	Script name
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Context	<b>configure system script-control script string owner string</b>
Tree	<b>script</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **owner string**

Synopsis	Script owner
Context	<b>configure system script-control script string owner string</b>
Tree	<b>script</b>
Description	<p>This command configures the owner to be associated with the script. The owner is optional and "TiMOS CLI" is used if an owner is not specified.</p> <p>The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The <b>configure system security cli-script authorization x cli-user</b> command determines the user context against which commands in the scripts are authorized.</p>
String Length	1 to 32
MD-CLI	TiMOS CLI
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the script
Context	<b>configure system script-control script string owner string admin-state keyword</b>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**location** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script location
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">location</a> <i>string</i>
Tree	<a href="#">location</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

**script-policy** [[policy-name](#)] *string* [owner](#) *string*

Synopsis	Enter the <b>script-policy</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i>
Tree	<a href="#">script-policy</a>
Max. Instances	1500
Introduced	16.0.R1
Platforms	All

**[policy-name]** *string*

Synopsis	Script policy name
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i>
Tree	<a href="#">script-policy</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**owner string**

Synopsis	Script policy owner
Context	<b>configure system script-control script-policy string owner string</b>
Tree	<a href="#">script-policy</a>
Description	<p>This command configures the owner to be associated with the script policy. The owner is optional and "TiMOS CLI" is used if an owner is not specified.</p> <p>The owner is an arbitrary name and not necessarily a user name. Commands in the scripts are not authorized against the owner. The <b>configure system security cli-script authorization x cli-user</b> command determines the user context against which commands in the scripts are authorized.</p>
String Length	1 to 32
MD-CLI	TiMOS CLI
Default	
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of the script policy
Context	<b>configure system script-control script-policy string owner string admin-state keyword</b>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**expire-time (number | keyword)**

Synopsis	Maximum amount of time to keep a run history status
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Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">expire-time</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">expire-time</a>
Range	0 to 21474836
Units	seconds
Options	forever
Default	3600
Introduced	16.0.R1
Platforms	All

### **lifetime** (*number* | *keyword*)

Synopsis	Maximum amount of time the script may run
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">lifetime</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">lifetime</a>
Range	0 to 21474836
Units	seconds
Options	forever
Default	3600
Notes	The following elements are part of a choice: ( <b>lifetime</b> and <b>script</b> ) or ( <b>python-lifetime</b> and <b>python-script</b> ).
Introduced	16.0.R1
Platforms	All

### **lock-override** *boolean*

Synopsis	Allow EHS/CRON script to break database explicit lock
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">lock-override</a> <i>boolean</i>
Tree	<a href="#">lock-override</a>
Default	false
Introduced	19.10.R1
Platforms	All



### **max-completed** *number*

Synopsis	Maximum number of script history status entries kept
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <b>max-completed</b> <i>number</i>
Tree	<a href="#">max-completed</a>
Range	1 to 1500
Default	1
Introduced	16.0.R1
Platforms	All

### **python-lifetime** *number*

Synopsis	Maximum time the Python application can run
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <b>python-lifetime</b> <i>number</i>
Tree	<a href="#">python-lifetime</a>
Range	30 to 86400
Units	seconds
Notes	The following elements are part of a choice: ( <b>lifetime</b> and <b>script</b> ) or ( <b>python-lifetime</b> and <b>python-script</b> ).
Introduced	21.10.R1
Platforms	All

### **python-script**

Synopsis	Enter the <b>python-script</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <b>python-script</b>
Tree	<a href="#">python-script</a>
Notes	The following elements are part of a choice: ( <b>lifetime</b> and <b>script</b> ) or ( <b>python-lifetime</b> and <b>python-script</b> ).
Introduced	21.10.R1
Platforms	All

## name *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Python application name
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <a href="#">python-script</a> <i>name reference</i>
Tree	<a href="#">name</a>
Reference	<b>configure</b> <a href="#">python</a> <a href="#">python-script</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

## results *string*

Synopsis	Location to receive CLI output of a script run
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <a href="#">results</a> <i>string</i>
Tree	<a href="#">results</a>
String Length	1 to 255
Introduced	16.0.R1
Platforms	All

## script

Synopsis	Enter the <b>script</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <b>owner</b> <i>string</i> <a href="#">script</a>
Tree	<a href="#">script</a>
Notes	The following elements are part of a choice: ( <b>lifetime</b> and <b>script</b> ) or ( <b>python-lifetime</b> and <b>python-script</b> ).
Introduced	16.0.R1
Platforms	All

**name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script name
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">script</a> <a href="#">name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**owner** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Script owner
Context	<b>configure</b> <a href="#">system</a> <a href="#">script-control</a> <a href="#">script-policy</a> <i>string</i> <a href="#">owner</a> <i>string</i> <a href="#">script</a> <a href="#">owner</a> <i>string</i>
Tree	<a href="#">owner</a>
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

**security**

Synopsis	Enter the <b>security</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a>
Tree	<a href="#">security</a>
Description	<p>Commands in this context configure central security settings such as DDoS protection, users, authorization profiles, and certificates.</p> <p>Access to these commands should be restricted to highly trusted users and device administrators.</p>
Introduced	16.0.R1
Platforms	All

**aaa**

Synopsis	Enter the <b>aaa</b> context
Context	<b>configure system security aaa</b>
Tree	<b>aaa</b>
Introduced	16.0.R1
Platforms	All

**cli-session-group** [**cli-session-group-name**] *string*

Synopsis	Enter the <b>cli-session-group</b> list instance
Context	<b>configure system security aaa cli-session-group string</b>
Tree	<b>cli-session-group</b>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[cli-session-group-name]** *string*

Synopsis	CLI session group name
Context	<b>configure system security aaa cli-session-group string</b>
Tree	<b>cli-session-group</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R2
Platforms	All

**combined-max-sessions** *number*

Synopsis	Maximum number of concurrent SSH and Telnet sessions
Context	<b>configure system security aaa cli-session-group string combined-max-sessions number</b>
Tree	<b>combined-max-sessions</b>
Range	0 to 50
Introduced	16.0.R1

Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **ssh-max-sessions** *number*

Synopsis Maximum number of concurrent SSH sessions  
 Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [ssh-max-sessions](#) *number*  
 Tree [ssh-max-sessions](#)  
 Range 0 to 50  
 Introduced 16.0.R1  
 Platforms All

### **telnet-max-sessions** *number*

Synopsis Maximum number of concurrent Telnet sessions  
 Context **configure** [system](#) [security](#) [aaa](#) [cli-session-group](#) *string* [telnet-max-sessions](#) *number*  
 Tree [telnet-max-sessions](#)  
 Range 0 to 50  
 Introduced 16.0.R1  
 Platforms All

### **health-check** (*number* | *keyword*)

Synopsis Polling interval of RADIUS, TACACS+, and LDAP servers  
 Context **configure** [system](#) [security](#) [aaa](#) [health-check](#) (*number* | *keyword*)  
 Tree [health-check](#)  
 Range 6 to 1500

Units	seconds
Options	none
Default	30
Introduced	16.0.R1
Platforms	All

## local-profiles

Synopsis	Enter the <b>local-profiles</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a>
Tree	<a href="#">local-profiles</a>
Introduced	16.0.R1
Platforms	All

## profile [[user-profile-name](#)] *string*

Synopsis	Enter the <b>profile</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i>
Tree	<a href="#">profile</a>
Max. Instances	128
Introduced	16.0.R1
Platforms	All

## [\[user-profile-name\]](#) *string*

Synopsis	User profile name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i>
Tree	<a href="#">profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**cli-session-group** *reference*

Synopsis	CLI session group to which the profile belongs
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">cli-session-group</a> <i>reference</i>
Tree	<a href="#">cli-session-group</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">cli-session-group</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**combined-max-sessions** *number*

Synopsis	Maximum number of concurrent SSH and Telnet sessions
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">combined-max-sessions</a> <i>number</i>
Tree	<a href="#">combined-max-sessions</a>
Range	0 to 50
Introduced	16.0.R1
Platforms	All

**default-action** *keyword*

Synopsis	Action for non-matching entry
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">default-action</a> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	deny-all, permit-all, none, read-only-all
Default	none
Introduced	16.0.R1
Platforms	All

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

**[entry-id]** *number*

Synopsis	User profile entry ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**action** *keyword*

Synopsis	Action when a user command matches the entry
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Options	deny, permit, none, read-only
Default	none
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**match** *string*

Synopsis	Command to match the entry
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <i>string</i>
Tree	<a href="#">match</a>



String Length	1 to 255
Introduced	16.0.R1
Platforms	All

## grpc

Synopsis	Enter the <b>grpc</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <b>grpc</b>
Tree	<a href="#">grpc</a>
Introduced	16.0.R1
Platforms	All

## rpc-authorization

Synopsis	Enter the <b>rpc-authorization</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <b>grpc</b> <b>rpc-authorization</b>
Tree	<a href="#">rpc-authorization</a>
Description	Commands in this context control the authorization of each RPC in gRPC interfaces.
Introduced	16.0.R1
Platforms	All

## gnmi-capabilities *keyword*

Synopsis	gNMI Capabilities RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <b>grpc</b> <b>rpc-authorization</b> <b>gnmi-capabilities</b> <i>keyword</i>
Tree	<a href="#">gnmi-capabilities</a>
Options	permit, deny
Default	permit
Introduced	16.0.R1
Platforms	All

## gnmi-get *keyword*

Synopsis	gNMI Get RPC authorization
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Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnmi-get</a> <i>keyword</i>
Tree	<a href="#">gnmi-get</a>
Options	permit, deny
Default	permit
Introduced	16.0.R1
Platforms	All

### **gnmi-set** *keyword*

Synopsis	gNMI Set RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnmi-set</a> <i>keyword</i>
Tree	<a href="#">gnmi-set</a>
Options	permit, deny
Default	permit
Introduced	16.0.R1
Platforms	All

### **gnmi-subscribe** *keyword*

Synopsis	gNMI Subscribe RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnmi-subscribe</a> <i>keyword</i>
Tree	<a href="#">gnmi-subscribe</a>
Options	permit, deny
Default	permit
Introduced	16.0.R1
Platforms	All

### **gnoi-cert-mgmt-cangenerate** *keyword*

Synopsis	gNOI CanGenerateCSR RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-cert-mgmt-cangenerate</a> <i>keyword</i>
Tree	<a href="#">gnoi-cert-mgmt-cangenerate</a>

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Options	permit, deny
Default	deny
Introduced	19.10.R1
Platforms	All

### **gnoi-cert-mgmt-getcert** *keyword*

Synopsis	gNOI GetCertificates RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-cert-mgmt-getcert</a> <i>keyword</i>
Tree	<a href="#">gnoi-cert-mgmt-getcert</a>
Options	permit, deny
Default	deny
Introduced	19.10.R1
Platforms	All

### **gnoi-cert-mgmt-install** *keyword*

Synopsis	gNOI Install RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-cert-mgmt-install</a> <i>keyword</i>
Tree	<a href="#">gnoi-cert-mgmt-install</a>
Options	permit, deny
Default	deny
Introduced	19.10.R1
Platforms	All

### **gnoi-cert-mgmt-revoke** *keyword*

Synopsis	gNOI RevokeCertificates RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-cert-mgmt-revoke</a> <i>keyword</i>
Tree	<a href="#">gnoi-cert-mgmt-revoke</a>
Options	permit, deny
Default	deny
Introduced	20.2.R1

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Platforms All

### **gnoi-cert-mgmt-rotate** *keyword*

Synopsis gNOI Rotate RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-cert-mgmt-rotate](#) *keyword*

Tree [gnoi-cert-mgmt-rotate](#)

Options permit, deny

Default deny

Introduced 19.10.R1

Platforms All

### **gnoi-file-get** *keyword*

Synopsis gNOI File Get RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-file-get](#) *keyword*

Tree [gnoi-file-get](#)

Options permit, deny

Default permit

Introduced 21.2.R1

Platforms All

### **gnoi-file-put** *keyword*

Synopsis gNOI File Put RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-file-put](#) *keyword*

Tree [gnoi-file-put](#)

Options permit, deny

Default permit

Introduced 21.2.R1

Platforms All

**gnoi-file-remove** *keyword*

Synopsis	gNOI File Remove RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-file-remove</a> <i>keyword</i>
Tree	<a href="#">gnoi-file-remove</a>
Options	permit, deny
Default	permit
Introduced	21.2.R1
Platforms	All

**gnoi-file-stat** *keyword*

Synopsis	gNOI File Stat RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-file-stat</a> <i>keyword</i>
Tree	<a href="#">gnoi-file-stat</a>
Options	permit, deny
Default	permit
Introduced	21.2.R1
Platforms	All

**gnoi-file-transfertoreremote** *keyword*

Synopsis	gNOI File TransferToRemote RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-file-transfertoreremote</a> <i>keyword</i>
Tree	<a href="#">gnoi-file-transfertoreremote</a>
Options	permit, deny
Default	permit
Introduced	21.7.R1
Platforms	All

**gnoi-system-cancelreboot** *keyword*

Synopsis	gNOI System CancelReboot RPC authorization
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Context	<b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-system-cancelreboot</a> <i>keyword</i>
Tree	<a href="#">gnoi-system-cancelreboot</a>
Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

### **gnoi-system-ping** *keyword*

Synopsis	gNOI System Ping RPC authorization
Context	<b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-system-ping</a> <i>keyword</i>
Tree	<a href="#">gnoi-system-ping</a>
Options	permit, deny
Default	permit
Introduced	21.7.R1
Platforms	All

### **gnoi-system-reboot** *keyword*

Synopsis	gNOI System Reboot RPC authorization
Context	<b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-system-reboot</a> <i>keyword</i>
Tree	<a href="#">gnoi-system-reboot</a>
Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

### **gnoi-system-rebootstatus** *keyword*

Synopsis	gNOI System RebootStatus RPC authorization
Context	<b>configure</b> <a href="#">system security aaa local-profiles profile</a> <i>string</i> <a href="#">grpc rpc-authorization gnoi-system-rebootstatus</a> <i>keyword</i>
Tree	<a href="#">gnoi-system-rebootstatus</a>

Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

### **gnoi-system-setpackage** *keyword*

Synopsis	gNOI System SetPackage RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-system-setpackage</a> <i>keyword</i>
Tree	<a href="#">gnoi-system-setpackage</a>
Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

### **gnoi-system-switchcontrolprocessor** *keyword*

Synopsis	gNOI System SwitchControlProcessor RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-system-switchcontrolprocessor</a> <i>keyword</i>
Tree	<a href="#">gnoi-system-switchcontrolprocessor</a>
Options	permit, deny
Default	deny
Introduced	20.5.R1
Platforms	All

### **gnoi-system-time** *keyword*

Synopsis	gNOI System Time RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">gnoi-system-time</a> <i>keyword</i>
Tree	<a href="#">gnoi-system-time</a>
Options	permit, deny
Default	permit
Introduced	21.7.R1

Platforms All

### **gnoi-system-traceroute** *keyword*

Synopsis gNOI System Traceroute RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [gnoi-system-traceroute](#) *keyword*

Tree [gnoi-system-traceroute](#)

Options permit, deny

Default permit

Introduced 21.7.R1

Platforms All

### **md-cli-session** *keyword*

Synopsis gNOI MdCli Session RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [md-cli-session](#) *keyword*

Tree [md-cli-session](#)

Options permit, deny

Default permit

Introduced 20.5.R1

Platforms All

### **rib-api-getversion** *keyword*

Synopsis RibApi GetVersion RPC authorization

Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [grpc](#) [rpc-authorization](#) [rib-api-getversion](#) *keyword*

Tree [rib-api-getversion](#)

Options permit, deny

Default permit

Introduced 16.0.R4

Platforms All



**rib-api-modify** *keyword*

Synopsis	RibApi Modify RPC authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">grpc</a> <a href="#">rpc-authorization</a> <a href="#">rib-api-modify</a> <i>keyword</i>
Tree	<a href="#">rib-api-modify</a>
Options	permit, deny
Default	permit
Introduced	16.0.R4
Platforms	All

**li** *boolean*

Synopsis	Allow lawful intercept profile ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">li</a> <i>boolean</i>
Tree	<a href="#">li</a>
Default	false
Introduced	19.10.R1
Platforms	All

**netconf**

Synopsis	Enter the <b>netconf</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a>
Tree	<a href="#">netconf</a>
Introduced	16.0.R1
Platforms	All

**base-op-authorization**

Synopsis	Enter the <b>base-op-authorization</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a>
Tree	<a href="#">base-op-authorization</a>
Description	<p>Commands in this context configure the permission to use NETCONF operations at the base operation level for the specified profile.</p> <p>The NETCONF operations are authorized by default in the built-in system-generated administrative profile.</p>

Introduced 16.0.R1  
Platforms All

### **action** *boolean*

Synopsis Allow NETCONF action operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [action](#) *boolean*  
Tree [action](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **cancel-commit** *boolean*

Synopsis Allow NETCONF cancel-commit operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [cancel-commit](#) *boolean*  
Tree [cancel-commit](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **close-session** *boolean*

Synopsis Allow NETCONF close-session operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#) [close-session](#) *boolean*  
Tree [close-session](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **commit** *boolean*

Synopsis Allow NETCONF commit operation

Context	<b>configure system security aaa local-profiles profile</b> <i>string</i> <b>netconf base-op-authorization</b> <b>commit</b> <i>boolean</i>
Tree	<b>commit</b>
Default	false
Introduced	21.7.R1
Platforms	All

**copy-config** *boolean*

Synopsis	Allow NETCONF copy-config operation
Context	<b>configure system security aaa local-profiles profile</b> <i>string</i> <b>netconf base-op-authorization</b> <b>copy-config</b> <i>boolean</i>
Tree	<b>copy-config</b>
Default	false
Introduced	21.7.R1
Platforms	All

**create-subscription** *boolean*

Synopsis	Allow NETCONF create-subscription operation
Context	<b>configure system security aaa local-profiles profile</b> <i>string</i> <b>netconf base-op-authorization</b> <b>create-subscription</b> <i>boolean</i>
Tree	<b>create-subscription</b>
Description	<p>When configured to <b>true</b>, this command enables the NETCONF create-subscription operation in the default profile.</p> <p>The <b>base-op-authorization create-subscription</b> configuration is not pre-emptive, which means that it is checked only at the time of the initial subscription. Configuration changes to <b>base-op-authorization</b> do not cancel any in-progress subscriptions and operators who successfully subscribed continue to receive messages.</p> <p>When configured to <b>false</b>, this command disables the NETCONF create-subscription operation in the default profile.</p> <p>The operation is enabled by default in the built-in system-generated administrative profile.</p>
Default	false
Introduced	21.7.R1
Platforms	All

**delete-config** *boolean*

Synopsis	Allow NETCONF delete-config operation
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">delete-config</a> <i>boolean</i>
Tree	<a href="#">delete-config</a>
Default	false
Introduced	21.7.R1
Platforms	All

**discard-changes** *boolean*

Synopsis	Allow NETCONF discard-changes operation
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">discard-changes</a> <i>boolean</i>
Tree	<a href="#">discard-changes</a>
Default	false
Introduced	21.7.R1
Platforms	All

**edit-config** *boolean*

Synopsis	Allow NETCONF edit-config operation
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">edit-config</a> <i>boolean</i>
Tree	<a href="#">edit-config</a>
Default	false
Introduced	21.7.R1
Platforms	All

**get** *boolean*

Synopsis	Allow NETCONF get operation
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">get</a> <i>boolean</i>
Tree	<a href="#">get</a>
Default	false

Introduced 21.7.R1  
Platforms All

### **get-config** *boolean*

Synopsis Allow NETCONF get-config operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)  
[get-config](#) *boolean*  
Tree [get-config](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **get-data** *boolean*

Synopsis Allow NETCONF get-data operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)  
[get-data](#) *boolean*  
Tree [get-data](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **get-schema** *boolean*

Synopsis Allow NETCONF get-schema operation  
Context **configure** [system](#) [security](#) [aaa](#) [local-profiles](#) [profile](#) *string* [netconf](#) [base-op-authorization](#)  
[get-schema](#) *boolean*  
Tree [get-schema](#)  
Default false  
Introduced 21.7.R1  
Platforms All

### **kill-session** *boolean*

Synopsis Allow NETCONF kill-session operation

Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">kill-session</a> <i>boolean</i>
Tree	<a href="#">kill-session</a>
Default	false
Introduced	16.0.R1
Platforms	All

**lock** *boolean*

Synopsis	Allow NETCONF lock and unlock operations
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">lock</a> <i>boolean</i>
Tree	<a href="#">lock</a>
Default	false
Introduced	16.0.R1
Platforms	All

**validate** *boolean*

Synopsis	Allow NETCONF validate operation
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">netconf</a> <a href="#">base-op-authorization</a> <a href="#">validate</a> <i>boolean</i>
Tree	<a href="#">validate</a>
Default	false
Introduced	21.7.R1
Platforms	All

**ssh-max-sessions** *number*

Synopsis	Maximum number of concurrent SSH sessions
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <a href="#">ssh-max-sessions</a> <i>number</i>
Tree	<a href="#">ssh-max-sessions</a>
Range	0 to 50
Introduced	16.0.R1
Platforms	All

**telnet-max-sessions** *number*

Synopsis	Maximum number of concurrent Telnet sessions
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i> <b>telnet-max-sessions</b> <i>number</i>
Tree	<a href="#">telnet-max-sessions</a>
Range	0 to 50
Introduced	16.0.R1
Platforms	All

**management-interface**

Synopsis	Enter the <b>management-interface</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <b>management-interface</b>
Tree	<a href="#">management-interface</a>
Introduced	20.10.R1
Platforms	All

**md-cli**

Synopsis	Enter the <b>md-cli</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">management-interface</a> <b>md-cli</b>
Tree	<a href="#">md-cli</a>
Introduced	20.10.R1
Platforms	All

**command-accounting-during-load** *boolean*

Synopsis	Perform file command accounting for load or rollback
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">management-interface</a> <a href="#">md-cli</a> <b>command-accounting-during-load</b> <i>boolean</i>
Tree	<a href="#">command-accounting-during-load</a>
Default	true
Introduced	20.10.R1
Platforms	All

## output-authorization

Synopsis	Enter the <b>output-authorization</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">management-interface</a> <a href="#">output-authorization</a>
Tree	<a href="#">output-authorization</a>
Description	<p>Commands in this context configure output authorization for model-driven interfaces and telemetry.</p> <p>When output authorization is performed, commands that display configuration or state output must authorize every element in the output. If a remote AAA server is configured, there may be delays in displaying output while the output is authorized. The remote AAA server may receive a large volume of authorization requests when substantial output displays are needed, such as for system configuration details.</p> <p>Input to edit the configuration is always authorized, and is not affected by commands in this context.</p>
Introduced	20.10.R1
Platforms	All

## md-interfaces *boolean*

Synopsis	Authorize output in model-driven interfaces
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">management-interface</a> <a href="#">output-authorization</a> <a href="#">md-interfaces</a> <i>boolean</i>
Tree	<a href="#">md-interfaces</a>
Description	<p>When configured to <b>true</b>, output is authorized for the following:</p> <ul style="list-style-type: none"> <li>• MD-CLI <b>info</b> and <b>compare</b> commands</li> <li>• MD-CLI command completion of list key values</li> <li>• NETCONF &lt;get&gt; and &lt;get-config&gt; RPC</li> <li>• gRPC/gNMI Get RPCs</li> </ul>
Default	true
Introduced	20.10.R1
Platforms	All

## telemetry-data *boolean*

Synopsis	Authorize telemetry data in gNMI Subscribe RPC response
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">management-interface</a> <a href="#">output-authorization</a> <a href="#">telemetry-data</a> <i>boolean</i>
Tree	<a href="#">telemetry-data</a>



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Default	false
Introduced	20.10.R1
Platforms	All

## remote-servers

Synopsis	Enter the <b>remote-servers</b> context
Context	<b>configure</b> <a href="#">system security aaa remote-servers</a>
Tree	<a href="#">remote-servers</a>
Introduced	16.0.R1
Platforms	All

## ldap

Synopsis	Enter the <b>ldap</b> context
Context	<b>configure</b> <a href="#">system security aaa remote-servers ldap</a>
Tree	<a href="#">ldap</a>
Introduced	16.0.R1
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of the LDAP operation protocol
Context	<b>configure</b> <a href="#">system security aaa remote-servers ldap admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## public-key-authentication *boolean*

Synopsis	Allow SSH public key authentication from LDAP server
Context	<b>configure</b> <a href="#">system security aaa remote-servers ldap public-key-authentication</a> <i>boolean</i>
Tree	<a href="#">public-key-authentication</a>

Default	false
Introduced	16.0.R1
Platforms	All

### **route-preference** *keyword*

Synopsis	Route preference to reach the AAA server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap</a> <b>route-preference</b> <i>keyword</i>
Tree	<a href="#">route-preference</a>
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	21.5.R1
Platforms	All

### **server** [[index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap</a> <b>server</b> <i>number</i>
Tree	<a href="#">server</a>
Max. Instances	5
Introduced	16.0.R1
Platforms	All

### **[index]** *number*

Synopsis	LDAP server ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap</a> <b>server</b> <i>number</i>
Tree	<a href="#">server</a>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **address** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Enter the **address** list instance

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Max. Instances 1

Introduced 16.0.R1

Platforms All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis LDAP server address

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **port number**

Synopsis Port number on which to contact the LDAP server

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [port](#) *number*

Tree [port](#)

Range 1 to 65535

Default 389

Introduced 16.0.R1

Platforms All

**admin-state** *keyword*

Synopsis	Administrative state of the LDAP server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap server</a> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**bind-authentication**

Synopsis	Enter the <b>bind-authentication</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap server</a> <i>number</i> <b>bind-authentication</b>
Tree	<a href="#">bind-authentication</a>
Introduced	16.0.R1
Platforms	All

**password** *string*

Synopsis	Password used for authentication with the LDAP server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap server</a> <i>number</i> <b>bind-authentication</b> <b>password</b> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 199
Introduced	16.0.R1
Platforms	All

**root-dn** *string*

Synopsis	Root domain used for authentication with LDAP server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">ldap server</a> <i>number</i> <b>bind-authentication</b> <b>root-dn</b> <i>string</i>
Tree	<a href="#">root-dn</a>
String Length	1 to 512
Introduced	16.0.R1

Platforms All

## search

Synopsis Enter the **search** context

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [search](#)

Tree [search](#)

Introduced 16.0.R1

Platforms All

## base-dn *string*

Synopsis LDAP server search base domain name

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [search](#) [base-dn](#) *string*

Tree [base-dn](#)

String Length 1 to 512

Introduced 16.0.R1

Platforms All

## server-name *string*

Synopsis LDAP server name

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [server-name](#) *string*

Tree [server-name](#)

String Length 1 to 32

Introduced 16.0.R1

Platforms All

## tls-profile *reference*

Synopsis TLS client profile used to encrypt the LDAP connection

Context **configure** [system](#) [security](#) [aaa](#) [remote-servers](#) [ldap](#) [server](#) *number* [tls-profile](#) *reference*

Tree [tls-profile](#)

Reference **configure** [system](#) [security](#) [tls](#) [client-tls-profile](#) *string*

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Introduced	16.0.R1
Platforms	All

**server-retry** *number*

Synopsis	Number of attempts to retry contacting the LDAP server
Context	<b>configure</b> <a href="#">system security aaa remote-servers ldap server-retry</a> <i>number</i>
Tree	<a href="#">server-retry</a>
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

**server-timeout** *number*

Synopsis	Timeout for a response from the LDAP server
Context	<b>configure</b> <a href="#">system security aaa remote-servers ldap server-timeout</a> <i>number</i>
Tree	<a href="#">server-timeout</a>
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

**use-default-template** *boolean*

Synopsis	Apply the default template to LDAP
Context	<b>configure</b> <a href="#">system security aaa remote-servers ldap use-default-template</a> <i>boolean</i>
Tree	<a href="#">use-default-template</a>
Default	true
Introduced	16.0.R1
Platforms	All

## radius

Synopsis	Enter the <b>radius</b> context
Context	<b>configure system security aaa remote-servers radius</b>
Tree	<a href="#">radius</a>
Introduced	16.0.R1
Platforms	All

## access-algorithm *keyword*

Synopsis	Algorithm used to access the set of RADIUS servers
Context	<b>configure system security aaa remote-servers radius access-algorithm <i>keyword</i></b>
Tree	<a href="#">access-algorithm</a>
Options	direct, round-robin
Default	direct
Introduced	16.0.R1
Platforms	All

## accounting *boolean*

Synopsis	Enable RADIUS command accounting
Context	<b>configure system security aaa remote-servers radius accounting <i>boolean</i></b>
Tree	<a href="#">accounting</a>
Default	false
Introduced	16.0.R1
Platforms	All

## accounting-port *number*

Synopsis	Port number on RADIUS server for accounting requests
Context	<b>configure system security aaa remote-servers radius accounting-port <i>number</i></b>
Tree	<a href="#">accounting-port</a>
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the authentication server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**authorization** *boolean*

Synopsis	Enable RADIUS authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>authorization</b> <i>boolean</i>
Tree	<a href="#">authorization</a>
Default	false
Introduced	16.0.R1
Platforms	All

**interactive-authentication** *boolean*

Synopsis	Enable RADIUS interactive authentication
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>interactive-authentication</b> <i>boolean</i>
Tree	<a href="#">interactive-authentication</a>
Default	false
Introduced	16.0.R1
Platforms	All

**port** *number*

Synopsis	UDP port number on which to contact RADIUS server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>port</b> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65535
Default	1812



Introduced	16.0.R1
Platforms	All

### **route-preference** *keyword*

Synopsis	Route preference to reach the AAA server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <b>route-preference</b> <i>keyword</i>
Tree	<a href="#">route-preference</a>
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	21.5.R1
Platforms	All

### **server** [[index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Max. Instances	5
Introduced	16.0.R1
Platforms	All

### **[index]** *number*

Synopsis	RADIUS server ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the RADIUS server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i> <b>address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**authenticator** *keyword*

Synopsis	Authenticator hash algorithm for the RADIUS server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i> <b>authenticator</b> <i>keyword</i>
Tree	<a href="#">authenticator</a>
Description	This command specifies the hash algorithm used to authenticate RADIUS Access-Request, Access-Accept, Access-Reject, Access-Challenge, Accounting-Request, and Accounting-Response packets.
Options	md5, sm3
Default	md5
Introduced	22.10.R1
Platforms	All

**secret** *string*

Synopsis	Secret key to access the RADIUS server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">radius</a> <a href="#">server</a> <i>number</i> <b>secret</b> <i>string</i>
Tree	<a href="#">secret</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	All

**tls-client-profile** *reference*

Synopsis	TLS client profile for the RADIUS server
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Context	<b>configure system security aaa remote-servers radius server</b> <i>number</i> <i>tls-client-profile reference</i>
Tree	<a href="#">tls-client-profile</a>
Description	This command specifies the TLS client profile used to encrypt RADIUS communication. When configured, RADIUS messages are sent using TLS.
Reference	<b>configure system security</b> <a href="#">tls client-tls-profile</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

### **server-retry** *number*

Synopsis	Number of attempts to retry contacting RADIUS server
Context	<b>configure system security aaa remote-servers radius server-retry</b> <i>number</i>
Tree	<a href="#">server-retry</a>
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

### **server-timeout** *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	<b>configure system security aaa remote-servers radius server-timeout</b> <i>number</i>
Tree	<a href="#">server-timeout</a>
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

### **use-default-template** *boolean*

Synopsis	Apply the RADIUS default user template to RADIUS user
Context	<b>configure system security aaa remote-servers radius use-default-template</b> <i>boolean</i>
Tree	<a href="#">use-default-template</a>

---

Default	false
Introduced	16.0.R1
Platforms	All

## **tacplus**

Synopsis	Enter the <b>tacplus</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a>
Tree	<a href="#">tacplus</a>
Introduced	16.0.R1
Platforms	All

## **accounting**

Synopsis	Enable the <b>accounting</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">accounting</a>
Tree	<a href="#">accounting</a>
Introduced	16.0.R1
Platforms	All

## **record-type** *keyword*

Synopsis	Type of accounting record packet sent to TACACS+ server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">accounting</a> <a href="#">record-type</a> <i>keyword</i>
Tree	<a href="#">record-type</a>
Options	start-stop, stop-only
Default	stop-only
Introduced	16.0.R1
Platforms	All

## **admin-control**

Synopsis	Enter the <b>admin-control</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">admin-control</a>
Tree	<a href="#">admin-control</a>

Introduced 16.0.R1  
Platforms All

### **tacplus-map-to-priv-lvl** *number*

Synopsis Interactive authentication from node to TACACS+ server  
Context **configure** [system security aaa remote-servers tacplus admin-control tacplus-map-to-priv-lvl number](#)  
Tree [tacplus-map-to-priv-lvl](#)  
Range 0 to 15  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the TACACS+ protocol  
Context **configure** [system security aaa remote-servers tacplus admin-state keyword](#)  
Tree [admin-state](#)  
Options enable, disable  
Default enable  
Introduced 16.0.R1  
Platforms All

### **authorization**

Synopsis Enable the **authorization** context  
Context **configure** [system security aaa remote-servers tacplus authorization](#)  
Tree [authorization](#)  
Introduced 16.0.R1  
Platforms All

### **request-format**

Synopsis Enter the **request-format** context  
Context **configure** [system security aaa remote-servers tacplus authorization request-format](#)  
Tree [request-format](#)

Description	Commands in this context configure access operations that are sent to the TACACS+ server during authorization.
Introduced	21.10.R3
Platforms	All

### **access-operation-cmd** *keyword*

Synopsis	Access operations sent in authorization requests
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">authorization</a> <a href="#">request-format</a> <b>access-operation-cmd</b> <i>keyword</i>
Tree	<a href="#">access-operation-cmd</a>
Description	This command sends an operation argument in authorization requests.  In model-driven interfaces, this command configures the system to send the operation in the cmd argument, and the path in the cmd-args argument, in TACACS+ authorization requests. This command does not apply to authorization requests in classic interfaces.
Options	delete
Max. Instances	1
Introduced	21.10.R3
Platforms	All

### **use-priv-lvl** *boolean*

Synopsis	Allow privilege level mapping
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">authorization</a> <b>use-priv-lvl</b> <i>boolean</i>
Tree	<a href="#">use-priv-lvl</a>
Description	When configured to <b>true</b> , this command automatically performs a single authorization request to the TACACS+ server for cmd* (all commands) immediately after login, and then uses the local profile associated (via the <b>priv-lvl-map</b> ) with the priv-lvl returned by the TACACS+ server for all subsequent authorization (except <b>enable-admin</b> ). After the initial authorization for cmd*, no further authorization requests are sent to the TACACS+ server (except <b>enable-admin</b> ).  When configured to <b>false</b> , each command is sent to the TACACS+ server for authorization (this is true regardless of whether the <b>tacplus use-default-template</b> setting is enabled).
Default	false
Introduced	16.0.R1
Platforms	All

**interactive-authentication** *boolean*

Synopsis	Allows TACACS+ interactive authentication
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">interactive-authentication</a> <i>boolean</i>
Tree	<a href="#">interactive-authentication</a>
Default	false
Introduced	16.0.R1
Platforms	All

**priv-lvl-map**

Synopsis	Enter the <b>priv-lvl-map</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">priv-lvl-map</a>
Tree	<a href="#">priv-lvl-map</a>
Introduced	16.0.R1
Platforms	All

**priv-lvl** [[level](#)] *number*

Synopsis	Enter the <b>priv-lvl</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">priv-lvl-map</a> <a href="#">priv-lvl</a> <i>number</i>
Tree	<a href="#">priv-lvl</a>
Introduced	16.0.R1
Platforms	All

**[level]** *number*

Synopsis	Privilege level for the mapping
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">priv-lvl-map</a> <a href="#">priv-lvl</a> <i>number</i>
Tree	<a href="#">priv-lvl</a>
Range	0 to 15
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**user-profile-name** *reference*

Synopsis	User profile for the mapping
Context	<b>configure system security aaa remote-servers tacplus priv-lvl-map priv-lvl</b> <i>number user-profile-name reference</i>
Tree	<a href="#">user-profile-name</a>
Reference	<b>configure system security aaa local-profiles profile</b> <i>string</i>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**route-preference** *keyword*

Synopsis	Route preference to reach the AAA server
Context	<b>configure system security aaa remote-servers tacplus route-preference</b> <i>keyword</i>
Tree	<a href="#">route-preference</a>
Description	This command specifies the routing preference to reach the AAA server. If the configured option is to use both in-band and out-of-band routes, the out-of-band routes in the Base routing instance are used to reach the server before the in-band routes in the management routing instance.
Options	both, inband, outband
Default	both
Introduced	21.5.R1
Platforms	All

**server** [[index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure system security aaa remote-servers tacplus server</b> <i>number</i>
Tree	<a href="#">server</a>
Max. Instances	5
Introduced	16.0.R1
Platforms	All



**[index] number**

Synopsis	TACACS+ server ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the TACACS+ server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">server</a> <i>number</i> <a href="#">address</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**port number**

Synopsis	TCP port ID on which to contact TACACS+ server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">server</a> <i>number</i> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	0   1 to 65535
Default	49
Introduced	16.0.R1
Platforms	All

**secret string**

Synopsis	Secret key to access the TACACS+ server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <a href="#">server</a> <i>number</i> <a href="#">secret</a> <i>string</i>
Tree	<a href="#">secret</a>
String Length	1 to 199

---

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **server-timeout** *number*

Synopsis	Time to wait for a response from the TACACS+ server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <b>server-timeout</b> <i>number</i>
Tree	<a href="#">server-timeout</a>
Range	1 to 90
Units	seconds
Default	3
Introduced	16.0.R1
Platforms	All

### **use-default-template** *boolean*

Synopsis	Apply TACACS+ default user-template to TACACS+ user
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <a href="#">tacplus</a> <b>use-default-template</b> <i>boolean</i>
Tree	<a href="#">use-default-template</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **vprn-server**

Synopsis	Enter the <b>vprn-server</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">remote-servers</a> <b>vprn-server</b>
Tree	<a href="#">vprn-server</a>
Introduced	22.2.R1
Platforms	All

### **inband** *reference*

Synopsis	VPRN service used for AAA by in-band sessions
----------	---

Context	<b>configure system security aaa remote-servers vprn-server inband</b> <i>reference</i>
Tree	<a href="#">inband</a>
Description	This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in the Base routing instance.
Reference	<b>configure service vprn</b> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **outband** *reference*

Synopsis	VPRN service used for AAA by out-of-band sessions
Context	<b>configure system security aaa remote-servers vprn-server outband</b> <i>reference</i>
Tree	<a href="#">outband</a>
Description	This command configures TACACS+ and RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions on the console or out-of-band (OOB) Ethernet ports.
Reference	<b>configure service vprn</b> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **vprn** *reference*

Synopsis	VPRN used for AAA in VPRNs without a AAA server
Context	<b>configure system security aaa remote-servers vprn-server vprn</b> <i>reference</i>
Tree	<a href="#">vprn</a>
Description	This command configures TACACS+ or RADIUS servers in a VPRN to be used for AAA by that VPRN and by sessions in VPRNs without a AAA server configured.
Reference	<b>configure service vprn</b> <i>string</i>
Introduced	22.2.R1
Platforms	All

### **user-template** [[user-template-name](#)] *keyword*

Synopsis	Enter the <b>user-template</b> list instance
Context	<b>configure system security aaa user-template</b> <i>keyword</i>
Tree	<a href="#">user-template</a>

Introduced 16.0.R1  
 Platforms All

### **[user-template-name]** *keyword*

Synopsis Default user template applied to the system user  
 Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword*  
 Tree [user-template](#)  
 Options ldap-default, radius-default, tacplus-default  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **access**

Synopsis Enter the **access** context  
 Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access**  
 Tree [access](#)  
 Introduced 16.0.R1  
 Platforms All

### **console** *boolean*

Synopsis Allow console access (serial port or Telnet)  
 Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access** [console](#) *boolean*  
 Tree [console](#)  
 Default true  
 Introduced 16.0.R1  
 Platforms All

### **ftp** *boolean*

Synopsis Allow FTP access  
 Context **configure** [system](#) [security](#) [aaa](#) [user-template](#) *keyword* **access** [ftp](#) *boolean*  
 Tree [ftp](#)

---

Default	false
Introduced	16.0.R1
Platforms	All

### **grpc** *boolean*

Synopsis	Allow gRPC access
Context	<b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">access grpc</a> <i>boolean</i>
Tree	<a href="#">grpc</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **li** *boolean*

Synopsis	Allow access to lawful intercept
Context	<b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">access li</a> <i>boolean</i>
Tree	<a href="#">li</a>
Default	false
Introduced	19.10.R1
Platforms	All

### **netconf** *boolean*

Synopsis	Allow NETCONF session access
Context	<b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">access netconf</a> <i>boolean</i>
Tree	<a href="#">netconf</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **console**

Synopsis	Enter the <b>console</b> context
Context	<b>configure</b> <a href="#">system security aaa user-template</a> <i>keyword</i> <a href="#">console</a>

Tree	<a href="#">console</a>
Introduced	16.0.R1
Platforms	All

### **login-exec** *string*

Synopsis	File to execute for a successful user login via console
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">user-template</a> <i>keyword</i> <a href="#">console</a> <b>login-exec</b> <i>string</i>
Tree	<a href="#">login-exec</a>
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

### **home-directory** (*sat-url* | *cflash-without-slot-url*)

Synopsis	User local home directory based on the template
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">user-template</a> <i>keyword</i> <a href="#">home-directory</a> ( <i>sat-url</i>   <i>cflash-without-slot-url</i> )
Tree	<a href="#">home-directory</a>
Description	This command configures the home directory of the user for file access. Files can be accessed locally by CLI <b>file</b> commands and output modifiers such as <b>&gt;</b> (file redirect), or remotely via FTP and SCP. If the home directory does not exist, a warning message is displayed when the user logs in.  When <b>restricted-to-home</b> is configured, file access is denied unless the <b>home-directory</b> is configured and the directory is created by an administrator.
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

### **profile** *string*

Synopsis	User profile based on the template
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">user-template</a> <i>keyword</i> <a href="#">profile</a> <i>string</i>
Tree	<a href="#">profile</a>
String Length	1 to 32
Introduced	16.0.R1

Platforms All

### **restricted-to-home** *boolean*

**Synopsis** Restrict file access to the home directory of the user

**Context** **configure** **system** **security** **aaa** **user-template** *keyword* **restricted-to-home** *boolean*

**Tree** [restricted-to-home](#)

**Description** When configured to **true**, the router denies the user from accessing files outside of their home directory. Files can be accessed locally by CLI file commands and output modifiers such as > (file redirect), or remotely via FTP and SCP. The system denies all configuration save operations (such as **admin save**) via any management interface (such as CLI and NETCONF) unless **save-when-restricted** is enabled.

File access is denied unless a home directory is configured and the directory is created by an administrator.

When configured to **false**, the router permits the user to access all files on the system.

**Default** false

**Introduced** 16.0.R1

**Platforms** All

### **save-when-restricted** *boolean*

**Synopsis** Save configurations when the user is restricted to home

**Context** **configure** **system** **security** **aaa** **user-template** *keyword* **save-when-restricted** *boolean*

**Tree** [save-when-restricted](#)

**Description** When configured to **true**, the system permits configuration save operations for all configuration regions (such as bof and configure) via any management interface (such as CLI and NETCONF) even if **restricted-to-home** is enabled.

The configuration for each region can be saved with **admin save** CLI commands or when committed over NETCONF and gRPC.

When configured to **false**, the system denies saving the configuration when **restricted-to-home** is enabled, unless the home directory of the user includes the location of the saved configuration file.

**Default** false

**Introduced** 22.10.R1

**Platforms** All

## cli-script

Synopsis	Enter the <b>cli-script</b> context
Context	<b>configure system security cli-script</b>
Tree	<a href="#">cli-script</a>
Introduced	16.0.R1
Platforms	All

## authorization

Synopsis	Enter the <b>authorization</b> context
Context	<b>configure system security cli-script authorization</b>
Tree	<a href="#">authorization</a>
Introduced	16.0.R1
Platforms	All

## cron

Synopsis	Enter the <b>cron</b> context
Context	<b>configure system security cli-script authorization cron</b>
Tree	<a href="#">cron</a>
Description	Commands in this context configure authorization for the cron job scheduler.
Introduced	16.0.R1
Platforms	All

## cli-user *reference*

Synopsis	User profile name for CLI command script authorization
Context	<b>configure system security cli-script authorization cron cli-user <i>reference</i></b>
Tree	<a href="#">cli-user</a>
Reference	<b>configure system security user-params local-user user <i>string</i></b>
Introduced	16.0.R1
Platforms	All



## event-handler

Synopsis	Enter the <b>event-handler</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cli-script</a> <a href="#">authorization</a> <a href="#">event-handler</a>
Tree	<a href="#">event-handler</a>
Description	Commands in this context configure authorization for the Event Handling System (EHS). EHS allows user-controlled programmatic exception handling by allowing a CLI script to be executed upon the detection of a log event.
Introduced	16.0.R1
Platforms	All

## cli-user *reference*

Synopsis	User profile name for CLI command script authorization
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cli-script</a> <a href="#">authorization</a> <a href="#">event-handler</a> <a href="#">cli-user</a> <i>reference</i>
Tree	<a href="#">cli-user</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

## cpm-filter

Synopsis	Enter the <b>cpm-filter</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a>
Tree	<a href="#">cpm-filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## default-action *keyword*

Synopsis	Action for packets that do not match any filter entries
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">default-action</a> <i>keyword</i>
Tree	<a href="#">default-action</a>
Options	drop, accept
Default	accept
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ip-filter

Synopsis Enter the **ip-filter** context  
 Context **configure system security cpm-filter ip-filter**  
 Tree [ip-filter](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis Administrative state of the CPM filter  
 Context **configure system security cpm-filter ip-filter admin-state *keyword***  
 Tree [admin-state](#)  
 Options enable, disable  
 Default disable  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## entry [[entry-id](#)] *number*

Synopsis Enter the **entry** list instance  
 Context **configure system security cpm-filter ip-filter entry *number***  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## [[entry-id](#)] *number*

Synopsis Filter entry ID  
 Context **configure system security cpm-filter ip-filter entry *number***  
 Tree [entry](#)  
 Range 1 to 131072  
 Notes This element is part of a list key.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## action

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## accept

Synopsis	Forward matching packets
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b> <b>accept</b>
Tree	<a href="#">accept</a>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## default

Synopsis	Use default action for matching packets
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b> <b>default</b>
Tree	<a href="#">default</a>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis	Drop matching packets
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <b>action</b> <b>drop</b>
Tree	<a href="#">drop</a>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **queue** *reference*

Synopsis	Forward matching packets to the CPM hardware queue
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry number action queue reference</a>
Tree	<a href="#">queue</a>
Reference	<b>configure</b> <a href="#">system security cpm-queue queue number</a>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry number description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **log** *reference*

Synopsis	Log ID where matching packets are entered
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry number log reference</a>
Tree	<a href="#">log</a>
Reference	<b>configure</b> <a href="#">filter log number</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry number match</a>

Tree	<a href="#">match</a>
Description	<p>Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.</p> <p>If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dscp keyword**

Synopsis	DSCP used as the match criterion on the packet
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dscp</a> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dst-ip**

Synopsis	Enter the <b>dst-ip</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a>
Tree	<a href="#">dst-ip</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis	IPv4 address used as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">address</a> ( <i>ipv4-prefix-with-host-bits</i>   <i>ipv4-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ip-prefix-list** *reference*

Synopsis IPv4 address prefix list used as match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ip-filter](#) [entry](#) *number* [match](#) [dst-ip](#) [ip-prefix-list](#) *reference*

Tree [ip-prefix-list](#)

Reference **configure** [filter](#) [match-list](#) [ip-prefix-list](#) *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *string*

Synopsis IPv4 address mask used as the match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ip-filter](#) [entry](#) *number* [match](#) [dst-ip](#) [mask](#) *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dst-port**

Synopsis Enter the **dst-port** context

Context **configure** [system](#) [security](#) [cpm-filter](#) [ip-filter](#) [entry](#) *number* [match](#) [dst-port](#)

Tree [dst-port](#)

Notes The following elements are part of a choice: **port** or (**dst-port** and **src-port**).

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eq** *number*

Synopsis Port number as the match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ip-filter](#) [entry](#) *number* [match](#) [dst-port](#) [eq](#) *number*

Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask number**

Synopsis	Port mask as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-list reference**

Synopsis	Port list as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">port-list</a> <i>reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **end number**

Synopsis Upper bound of the port number to match

Context **configure system security cpm-filter ip-filter entry** *number match dst-port range end number*

Tree [end](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **start number**

Synopsis Lower bound of the port number to match

Context **configure system security cpm-filter ip-filter entry** *number match dst-port range start number*

Tree [start](#)

Range 0 to 65535

Notes This element is mandatory.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fragment keyword**

Synopsis Match criterion based on presence of fragmented packets

Context **configure system security cpm-filter ip-filter entry** *number match fragment keyword*

Tree [fragment](#)

Description This command specifies the match criterion based on the existence or absence of fragmented IP packets.

Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.



Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.

Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry number match icmp</a>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## code number

Synopsis	ICMP code to match
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry number match icmp code number</a>
Tree	<a href="#">code</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## type number

Synopsis	ICMP type to match
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry number match icmp type number</a>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ip-option

Synopsis	Enable the <b>ip-option</b> context
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Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match ip-option</i>
Tree	<a href="#">ip-option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mask number**

Synopsis	Range of option numbers for the mask match criterion
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match ip-option mask number</i>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**type number**

Synopsis	Specific IP option to match
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match ip-option type number</i>
Tree	<a href="#">type</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**multiple-option boolean**

Synopsis	Match on packets containing multiple option fields
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match multiple-option boolean</i>
Tree	<a href="#">multiple-option</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **option-present** *boolean*

Synopsis	Match on packets with option field present
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">option-present</a> <i>boolean</i>
Tree	<a href="#">option-present</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port**

Synopsis	Enter the <b>port</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eq** *number*

Synopsis	Port number as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *number*

Synopsis	Port mask as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-list** *reference*

Synopsis	Port list as the match criterion
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match port port-list reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">filter match-list port-list string</a>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match port range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **end** *number*

Synopsis	Upper bound of the port number to match
Context	<b>configure</b> <a href="#">system security cpm-filter ip-filter entry</a> <i>number match port range end number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **start** *number*

Synopsis	Lower bound of the port number to match
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Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match port range start number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **protocol** (*number | keyword*)

Synopsis	IP protocol as the match criterion
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match protocol</i> ( <i>number   keyword</i> )
Tree	<a href="#">protocol</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **router-instance** *string*

Synopsis	Router instance as the match criteria
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match router-instance</i> <i>string</i>
Tree	<a href="#">router-instance</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match src-ip</i>
Tree	<a href="#">src-ip</a>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **address** (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Synopsis IPv4 address used as the match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ip-filter](#) [entry](#) *number* [match](#) [src-ip](#) [address](#) (*ipv4-prefix-with-host-bits* | *ipv4-address*)

Tree [address](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ip-prefix-list** *reference*

Synopsis IPv4 address prefix list used as match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ip-filter](#) [entry](#) *number* [match](#) [src-ip](#) [ip-prefix-list](#) *reference*

Tree [ip-prefix-list](#)

Reference **configure** [filter](#) [match-list](#) [ip-prefix-list](#) *string*

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *string*

Synopsis IPv4 address mask used as the match criterion

Context **configure** [system](#) [security](#) [cpm-filter](#) [ip-filter](#) [entry](#) *number* [match](#) [src-ip](#) [mask](#) *string*

Tree [mask](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ip-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **src-port**

Synopsis Enter the **src-port** context

Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match src-port</i>
Tree	<a href="#">src-port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eq** *number*

Synopsis	Port number as the match criterion
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match src-port eq number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *number*

Synopsis	Port mask as the match criterion
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match src-port mask number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-list** *reference*

Synopsis	Port list as the match criterion
Context	<b>configure system security cpm-filter ip-filter entry</b> <i>number match src-port port-list reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure filter match-list port-list</b> <i>string</i>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## end number

Synopsis	Upper bound of the port number to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## start number

Synopsis	Lower bound of the port number to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



## tcp-flags

Synopsis	Enter the <b>tcp-flags</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>tcp-flags</b>
Tree	<a href="#">tcp-flags</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ack *boolean*

Synopsis	ACK bit in TCP header control bits as match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>tcp-flags</b> <b>ack</b> <i>boolean</i>
Tree	<a href="#">ack</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## syn *boolean*

Synopsis	SYN bit in TCP header control bits as match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>tcp-flags</b> <b>syn</b> <i>boolean</i>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv6-filter

Synopsis	Enter the <b>ipv6-filter</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <b>ipv6-filter</b>
Tree	<a href="#">ipv6-filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of the CPM filter
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <b>admin-state</b> <i>keyword</i>

Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[entry-id]** *number*

Synopsis	Filter entry ID
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 131072
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **action**

Synopsis	Enter the <b>action</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number</i> <b>action</b>
Tree	<a href="#">action</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **accept**

Synopsis	Forward matching packets
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Context	<b>configure system security cpm-filter ipv6-filter entry</b> <i>number</i> <b>action accept</b>
Tree	<b>accept</b>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## default

Synopsis	Use default action for matching packets
Context	<b>configure system security cpm-filter ipv6-filter entry</b> <i>number</i> <b>action default</b>
Tree	<b>default</b>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis	Drop matching packets
Context	<b>configure system security cpm-filter ipv6-filter entry</b> <i>number</i> <b>action drop</b>
Tree	<b>drop</b>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## queue reference

Synopsis	Forward matching packets to the CPM hardware queue
Context	<b>configure system security cpm-filter ipv6-filter entry</b> <i>number</i> <b>action queue</b> <i>reference</i>
Tree	<b>queue</b>
Reference	<b>configure system security cpm-queue</b> <i>queue</i> <i>number</i>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**log reference**

Synopsis	Log ID where matching packets are entered
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">log</a> <i>reference</i>
Tree	<a href="#">log</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">log</a> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Description	<p>Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.</p> <p>If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.</p>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**dscp keyword**

Synopsis	DSCP used as the match criterion on the packet
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dscp</a> <i>keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## dst-ip

Synopsis Enter the **dst-ip** context  
 Context **configure** system security cpm-filter ipv6-filter entry *number* match **dst-ip**  
 Tree [dst-ip](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis IPv6 address used as the match criterion  
 Context **configure** system security cpm-filter ipv6-filter entry *number* match **dst-ip** address (*ipv6-prefix-with-host-bits* | *ipv6-address*)  
 Tree [address](#)  
 Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv6-prefix-list *reference*

Synopsis IPv6 address prefix list used as match criterion  
 Context **configure** system security cpm-filter ipv6-filter entry *number* match **dst-ip** [ipv6-prefix-list](#) *reference*  
 Tree [ipv6-prefix-list](#)  
 Reference **configure** filter match-list [ipv6-prefix-list](#) *string*  
 Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask string**

Synopsis	IPv6 address mask used as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-ip</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dst-port**

Synopsis	Enter the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a>
Tree	<a href="#">dst-port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eq number**

Synopsis	Port number as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask number**

Synopsis	Port mask as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535

Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-list** *reference*

Synopsis	Port list as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">port-list</a> <i>reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **end** *number*

Synopsis	Upper bound of the port number to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">dst-port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**start number**

Synopsis	Lower bound of the port number to match
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry number match dst-port range start number</a>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**extension-header**

Synopsis	Enter the <b>extension-header</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry number match extension-header</a>
Tree	<a href="#">extension-header</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**hop-by-hop boolean**

Synopsis	Match on existence of Hop-By-Hop Options Header
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry number match extension-header hop-by-hop boolean</a>
Tree	<a href="#">hop-by-hop</a>
Description	When configured to <b>true</b> , a match occurs when the Hop-by-Hop Options Extension Header is present.  When configured to <b>false</b> , a match occurs when the Hop-by-Hop Options Extension Header is not present.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**flow-label number**

Synopsis	Flow label in the IPv6 header as the match criterion
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry number match flow-label number</a>



Tree	<a href="#">flow-label</a>
Range	0 to 1048575
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fragment** *keyword*

Synopsis	Match criterion based on presence of fragmented packets
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number match fragment keyword</i>
Tree	<a href="#">fragment</a>
Description	<p>This command specifies the match criterion based on the existence or absence of fragmented IP packets.</p> <p>Matching on fragmented IPv4 packets occurs when all packets have either the MF (more fragment) bit set or have the Fragment Offset field of the IP header set to a non-zero value. For IPv6, the existence of the IPv6 Fragmentation Extension Header results in a fragmented packet match.</p> <p>Matching on non-fragmented IPv4 packets occurs when all packets have the MF bit set to zero and the Fragment Offset field is also set to zero. For IPv6, the absence of an IPv6 Fragmentation Extension Header results in a non-fragmented packet match.</p>
Options	false, true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **icmp**

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number match icmp</i>
Tree	<a href="#">icmp</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **code** *number*

Synopsis	ICMP code as the match criterion
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number match icmp code number</i>
Tree	<a href="#">code</a>
Range	0 to 255

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **type** *number*

Synopsis	ICMP type as the match criterion
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number</i> <b>match icmp type</b> <i>number</i>
Tree	<a href="#">type</a>
Range	0 to 255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number</i> <b>match next-header</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port**

Synopsis	Enter the <b>port</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry</a> <i>number</i> <b>match port</b>
Tree	<a href="#">port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eq** *number*

Synopsis	Port number as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask** *number*

Synopsis	Port mask as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port-list** *reference*

Synopsis	Port list as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">port-list</a> <i>reference</i>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">port-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a>

Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**end number**

Synopsis	Upper bound of the port number to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a> <a href="#">end</a> <i>number</i>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**start number**

Synopsis	Lower bound of the port number to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">port</a> <a href="#">range</a> <a href="#">start</a> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**router-instance string**

Synopsis	Router instance as the match criteria
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
String Length	1 to 64
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## src-ip

Synopsis Enter the **src-ip** context

Context **configure** [system security cpm-filter ipv6-filter entry number match src-ip](#)

Tree [src-ip](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## address (*ipv6-prefix-with-host-bits* | *ipv6-address*)

Synopsis IPv6 address used as the match criterion

Context **configure** [system security cpm-filter ipv6-filter entry number match src-ip address \(\*ipv6-prefix-with-host-bits\* | \*ipv6-address\*\)](#)

Tree [address](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv6-prefix-list *reference*

Synopsis IPv6 address prefix list used as match criterion

Context **configure** [system security cpm-filter ipv6-filter entry number match src-ip ipv6-prefix-list reference](#)

Tree [ipv6-prefix-list](#)

Reference **configure** [filter match-list ipv6-prefix-list string](#)

Notes The following elements are part of a choice: (**address** and **mask**) or **ipv6-prefix-list**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mask *string*

Synopsis IPv6 address mask used as the match criterion

Context **configure** [system security cpm-filter ipv6-filter entry number match src-ip mask string](#)

Tree [mask](#)

Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **src-port**

Synopsis	Enter the <b>src-port</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a>
Tree	<a href="#">src-port</a>
Notes	The following elements are part of a choice: <b>port</b> or ( <b>dst-port</b> and <b>src-port</b> ).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **eq number**

Synopsis	Port number as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">eq</a> <i>number</i>
Tree	<a href="#">eq</a>
Range	0 to 65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask number**

Synopsis	Port mask as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**port-list reference**

Synopsis	Port list as the match criterion
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry number match src-port port-list reference</a>
Tree	<a href="#">port-list</a>
Reference	<b>configure</b> <a href="#">filter match-list port-list string</a>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**range**

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry number match src-port range</a>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: ( <b>eq</b> and <b>mask</b> ), <b>port-list</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**end number**

Synopsis	Upper bound of the port number to match
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry number match src-port range end number</a>
Tree	<a href="#">end</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**start number**

Synopsis	Lower bound of the port number to match
Context	<b>configure</b> <a href="#">system security cpm-filter ipv6-filter entry number match src-port range start number</a>

Tree	<a href="#">start</a>
Range	0 to 65535
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## tcp-flags

Synopsis	Enter the <b>tcp-flags</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a>
Tree	<a href="#">tcp-flags</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ack *boolean*

Synopsis	ACK bit in TCP header control bits as match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> <a href="#">ack</a> <i>boolean</i>
Tree	<a href="#">ack</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## syn *boolean*

Synopsis	SYN bit in TCP header control bits as match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">tcp-flags</a> <a href="#">syn</a> <i>boolean</i>
Tree	<a href="#">syn</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mac-filter

Synopsis	Enter the <b>mac-filter</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a>



Tree	<a href="#">mac-filter</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the CPM filter
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[entry-id]** *number*

Synopsis	Filter entry ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 131072
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **action**

Synopsis	Enter the <b>action</b> context
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Context	<b>configure system security cpm-filter mac-filter entry <i>number</i> action</b>
Tree	<b>action</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## accept

Synopsis	Forward matching packets
Context	<b>configure system security cpm-filter mac-filter entry <i>number</i> action accept</b>
Tree	<b>accept</b>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## default

Synopsis	Use default action for matching packets
Context	<b>configure system security cpm-filter mac-filter entry <i>number</i> action default</b>
Tree	<b>default</b>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## drop

Synopsis	Drop matching packets
Context	<b>configure system security cpm-filter mac-filter entry <i>number</i> action drop</b>
Tree	<b>drop</b>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## queue reference

Synopsis	Forward matching packets to the CPM hardware queue
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Context	<b>configure system security cpm-filter mac-filter entry</b> <i>number action queue reference</i>
Tree	<a href="#">queue</a>
Reference	<b>configure system security cpm-queue queue</b> <i>number</i>
Notes	The following elements are part of a choice: <b>accept</b> , <b>default</b> , <b>drop</b> , or <b>queue</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure system security cpm-filter mac-filter entry</b> <i>number description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **log** *reference*

Synopsis	Log ID where matching packets are entered
Context	<b>configure system security cpm-filter mac-filter entry</b> <i>number log reference</i>
Tree	<a href="#">log</a>
Reference	<b>configure filter log</b> <i>number</i>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure system security cpm-filter mac-filter entry</b> <i>number match</i>
Tree	<a href="#">match</a>
Description	<p>Commands in this context specify match criteria for the entry. When the match criteria have been satisfied, the action associated with the entry is executed.</p> <p>If more than one match criterion is configured, all criteria must be met before the action associated with the entry is executed.</p>
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## cfm-opcode

Synopsis Enter the **cfm-opcode** context

Context **configure system security cpm-filter mac-filter entry number match cfm-opcode**

Tree [cfm-opcode](#)

Description Commands in this context specify match criteria based on the CFM opcode.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## eq number

Synopsis Equal to comparison operator for the CFM opcode

Context **configure system security cpm-filter mac-filter entry number match cfm-opcode eq number**

Tree [eq](#)

Range 0 to 255

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## gt number

Synopsis Greater than comparison operator for the CFM opcode

Context **configure system security cpm-filter mac-filter entry number match cfm-opcode gt number**

Tree [gt](#)

Range 0 to 254

Notes The following elements are part of a choice: **eq**, **gt**, **lt**, or **range**.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## lt number

Synopsis Less than comparison operator for the CFM opcode

Context	<b>configure system security cpm-filter mac-filter entry</b> <i>number match cfm-opcode lt number</i>
Tree	<a href="#">lt</a>
Range	1 to 255
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure system security cpm-filter mac-filter entry</b> <i>number match cfm-opcode range</i>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## end number

Synopsis	Upper bound of the Opcode range to match
Context	<b>configure system security cpm-filter mac-filter entry</b> <i>number match cfm-opcode range end number</i>
Tree	<a href="#">end</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## start number

Synopsis	Lower bound of the OpCode range to match
Context	<b>configure system security cpm-filter mac-filter entry</b> <i>number match cfm-opcode range start number</i>
Tree	<a href="#">start</a>
Range	0 to 254

Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **dst-mac**

Synopsis	Enable the <b>dst-mac</b> context
Context	<b>configure system security cpm-filter mac-filter entry number match dst-mac</b>
Tree	<b>dst-mac</b>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **address string**

Synopsis	MAC address used as the match criterion
Context	<b>configure system security cpm-filter mac-filter entry number match dst-mac address string</b>
Tree	<b>address</b>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **mask string**

Synopsis	MAC address mask as the match criterion
Context	<b>configure system security cpm-filter mac-filter entry number match dst-mac mask string</b>
Tree	<b>mask</b>
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **etype string**

Synopsis	Ethernet type as the match criterion
Context	<b>configure system security cpm-filter mac-filter entry number match etype string</b>

Tree	<a href="#">etype</a>
Description	This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion.  The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames.
String Length	5 to 6
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **frame-type** *keyword*

Synopsis	MAC frame type as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>frame-type</b> <i>keyword</i>
Tree	<a href="#">frame-type</a>
Options	802dot2-llc, ethernet-ii
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **llc-dsap**

Synopsis	Enable the <b>llc-dsap</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>llc-dsap</b>
Tree	<a href="#">llc-dsap</a>
Description	Commands in this context specify match criteria based on the Destination Service Access Point (DSAP).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dsap** *number*

Synopsis	8-bit DSAP as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>llc-dsap</b> <b>dsap</b> <i>number</i>
Tree	<a href="#">dsap</a>
Range	0 to 255
Notes	This element is mandatory.

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mask number**

Synopsis	Mask for DSAP value as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">llc-dsap</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**llc-ssap**

Synopsis	Enable the <b>llc-ssap</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">llc-ssap</a>
Tree	<a href="#">llc-ssap</a>
Description	Commands in this context specify match criteria based on the Source Service Access Point (SSAP).
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**mask number**

Synopsis	Mask for SSAP value as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpm-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">llc-ssap</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS



**ssap number**

Synopsis	8-bit SSAP as the match criterion
Context	<b>configure</b> <a href="#">system security cpm-filter mac-filter entry number match llc-ssap ssap number</a>
Tree	<a href="#">ssap</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**service reference**

Synopsis	Service ID used as the match condition
Context	<b>configure</b> <a href="#">system security cpm-filter mac-filter entry number match service reference</a>
Tree	<a href="#">service</a>
Reference	<b>configure</b> <a href="#">service vpls string</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**src-mac**

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure</b> <a href="#">system security cpm-filter mac-filter entry number match src-mac</a>
Tree	<a href="#">src-mac</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**address string**

Synopsis	MAC address used as the match criterion
Context	<b>configure</b> <a href="#">system security cpm-filter mac-filter entry number match src-mac address string</a>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mask string**

Synopsis MAC address mask as the match criterion  
 Context **configure** [system](#) [security](#) [cpm-filter](#) [mac-filter](#) [entry](#) *number* [match](#) [src-mac](#) [mask](#) *string*  
 Tree [mask](#)  
 Default ff:ff:ff:ff:ff:ff  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cpm-queue**

Synopsis Enter the **cpm-queue** context  
 Context **configure** [system](#) [security](#) [cpm-queue](#)  
 Tree [cpm-queue](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **queue [queue-id] number**

Synopsis Enter the **queue** list instance  
 Context **configure** [system](#) [security](#) [cpm-queue](#) [queue](#) *number*  
 Tree [queue](#)  
 Introduced 16.0.R1  
 Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[queue-id] number**

Synopsis CPM queue ID  
 Context **configure** [system](#) [security](#) [cpm-queue](#) [queue](#) *number*  
 Tree [queue](#)  
 Range 33 to 2000  
 Notes This element is part of a list key.  
 Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cbs number**

Synopsis Buffer size that can be drawn from queue buffer pool

Context **configure system security cpm-queue queue number cbs number**

Tree [cbs](#)

Description This command specifies the amount of buffer that can be drawn from the reserved buffer portion of the buffer pool of the queue.

Range 0 to 131072

Units kilobps

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **mbs number**

Synopsis Maximum queue depth to which the queue can grow

Context **configure system security cpm-queue queue number mbs number**

Tree [mbs](#)

Range 0 to 131072

Units kilobps

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **rate**

Synopsis Enter the **rate** context

Context **configure system security cpm-queue queue number rate**

Tree [rate](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cir (number | keyword)**

Synopsis Amount of bandwidth committed to the queue

Context	<b>configure system security cpm-queue queue number rate cir</b> ( <i>number   keyword</i> )
Tree	<a href="#">cir</a>
Range	0 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pir** (*number | keyword*)

Synopsis	Peak Information Rate for the queue
Context	<b>configure system security cpm-queue queue number rate pir</b> ( <i>number   keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 100000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **cpu-protection**

Synopsis	Enter the <b>cpu-protection</b> context
Context	<b>configure system security cpu-protection</b>
Tree	<a href="#">cpu-protection</a>
Description	Commands in this context configure CPU protection policies.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **ip-src-monitoring**

Synopsis	Enter the <b>ip-src-monitoring</b> context
Context	<b>configure system security cpu-protection ip-src-monitoring</b>
Tree	<a href="#">ip-src-monitoring</a>

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## included-protocols

Synopsis	Enter the <b>included-protocols</b> context
Context	<b>configure</b> <a href="#">system security cpu-protection ip-src-monitoring included-protocols</a>
Tree	<a href="#">included-protocols</a>
Description	Commands in this context specify the protocols included in IP source monitoring. The protocol packets will be subject to the per-source-rate of CPU protection policies. This configuration applies system wide and applies to CPU protection globally.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## dhcp *boolean*

Synopsis	Include extracted DHCP packets for IP source monitoring
Context	<b>configure</b> <a href="#">system security cpu-protection ip-src-monitoring included-protocols dhcp boolean</a>
Tree	<a href="#">dhcp</a>
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## gtp *boolean*

Synopsis	Include extracted GTP packets for IP source monitoring
Context	<b>configure</b> <a href="#">system security cpu-protection ip-src-monitoring included-protocols gtp boolean</a>
Tree	<a href="#">gtp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**icmp boolean**

Synopsis	Include extracted ICMP packets for IP source monitoring
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a> <a href="#">included-protocols</a> <a href="#">icmp</a> <i>boolean</i>
Tree	<a href="#">icmp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**igmp boolean**

Synopsis	Include extracted IGMP packets for IP source monitoring
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">ip-src-monitoring</a> <a href="#">included-protocols</a> <a href="#">igmp</a> <i>boolean</i>
Tree	<a href="#">igmp</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**link-specific-rate** (*number* | *keyword*)

Synopsis	Packet arrival rate limit for link level protocols
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">cpu-protection</a> <a href="#">link-specific-rate</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">link-specific-rate</a>
Description	This command configures a link-specific rate for CPU protection. The limit is applied to all ports within the system. The CPU receives no more than the configured packet rate for all link level protocols, such as LACP, from any one port.  The measurement is cleared each second and is based on the ingress port.
Range	1 to 65535
Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**policy** [*policy-id*] *number*

Synopsis	Enter the <b>policy</b> list instance
Context	<b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i>
Tree	<a href="#">policy</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**[policy-id]** *number*

Synopsis	Policy ID
Context	<b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i>
Tree	<a href="#">policy</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**alarm** *boolean*

Synopsis	Generate an event when the rate is exceeded
Context	<b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <b>alarm</b> <i>boolean</i>
Tree	<a href="#">alarm</a>
Description	When configured to <b>true</b> , an event is generated when the rate is exceeded. The event includes information about the offending source. Only one event is generated per monitor period. When configured to <b>false</b> , notifications are disabled.
Default	true
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>

String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## eth-cfm

Synopsis	Enter the <b>eth-cfm</b> context
Context	<b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <b>eth-cfm</b>
Tree	<a href="#">eth-cfm</a>
Description	Commands in this context configure CPU policy entries that determine match criteria and overall arrival rate of the Ethernet Connectivity and Fault Management (ETH-CFM) packets at the CPU.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## entry [*id*] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <b>eth-cfm</b> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Max. Instances	10
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

## [*id*] *number*

Synopsis	Entry ID
Context	<b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <b>eth-cfm</b> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 100
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS



**level** *start number end number*

Synopsis	Add a list entry for <b>level</b>
Context	<b>configure system security cpu-protection policy number eth-cfm entry number level start number end number</b>
Tree	<b>level</b>
Description	Commands in this context specify the range of domain levels for the match criterion.
Min.	1
Instances	
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**start number**

Synopsis	Lower bound of the level range
Context	<b>configure system security cpu-protection policy number eth-cfm entry number level start number end number</b>
Tree	<b>level</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**end number**

Synopsis	Upper bound of the level range
Context	<b>configure system security cpu-protection policy number eth-cfm entry number level start number end number</b>
Tree	<b>level</b>
Range	0 to 7
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**opcode** *start number end number*

Synopsis	Add a list entry for <b>opcode</b>
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Context	<b>configure system security cpu-protection policy number eth-cfm entry number opcode start number end number</b>
Tree	<a href="#">opcode</a>
Description	Commands in this context specify the range of operational codes (that identify the application) for the match criterion.
Min. Instances	1
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**start number**

Synopsis	Lower bound of the OpCode range
Context	<b>configure system security cpu-protection policy number eth-cfm entry number opcode start number end number</b>
Tree	<a href="#">opcode</a>
Range	0 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**end number**

Synopsis	Upper bound of the OpCode range
Context	<b>configure system security cpu-protection policy number eth-cfm entry number opcode start number end number</b>
Tree	<a href="#">opcode</a>
Range	0 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

**pir (number | keyword)**

Synopsis	Packet arrival rate limit
Context	<b>configure system security cpu-protection policy number eth-cfm entry number pir (number   keyword)</b>

Tree	<a href="#">pir</a>
Range	0 to 65534
Units	packets per second
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **out-profile-rate**

Synopsis	Enter the <b>out-profile-rate</b> context
Context	<b>configure</b> <a href="#">system security cpu-protection policy number out-profile-rate</a>
Tree	<a href="#">out-profile-rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **log-events** *boolean*

Synopsis	Generate a log event when the packet rate is exceeded
Context	<b>configure</b> <a href="#">system security cpu-protection policy number out-profile-rate log-events boolean</a>
Tree	<a href="#">log-events</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **pir** (*number* | *keyword*)

Synopsis	Packet arrival rate limit
Context	<b>configure</b> <a href="#">system security cpu-protection policy number out-profile-rate pir (number   keyword)</a>
Tree	<a href="#">pir</a>
Range	1 to 65534
Units	packets per second
Options	max
Introduced	16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **overall-rate** (*number* | *keyword*)

Synopsis Packet arrival rate limit for all packets

Context **configure** [system security cpu-protection policy](#) *number* **overall-rate** (*number* | *keyword*)

Tree [overall-rate](#)

Range 1 to 65534

Units packets per second

Options max

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **per-source-parameters**

Synopsis Enter the **per-source-parameters** context

Context **configure** [system security cpu-protection policy](#) *number* **per-source-parameters**

Tree [per-source-parameters](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **ip-src-monitoring**

Synopsis Enter the **ip-src-monitoring** context

Context **configure** [system security cpu-protection policy](#) *number* **per-source-parameters** **ip-src-monitoring**

Tree [ip-src-monitoring](#)

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **limit-dhcp-ci-addr-zero** *boolean*

Synopsis Apply rate limiting to packets with client IP address 0

Context **configure** [system security cpu-protection policy](#) *number* **per-source-parameters** **ip-src-monitoring** **limit-dhcp-ci-addr-zero** *boolean*

Tree [limit-dhcp-ci-addr-zero](#)

Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **per-source-rate** (*number* | *keyword*)

Synopsis	Per-source packet arrival rate limit
Context	<b>configure</b> <a href="#">system security cpu-protection policy</a> <i>number</i> <b>per-source-rate</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">per-source-rate</a>
Description	<p>This command configures the per-source packet arrival rate limit.</p> <p>A source is defined as a unique combination of SAP and MAC source address or SAP and source IP address. The CPU receives no more than the specified packet rate from each source. The measurement is cleared every second.</p> <p>This configuration is applicable only if the policy is assigned to an interface (such as SAPs, subscriber interfaces, and spoke SDPs), and MAC monitoring or IP source monitoring is specified in the CPU protection configuration of the interface.</p>
Range	1 to 65534
Units	packets per second
Options	max
Default	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **port-overall-rate**

Synopsis	Enter the <b>port-overall-rate</b> context
Context	<b>configure</b> <a href="#">system security cpu-protection port-overall-rate</a>
Tree	<a href="#">port-overall-rate</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **action-low-priority** *boolean*

Synopsis	Mark packets that exceed the rate as low-priority
Context	<b>configure</b> <a href="#">system security cpu-protection port-overall-rate action-low-priority</a> <i>boolean</i>
Tree	<a href="#">action-low-priority</a>

Description	When configured to <b>true</b> , packets that exceed the per-port packet arrival rate limit are marked as low priority for preferential discard later (if there is congestion in the control plane) rather than discarded immediately.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **pir** (*number* | *keyword*)

Synopsis	Per-port packet arrival rate limit
Context	<b>configure</b> <a href="#">system security cpu-protection port-overall-rate pir</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">pir</a>
Range	1 to 65535
Units	packets per second
Options	max
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **protocol-protection**

Synopsis	Enable the <b>protocol-protection</b> context
Context	<b>configure</b> <a href="#">system security cpu-protection protocol-protection</a>
Tree	<a href="#">protocol-protection</a>
Description	When enabled, the network processor on the CPM discards all packets received for protocols that are not configured on the interface. This action helps to mitigate DoS attacks by filtering invalid control traffic before it ingresses the CPU. For example, if IS-IS is not configured on an interface, protocol protection discards any IS-IS packets received on the interface.  Commands in this context further define the action when the context is enabled.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **allow-sham-links** *boolean*

Synopsis	Allow OSPF sham link traffic
Context	<b>configure</b> <a href="#">system security cpu-protection protocol-protection allow-sham-links</a> <i>boolean</i>
Tree	<a href="#">allow-sham-links</a>

Description	When configured to <b>true</b> , tunneled OSPF packets received over the backbone network must be explicitly allowed when OSPF sham links form an adjacency over the MPLS-VPRN backbone network.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **block-pim-tunneled** *boolean*

Synopsis	Block extraction and processing of PIM packets
Context	<b>configure</b> <a href="#">system security cpu-protection protocol-protection block-pim-tunneled</a> <i>boolean</i>
Tree	<a href="#">block-pim-tunneled</a>
Description	When configured to <b>true</b> , PIM packets arriving at the SR OS node inside a tunnel (for example, MPLS or GRE) on a network interface are blocked and not processed. Traffic is not switched from the (*,G) to the (S,G) tree for PIM in an mVPN on the egress DR.
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR-7/12/12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS

### **dist-cpu-protection**

Synopsis	Enter the <b>dist-cpu-protection</b> context
Context	<b>configure</b> <a href="#">system security dist-cpu-protection</a>
Tree	<a href="#">dist-cpu-protection</a>
Description	Commands in this context configure distributed CPU protection (DCP) attributes.
Introduced	16.0.R1
Platforms	All

### **policy** [[policy-name](#)] *string*

Synopsis	Enter the <b>policy</b> list instance
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i>
Tree	<a href="#">policy</a>
Description	Commands in this context configure the attributes of DCP policies. These policies can be applied to objects such as SAPs, network interfaces or ports

Max. Instances	130
Introduced	16.0.R1
Platforms	All

**[policy-name]** *string*

Synopsis	Policy name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i>
Tree	<a href="#">policy</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**local-monitoring-policer** [[policer-name](#)] *string*

Synopsis	Enter the <b>local-monitoring-policer</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i>
Tree	<a href="#">local-monitoring-policer</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All



**[policer-name] string**

Synopsis	Local monitoring policer name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i>
Tree	<a href="#">local-monitoring-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description string**

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**exceed-action keyword**

Synopsis	Action taken when policer rates are exceeded
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">exceed-action</a> <i>keyword</i>
Tree	<a href="#">exceed-action</a>
Description	This command specifies the action taken on the extracted control packets when the configured policer rates are exceeded.
Options	discard, low-priority, none
Default	none
Introduced	16.0.R1
Platforms	All

**log-events keyword**

Synopsis	Control of log events creation for status and activity
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Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>local-monitoring-policer</b> <i>string</i> <b>log-events</b> <i>keyword</i>
Tree	<b>log-events</b>
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose
Default	true
Introduced	16.0.R1
Platforms	All

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>local-monitoring-policer</b> <i>string</i> <b>rate</b>
Tree	<b>rate</b>
Description	Commands in this context specify the rate and burst tolerance for the policer. The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	16.0.R1
Platforms	All

## kbps

Synopsis	Enter the <b>kbps</b> context
Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>local-monitoring-policer</b> <i>string</i> <b>rate kbps</b>
Tree	<b>kbps</b>
Notes	The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .
Introduced	16.0.R1
Platforms	All

## limit (*keyword* | *number*)

Synopsis	Rate limit
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Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>local-monitoring-policer</b> <i>string</i> <b>rate kbps limit</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>limit</b>
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **mbs** *number*

Synopsis	Tolerance for the rate
Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>local-monitoring-policer</b> <i>string</i> <b>rate kbps mbs</b> <i>number</i>
Tree	<b>mbs</b>
Range	0 to 4194304
Units	bytes
Introduced	16.0.R1
Platforms	All

### **packets**

Synopsis	Enter the <b>packets</b> context
Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>local-monitoring-policer</b> <i>string</i> <b>rate packets</b>
Tree	<b>packets</b>
Notes	The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .
Introduced	16.0.R1
Platforms	All

### **initial-delay** *number*

Synopsis	Additional packets allowed in an initial burst
Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>local-monitoring-policer</b> <i>string</i> <b>rate packets initial-delay</b> <i>number</i>

Tree	<a href="#">initial-delay</a>
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Units	packets
Default	0
Introduced	16.0.R1
Platforms	All

### **limit** (*keyword* | *number*)

Synopsis	Packets per interval limit
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">packets</a> <b>limit</b> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">limit</a>
Range	0 to 8000
Units	packets per interval
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

### **within** *number*

Synopsis	Measurement interval for packets rate
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i> <a href="#">rate</a> <a href="#">packets</a> <b>within</b> <i>number</i>
Tree	<a href="#">within</a>
Range	1 to 32767
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**protocol** [[protocol-name](#)] *keyword*

Synopsis	Enter the <b>protocol</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i>
Tree	<a href="#">protocol</a>
Introduced	16.0.R1
Platforms	All

**[protocol-name]** *keyword*

Synopsis	Protocol name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i>
Tree	<a href="#">protocol</a>
Options	arp, dhcp, http-redirect, icmp, igmp, mld, ndis, pppoe-pppoa, all-unspecified, mpls-ttl, bfd-cpm, bgp, eth-cfm, isis, ldp, ospf, pim, rsvp, icmp-ping-check, lacp, vrrp, multi-chassis, multi-chassis-sync, bfd, ftp, icmp-v4, icmp-v6, l3-to-my-ipv4, l3-to-my-ipv6, lsp-ping, mc-lag, mcast-snooping, radius, rip, sbfd-reflector, snmp, ssh, stp, tacacs, telnet, tftp, twamp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**dynamic-parameters**

Synopsis	Enter the <b>dynamic-parameters</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a>
Tree	<a href="#">dynamic-parameters</a>
Introduced	16.0.R1
Platforms	All

**detection-time** *number*

Synopsis	Minimum time the dynamic policer remains allocated
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <a href="#">detection-time</a> <i>number</i>
Tree	<a href="#">detection-time</a>
Range	1 to 128000

Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

## exceed-action

Synopsis	Enter the <b>exceed-action</b> context
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <b>exceed-action</b>
Tree	<a href="#">exceed-action</a>
Description	Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.
Introduced	16.0.R1
Platforms	All

## action *keyword*

Synopsis	Action taken on control packets when rates are exceeded
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <b>exceed-action</b> <b>action</b> <i>keyword</i>
Tree	<a href="#">action</a>
Options	discard, low-priority, none
Default	none
Introduced	16.0.R1
Platforms	All

## hold-down (*keyword* | *number*)

Synopsis	Hold down behavior
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters</a> <b>exceed-action</b> <b>hold-down</b> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">hold-down</a>
Description	This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.

The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.

An indefinite hold down behavior must be cleared using the **tools perform security dist-cpu-protection release-hold-down** command.

Range	1 to 10080
Units	seconds
Options	indefinite, none
Default	none
Introduced	16.0.R1
Platforms	All

### **log-events** *keyword*

Synopsis	Control of log events creation for status and activity
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters log-events</a> <i>keyword</i>
Tree	<a href="#">log-events</a>
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose
Default	true
Introduced	16.0.R1
Platforms	All

### **rate**

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters rate</a>
Tree	<a href="#">rate</a>
Description	Commands in this context specify the rate and burst tolerance for the policer.  The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	16.0.R1
Platforms	All

## kbps

Synopsis	Enter the <b>kbps</b> context
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters rate kbps</a>
Tree	<a href="#">kbps</a>
Notes	The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .
Introduced	16.0.R1
Platforms	All

## limit (*keyword* | *number*)

Synopsis	Rate limit
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters rate kbps limit</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">limit</a>
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1
Platforms	All

## mbs *number*

Synopsis	Tolerance for the rate
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters rate kbps mbs</a> <i>number</i>
Tree	<a href="#">mbs</a>
Range	0 to 4194304
Units	bytes
Introduced	16.0.R1
Platforms	All



**packets**

Synopsis	Enter the <b>packets</b> context
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters rate packets</a>
Tree	<a href="#">packets</a>
Notes	The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .
Introduced	16.0.R1
Platforms	All

**initial-delay** *number*

Synopsis	Additional packets allowed in an initial burst
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters rate packets initial-delay</a> <i>number</i>
Tree	<a href="#">initial-delay</a>
Description	This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.
Range	0 to 255
Units	packets
Default	0
Introduced	16.0.R1
Platforms	All

**limit** (*keyword* | *number*)

Synopsis	Packets per interval limit
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">dynamic-parameters rate packets limit</a> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">limit</a>
Range	0 to 8000
Units	packets per interval
Options	max
Default	max
Introduced	16.0.R1

Platforms All

### **within** *number*

Synopsis Measurement interval for packets rate

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword* [dynamic-parameters rate packets within](#) *number*

Tree [within](#)

Range 1 to 32767

Units seconds

Default 1

Introduced 16.0.R1

Platforms All

### **enforcement**

Synopsis Enter the **enforcement** context

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword* [enforcement](#)

Tree [enforcement](#)

Introduced 16.0.R1

Platforms All

### **dynamic**

Synopsis Enter the **dynamic** context

Context **configure** [system security dist-cpu-protection policy](#) *string* [protocol](#) *keyword* [enforcement dynamic](#)

Tree [dynamic](#)

Notes The following elements are part of a choice: **dynamic**, **dynamic-local-mon-bypass**, **shared**, or **static**.

Introduced 16.0.R1

Platforms All

**mon-policer-name** *reference*

Synopsis	Dynamic enforcement policer for the protocol
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">enforcement dynamic mon-policer-name</a> <i>reference</i>
Tree	<a href="#">mon-policer-name</a>
Description	This command specifies the dynamic enforcement policer that is instantiated when the associated local monitoring policer is determined to be in a nonconforming state (at the end of a minimum monitoring time of 60 seconds to reduce thrashing).
Reference	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">local-monitoring-policer</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**dynamic-local-mon-bypass**

Synopsis	Do not include packets in the local monitoring function
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">enforcement dynamic-local-mon-bypass</a>
Tree	<a href="#">dynamic-local-mon-bypass</a>
Description	When configured, packets from the protocol are not included in the local monitoring function and the dynamic enforcement policer is not instantiated for the protocol.
Notes	The following elements are part of a choice: <b>dynamic</b> , <b>dynamic-local-mon-bypass</b> , <b>shared</b> , or <b>static</b> .
Introduced	16.0.R1
Platforms	All

**static**

Synopsis	Enter the <b>static</b> context
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">enforcement static</a>
Tree	<a href="#">static</a>
Notes	The following elements are part of a choice: <b>dynamic</b> , <b>dynamic-local-mon-bypass</b> , <b>shared</b> , or <b>static</b> .
Introduced	16.0.R1
Platforms	All

**policer-name** *reference*

Synopsis	Static policer enforced by the protocol
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">protocol</a> <i>keyword</i> <a href="#">enforcement static policer-name</a> <i>reference</i>
Tree	<a href="#">policer-name</a>
Reference	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**static-policer** [[policer-name](#)] *string*

Synopsis	Enter the <b>static-policer</b> list instance
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i>
Tree	<a href="#">static-policer</a>
Description	Commands in this context configure a static enforcement policer that can be referenced by one or more protocols in the policy. When a policer is referenced by a protocol, the policer is instantiated for each object (for example, a SAP or network interface) that is created and references the policer.  If no policer resources are available on the associated card or FP, the object is not created.
Max. Instances	18
Introduced	16.0.R1
Platforms	All

**[policer-name]** *string*

Synopsis	Static policer name
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i>
Tree	<a href="#">static-policer</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**detection-time** *number*

Synopsis	Minimum time the dynamic policer remains allocated
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <a href="#">detection-time</a> <i>number</i>
Tree	<a href="#">detection-time</a>
Range	1 to 128000
Units	seconds
Default	30
Introduced	16.0.R1
Platforms	All

**exceed-action**

Synopsis	Enter the <b>exceed-action</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dist-cpu-protection</a> <a href="#">policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <a href="#">exceed-action</a>
Tree	<a href="#">exceed-action</a>
Description	Commands in this context specify the settings for the scenario when the configured policer rates are exceeded.
Introduced	16.0.R1
Platforms	All

**action** *keyword*

Synopsis	Action taken on control packets when rates are exceeded
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Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>static-policer</b> <i>string</i> <b>exceed-action action</b> <i>keyword</i>
Tree	<b>action</b>
Options	discard, low-priority, none
Default	none
Introduced	16.0.R1
Platforms	All

### **hold-down** (*keyword* | *number*)

Synopsis	Hold down behavior
Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>static-policer</b> <i>string</i> <b>exceed-action hold-down</b> ( <i>keyword</i>   <i>number</i> )
Tree	<b>hold-down</b>
Description	<p>This command specifies the behavior when the system detects that an enforcement policer has marked or discarded one or more packets and there is no action specified for the scenario when the rates are exceeded.</p> <p>The hold time condition is cleared after the specified time has expired. The detection time (the minimum time that the policer remains allocated) begins after the hold down is complete. The hold down behavior is not applicable to a local monitoring policer.</p> <p>An indefinite hold down behavior must be cleared using the <b>tools perform security dist-cpu-protection release-hold-down</b> command.</p>
Range	1 to 10080
Units	seconds
Options	indefinite, none
Default	none
Introduced	16.0.R1
Platforms	All

### **log-events** *keyword*

Synopsis	Control of log events creation for status and activity
Context	<b>configure system security dist-cpu-protection policy</b> <i>string</i> <b>static-policer</b> <i>string</i> <b>log-events</b> <i>keyword</i>
Tree	<b>log-events</b>
Description	This command controls the creation of log events related to the status and activity of the local monitoring policer.
Options	false, true, verbose

Default	true
Introduced	16.0.R1
Platforms	All

## rate

Synopsis	Enter the <b>rate</b> context
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <b>rate</b>
Tree	<a href="#">rate</a>
Description	Commands in this context specify the rate and burst tolerance for the policer. The actual hardware may not be able to perfectly rate limit to the exact configured parameters. In this case, the configured parameters will be adapted to the closest supported rate.
Introduced	16.0.R1
Platforms	All

## kbps

Synopsis	Enter the <b>kbps</b> context
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <b>rate</b> <b>kbps</b>
Tree	<a href="#">kbps</a>
Notes	The following elements are part of a choice: <b>kbps</b> or <b>packets</b> .
Introduced	16.0.R1
Platforms	All

## limit (*keyword* | *number*)

Synopsis	Rate limit
Context	<b>configure</b> <a href="#">system security dist-cpu-protection policy</a> <i>string</i> <a href="#">static-policer</a> <i>string</i> <b>rate</b> <b>kbps</b> <b>limit</b> ( <i>keyword</i>   <i>number</i> )
Tree	<a href="#">limit</a>
Range	1 to 20000000
Units	kilobps
Options	max
Default	max
Introduced	16.0.R1

Platforms All

### **mbs** *number*

Synopsis Tolerance for the rate

Context **configure** [system security dist-cpu-protection policy](#) *string* [static-policer](#) *string* [rate](#) [kbps](#) [mbs](#) *number*

Tree [mbs](#)

Range 0 to 4194304

Units bytes

Introduced 16.0.R1

Platforms All

### **packets**

Synopsis Enter the **packets** context

Context **configure** [system security dist-cpu-protection policy](#) *string* [static-policer](#) *string* [rate](#) [packets](#)

Tree [packets](#)

Notes The following elements are part of a choice: **kbps** or **packets**.

Introduced 16.0.R1

Platforms All

### **initial-delay** *number*

Synopsis Additional packets allowed in an initial burst

Context **configure** [system security dist-cpu-protection policy](#) *string* [static-policer](#) *string* [rate](#) [packets](#) [initial-delay](#) *number*

Tree [initial-delay](#)

Description This command specifies the number of packets allowed in an initial burst (or a burst after the policer bucket has drained to zero) in addition to the packets per interval limit. The typical setting would be a value equal to the number of received packets in several full handshakes or negotiations of the protocol.

Range 0 to 255

Units packets

Default 0

Introduced 16.0.R1



Platforms All

### **limit** (*keyword* | *number*)

Synopsis Packets per interval limit

Context **configure** [system security dist-cpu-protection policy](#) *string* [static-policer](#) *string* [rate packets limit](#) (*keyword* | *number*)

Tree [limit](#)

Range 0 to 8000

Units packets per interval

Options max

Default max

Introduced 16.0.R1

Platforms All

### **within** *number*

Synopsis Measurement interval for packets rate

Context **configure** [system security dist-cpu-protection policy](#) *string* [static-policer](#) *string* [rate packets within](#) *number*

Tree [within](#)

Range 1 to 32767

Units seconds

Default 1

Introduced 16.0.R1

Platforms All

### **type** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Policy type

Context **configure** [system security dist-cpu-protection policy](#) *string* [type](#) *keyword*

Tree [type](#)

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Options	access-network, port
Introduced	21.5.R1
Platforms	All

## **dot1x**

Synopsis	Enter the <b>dot1x</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a>
Tree	<a href="#">dot1x</a>
Introduced	16.0.R1
Platforms	All

## **admin-state** *keyword*

Synopsis	Administrative state of 802.1x network access control
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## **radius-policy** [[policy-name](#)] *string*

Synopsis	Enter the <b>radius-policy</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i>
Tree	<a href="#">radius-policy</a>
Introduced	16.0.R1
Platforms	All

## **[policy-name]** *string*

Synopsis	RADIUS server policy name for 802.1X authentication
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i>
Tree	<a href="#">radius-policy</a>

---

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the server for authentication
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **retry** *number*

Synopsis	Number of RADIUS requests toward the same RADIUS server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <b>retry</b> <i>number</i>
Tree	<a href="#">retry</a>
Range	1 to 10
Default	3
Introduced	16.0.R1
Platforms	All

### **server** [[server-index](#)] *number*

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <b>server</b> <i>number</i>
Tree	<a href="#">server</a>
Max. Instances	5
Introduced	16.0.R1
Platforms	All

**[server-index] number**

Synopsis	RADIUS server index
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i>
Tree	<a href="#">server</a>
Range	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**accounting-port number**

Synopsis	UDP port to contact the RADIUS server for accounting
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">accounting-port</a> <i>number</i>
Tree	<a href="#">accounting-port</a>
Range	1 to 65535
Default	1813
Introduced	16.0.R1
Platforms	All

**address string**

Synopsis	IP address of the RADIUS dot1x server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**authentication-port number**

Synopsis	UDP port to contact RADIUS server for authentication
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">authentication-port</a> <i>number</i>
Tree	<a href="#">authentication-port</a>

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Range	1 to 65535
Default	1812
Introduced	16.0.R1
Platforms	All

**secret string**

Synopsis	Secret key associated with the RADIUS server
Context	<b>configure</b> <a href="#">system security dot1x radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">secret</a> <i>string</i>
Tree	<a href="#">secret</a>
String Length	1 to 54
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**type keyword**

Synopsis	RADIUS server type
Context	<b>configure</b> <a href="#">system security dot1x radius-policy</a> <i>string</i> <a href="#">server</a> <i>number</i> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	authorization, accounting, combined
Default	authorization
Introduced	16.0.R1
Platforms	All

**source-address string**

Synopsis	Source address of the RADIUS packet
Context	<b>configure</b> <a href="#">system security dot1x radius-policy</a> <i>string</i> <a href="#">source-address</a> <i>string</i>
Tree	<a href="#">source-address</a>
Introduced	16.0.R1
Platforms	All

### **timeout** *number*

Synopsis	Time to wait for a response from the RADIUS server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">dot1x</a> <a href="#">radius-policy</a> <i>string</i> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 90
Units	seconds
Default	5
Introduced	16.0.R1
Platforms	All

### **ftp-server** *boolean*

Synopsis	Enable FTP servers running on the system
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ftp-server</a> <i>boolean</i>
Tree	<a href="#">ftp-server</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **hash-control**

Synopsis	Enter the <b>hash-control</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a>
Tree	<a href="#">hash-control</a>
Introduced	16.0.R4
Platforms	All

### **management-interface**

Synopsis	Enter the <b>management-interface</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a>
Tree	<a href="#">management-interface</a>
Description	Commands in this context configure encryption parameters for different management interfaces.
Introduced	16.0.R4

Platforms All

## **classic-cli**

Synopsis Enter the **classic-cli** context

Context **configure** [system](#) [security](#) [hash-control](#) [management-interface](#) [classic-cli](#)

Tree [classic-cli](#)

Introduced 16.0.R4

Platforms All

## **read-algorithm** *keyword*

Synopsis Input encryption algorithm for configuration secrets

Context **configure** [system](#) [security](#) [hash-control](#) [management-interface](#) [classic-cli](#) [read-algorithm](#) *keyword*

Tree [read-algorithm](#)

Description This command specifies how encrypted configuration secrets are interpreted and which encryption types are accepted when secrets are input into the system or read from a configuration file (for example, at system bootup time).

Options all-hash, hash, hash2, custom

Default all-hash

Introduced 16.0.R4

Platforms All

## **write-algorithm** *keyword*

Synopsis Output encryption algorithm for configuration secrets

Context **configure** [system](#) [security](#) [hash-control](#) [management-interface](#) [classic-cli](#) [write-algorithm](#) *keyword*

Tree [write-algorithm](#)

Description This command specifies the format of the output for encrypted configuration secrets (for example, in the saved configuration file, or in the output of the **info** or **show** commands).

Options cleartext, hash, hash2, custom

Default hash2

Introduced 16.0.R4

Platforms All

## grpc

Synopsis	Enter the <b>grpc</b> context
Context	<b>configure</b> <a href="#">system security hash-control management-interface grpc</a>
Tree	<a href="#">grpc</a>
Introduced	16.0.R4
Platforms	All

## hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	<b>configure</b> <a href="#">system security hash-control management-interface grpc hash-algorithm keyword</a>
Tree	<a href="#">hash-algorithm</a>
Description	This command specifies the format of the input and output for encrypted configuration secrets.
Options	cleartext, hash, hash2, custom
Default	hash2
Introduced	16.0.R4
Platforms	All

## md-cli

Synopsis	Enter the <b>md-cli</b> context
Context	<b>configure</b> <a href="#">system security hash-control management-interface md-cli</a>
Tree	<a href="#">md-cli</a>
Introduced	16.0.R4
Platforms	All

## hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	<b>configure</b> <a href="#">system security hash-control management-interface md-cli hash-algorithm keyword</a>
Tree	<a href="#">hash-algorithm</a>



Description	This command specifies the format of the input and output for encrypted configuration secrets.
Options	cleartext, hash, hash2, custom
Default	hash2
Introduced	16.0.R4
Platforms	All

## netconf

Synopsis	Enter the <b>netconf</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <b>netconf</b>
Tree	<a href="#">netconf</a>
Introduced	16.0.R4
Platforms	All

## hash-algorithm *keyword*

Synopsis	Encryption algorithm for configuration secrets
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">hash-control</a> <a href="#">management-interface</a> <a href="#">netconf</a> <a href="#">hash-algorithm</a> <i>keyword</i>
Tree	<a href="#">hash-algorithm</a>
Description	This command specifies the format of the input and output for encrypted configuration secrets.
Options	cleartext, hash, hash2, custom
Default	hash2
Introduced	16.0.R4
Platforms	All

## keychains

Synopsis	Enter the <b>keychains</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <b>keychains</b>
Tree	<a href="#">keychains</a>
Introduced	16.0.R1
Platforms	All

**keychain** [[keychain-name](#)] *string*

Synopsis	Enter the <b>keychain</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Tree	<a href="#">keychain</a>
Max. Instances	256
Introduced	16.0.R1
Platforms	All

**[keychain-name]** *string*

Synopsis	Keychain name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Tree	<a href="#">keychain</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the keychain
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**bidirectional**

Synopsis	Enter the <b>bidirectional</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>bidirectional</b>
Tree	<a href="#">bidirectional</a>

Introduced 16.0.R1  
 Platforms All

### **entry** [[keychain-entry-index](#)] *number*

Synopsis Enter the **entry** list instance  
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [bidirectional](#) [entry](#) *number*  
 Tree [entry](#)  
 Introduced 16.0.R1  
 Platforms All

### **[keychain-entry-index]** *number*

Synopsis Keychain identifier  
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [bidirectional](#) [entry](#) *number*  
 Tree [entry](#)  
 Range 0 to 63 | 255  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the keychain entry  
 Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [bidirectional](#) [entry](#) *number* [admin-state](#) *keyword*  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

**algorithm** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <b>algorithm</b> <i>keyword</i>
Tree	<a href="#">algorithm</a>
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16, aes-128-cmac-128
Introduced	16.0.R1
Platforms	All

**authentication-key** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <b>authentication-key</b> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

**begin-time** *string*

Synopsis	Calendar date and time to start using the key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <b>begin-time</b> <i>string</i>
Tree	<a href="#">begin-time</a>
Introduced	16.0.R1
Platforms	All

**option** *keyword*

Synopsis	Keychain key option
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <a href="#">option</a> <i>keyword</i>
Tree	<a href="#">option</a>
Options	none, basic, isis-enhanced
Default	none
Introduced	16.0.R1
Platforms	All

**tolerance** (*number* | *keyword*)

Synopsis	Time eligible receive key overlaps with active send key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">bidirectional</a> <a href="#">entry</a> <i>number</i> <a href="#">tolerance</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">tolerance</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**receive**

Synopsis	Enter the <b>receive</b> context
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Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a>
Tree	<a href="#">receive</a>
Introduced	16.0.R1
Platforms	All

### **entry** [[keychain-entry-index](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1
Platforms	All

### **[keychain-entry-index]** *number*

Synopsis	Keychain identifier
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Range	0 to 63   255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the keychain entry
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <i>number</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**algorithm** *keyword***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Encryption algorithm used by the keychain key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">algorithm</a> <i>keyword</i>
Tree	<a href="#">algorithm</a>
Options	aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16, aes-128-cmac-128
Introduced	16.0.R1
Platforms	All

**authentication-key** *string***WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

**begin-time** *string*

Synopsis	Calendar date and time to start using the key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <a href="#">number</a> <a href="#">begin-time</a> <i>string</i>
Tree	<a href="#">begin-time</a>
Introduced	16.0.R1
Platforms	All

**end-time** *string*

Synopsis	Calendar date and time when system stops using the key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <i>number</i> <b>end-time</b> <i>string</i>
Tree	<a href="#">end-time</a>
Introduced	16.0.R1
Platforms	All

**tolerance** (*number* | *keyword*)

Synopsis	Time eligible receive key overlaps with active send key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">receive</a> <a href="#">entry</a> <i>number</i> <b>tolerance</b> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">tolerance</a>
Range	0 to 4294967294
Units	seconds
Options	infinite
Default	300
Introduced	16.0.R1
Platforms	All

**send**

Synopsis	Enter the <b>send</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <b>send</b>
Tree	<a href="#">send</a>
Introduced	16.0.R1
Platforms	All

**entry** [[keychain-entry-index](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">send</a> <a href="#">entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R1



Platforms All

### **[keychain-entry-index]** *number*

Synopsis Keychain identifier

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [send](#) [entry](#) *number*

Tree [entry](#)

Range 0 to 63 | 255

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of the keychain entry

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [send](#) [entry](#) *number* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default enable

Introduced 16.0.R1

Platforms All

### **algorithm** *keyword*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Encryption algorithm used by the keychain key

Context **configure** [system](#) [security](#) [keychains](#) [keychain](#) *string* [send](#) [entry](#) *number* [algorithm](#) *keyword*

Tree [algorithm](#)

Options aes-128-cmac-96, hmac-sha-1-96, password, message-digest, hmac-md5, hmac-sha-1, hmac-sha-256, aes-128-gcm-16, aes-128-cmac-128

Introduced 16.0.R1

Platforms All

**authentication-key *string*****WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Authentication key used by the encryption algorithm
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">send</a> <a href="#">entry</a> <i>number</i> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
String Length	1 to 54
Introduced	16.0.R1
Platforms	All

**begin-time *string***

Synopsis	Calendar date and time to start using the key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">send</a> <a href="#">entry</a> <i>number</i> <a href="#">begin-time</a> <i>string</i>
Tree	<a href="#">begin-time</a>
Introduced	16.0.R1
Platforms	All

**tcp-option-number**

Synopsis	Enter the <b>tcp-option-number</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">tcp-option-number</a>
Tree	<a href="#">tcp-option-number</a>
Introduced	16.0.R1
Platforms	All

**receive *keyword***

Synopsis	TCP option accepted in received TCP packets
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i> <a href="#">tcp-option-number</a> <a href="#">receive</a> <i>keyword</i>
Tree	<a href="#">receive</a>

Options	option-253, option-254, both, tcp-ao
Default	option-254
Introduced	16.0.R1
Platforms	All

### **send** *keyword*

Synopsis	TCP option accepted in sent TCP packets
Context	<b>configure</b> <a href="#">system security keychains keychain</a> <i>string</i> <a href="#">tcp-option-number</a> <b>send</b> <i>keyword</i>
Tree	<a href="#">send</a>
Options	option-253, option-254, tcp-ao
Default	option-254
Introduced	16.0.R1
Platforms	All

### **management**

Synopsis	Enter the <b>management</b> context
Context	<b>configure</b> <a href="#">system security management</a>
Tree	<a href="#">management</a>
Description	Commands in this context control which management protocols can be used to access the SR OS router via the 'Base' and 'management' router instances.
Introduced	16.0.R5
Platforms	All

### **allow-ftp** *boolean*

Synopsis	Allow access to the FTP server
Context	<b>configure</b> <a href="#">system security management allow-ftp</a> <i>boolean</i>
Tree	<a href="#">allow-ftp</a>
Description	When configured to <b>true</b> , this command allows FTP access to the SR OS router via the 'Base' and 'management' router instances. When configured to <b>false</b> , this command disallows access to the SR OS FTP server.
Default	true
Introduced	16.0.R6

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Platforms All

### **allow-grpc** *boolean*

Synopsis Allow access to the gRPC server

Context **configure** [system](#) [security](#) [management](#) **allow-grpc** *boolean*

Tree [allow-grpc](#)

Description When configured to **true**, the system allows access to the gRPC server via the 'Base' and 'management' router instances.

Default true

Introduced 19.5.R1

Platforms All

### **allow-netconf** *boolean*

Synopsis Allow access to the NETCONF server

Context **configure** [system](#) [security](#) [management](#) **allow-netconf** *boolean*

Tree [allow-netconf](#)

Description When configured to **true**, the system allows NETCONF server access to the SR OS router via the 'Base' and 'management' router instances.

Default true

Introduced 19.5.R1

Platforms All

### **allow-ssh** *boolean*

Synopsis Allow access to the SSH server

Context **configure** [system](#) [security](#) [management](#) **allow-ssh** *boolean*

Tree [allow-ssh](#)

Description When configured to **true**, this command allows SSH server access to the SR OS router via the 'Base' and 'management' router instances.

When configured to **false**, this command disallows SSH server access.

Default true

Introduced 16.0.R5

Platforms All

**allow-telnet** *boolean*

Synopsis	Allow access to the IPv4 Telnet server
Context	<b>configure</b> <a href="#">system security management allow-telnet</a> <i>boolean</i>
Tree	<a href="#">allow-telnet</a>
Description	When configured to <b>true</b> , the system allows IPv4 Telnet server access to the SR OS router via the 'Base' and 'management' router instances. When configured to <b>false</b> , access to the IPv4 Telnet server is not allowed.
Default	true
Introduced	16.0.R5
Platforms	All

**allow-telnet6** *boolean*

Synopsis	Allow access to the Telnet IPv6 server
Context	<b>configure</b> <a href="#">system security management allow-telnet6</a> <i>boolean</i>
Tree	<a href="#">allow-telnet6</a>
Description	When configured to <b>true</b> , the system allows IPv6 Telnet server access to the SR OS router via the 'Base' and 'management' router instances. When configured to <b>false</b> , the system prevents access to the IPv6 Telnet server.
Default	true
Introduced	16.0.R5
Platforms	All

**management-access-filter**

Synopsis	Enter the <b>management-access-filter</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter</a>
Tree	<a href="#">management-access-filter</a>
Description	Commands in this context configure the attributes for management access filters. Management access filters control all traffic in and out of the CPM. The filters can be used to restrict management of the router by other nodes outside of specific networks (or sub-networks) or through designated ports. Management filters are enforced by the system software.
Introduced	16.0.R4
Platforms	All

## ip-filter

Synopsis	Enter the <b>ip-filter</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter</a>
Tree	<a href="#">ip-filter</a>
Introduced	16.0.R4
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of management-access filters
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter admin-state keyword</a>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

## default-action *keyword*

Synopsis	Default action for the management access filter
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter default-action keyword</a>
Tree	<a href="#">default-action</a>
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	16.0.R4
Platforms	All

## entry [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry number</a>
Tree	<a href="#">entry</a>

Introduced	16.0.R4
Platforms	All

**[entry-id]** *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**action** *keyword*

Synopsis	Action associated with the management access filter
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <b>action</b> <i>keyword</i>
Tree	<a href="#">action</a>
Description	This command specifies the action associated with the management access filter match criteria entry.  If the packet does not meet any of the match criteria, the configured default action is applied.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	16.0.R4
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <b>description</b> <i>string</i>

Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **log-events** *boolean*

Synopsis	Enable match logging
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry number log-events</a> <i>boolean</i>
Tree	<a href="#">log-events</a>
Description	When configured to <b>true</b> , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised. When configured to <b>false</b> , match logging is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry number match</a>
Tree	<a href="#">match</a>
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

### **dst-port**

Synopsis	Enable the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry number match dst-port</a>
Tree	<a href="#">dst-port</a>
Introduced	16.0.R4
Platforms	All



### **mask number**

Synopsis	IP address mask as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match dst-port mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535
Introduced	16.0.R4
Platforms	All

### **port number**

Synopsis	TCP or UDP port number as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match dst-port port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **mgmt-port**

Synopsis	Enter the <b>mgmt-port</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry</a> <i>number</i> <a href="#">match mgmt-port</a>
Tree	<a href="#">mgmt-port</a>
Description	Commands in this context specify match criteria based on the Ethernet port.
Introduced	16.0.R4
Platforms	All

### **cpm**

Synopsis	Match any traffic received on any Ethernet port
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Context	<b>configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port cpm</b>
Tree	<b>cpm</b>
Notes	The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .
Introduced	16.0.R4
Platforms	All

### **lag string**

Synopsis	LAG ID as the match criterion
Context	<b>configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port lag string</b>
Tree	<b>lag</b>
String Length	1 to 27
Notes	The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .
Introduced	21.2.R1
Platforms	All

### **port-id string**

Synopsis	Port ID as the match criterion
Context	<b>configure system security management-access-filter ip-filter entry <i>number</i> match mgmt-port port-id string</b>
Tree	<b>port-id</b>
Notes	The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .
Introduced	16.0.R4
Platforms	All

### **protocol (*number* | *keyword*)**

Synopsis	IP protocol as the match criterion
Context	<b>configure system security management-access-filter ip-filter entry <i>number</i> match protocol (<i>number</i>   <i>keyword</i>)</b>
Tree	<b>protocol</b>
Range	0 to 255

Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R4
Platforms	All

### **router-instance** *string*

Synopsis	Router instance as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	All

### **src-ip**

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a>
Tree	<a href="#">src-ip</a>
Description	Commands in this context specify match criteria based on the source IP address.
Introduced	16.0.R4
Platforms	All

### **address** (*ipv4-prefix* | *ipv4-address*)

Synopsis	IP address or IP prefix as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">address</a> ( <i>ipv4-prefix</i>   <i>ipv4-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

## **ip-prefix-list** *reference*

Synopsis	IP prefix list as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry number match src-ip ip-prefix-list reference</a>
Tree	<a href="#">ip-prefix-list</a>
Reference	<b>configure</b> <a href="#">filter match-list ip-prefix-list string</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	20.7.R1
Platforms	All

## **mask** *string*

Synopsis	IP address mask as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry number match src-ip mask string</a>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ip-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

## **src-port**

Synopsis	Enable the <b>src-port</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry number match src-port</a>
Tree	<a href="#">src-port</a>
Introduced	21.7.R1
Platforms	All

## **mask** *number*

Synopsis	IP address mask as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter ip-filter entry number match src-port mask number</a>
Tree	<a href="#">mask</a>
Range	1 to 65535

Default	65535
Introduced	21.7.R1
Platforms	All

**port number**

Synopsis	TCP or UDP port number as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ip-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

**ipv6-filter**

Synopsis	Enter the <b>ipv6-filter</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a>
Tree	<a href="#">ipv6-filter</a>
Introduced	16.0.R4
Platforms	All

**admin-state keyword**

Synopsis	Administrative state of management-access filters
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

**default-action** *keyword*

Synopsis	Default action for the management access filter
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <b>default-action</b> <i>keyword</i>
Tree	<a href="#">default-action</a>
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	16.0.R4
Platforms	All

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R4
Platforms	All

**[entry-id]** *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**action** *keyword*

Synopsis	Action associated with the management access filter
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Context	<b>configure system security management-access-filter ipv6-filter entry</b> <i>number</i> <b>action</b> <i>keyword</i>
Tree	<b>action</b>
Description	This command specifies the action associated with the management access filter match criteria entry.  If the packet does not meet any of the match criteria, the configured default action is applied.
Options	ignore-match, accept, drop, reject
Default	ignore-match
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure system security management-access-filter ipv6-filter entry</b> <i>number</i> <b>description</b> <i>string</i>
Tree	<b>description</b>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **log-events** *boolean*

Synopsis	Enable match logging
Context	<b>configure system security management-access-filter ipv6-filter entry</b> <i>number</i> <b>log-events</b> <i>boolean</i>
Tree	<b>log-events</b>
Description	When configured to <b>true</b> , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised.  When configured to <b>false</b> , match logging is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

## match

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <b>match</b>
Tree	<a href="#">match</a>
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

## dst-port

Synopsis	Enable the <b>dst-port</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <b>match</b> <b>dst-port</b>
Tree	<a href="#">dst-port</a>
Description	Commands in this context specify match criteria based on the destination port.
Introduced	16.0.R4
Platforms	All

## mask *number*

Synopsis	IP address mask as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <b>match</b> <b>dst-port</b> <b>mask</b> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535
Introduced	16.0.R4
Platforms	All

## port *number*

Synopsis	TCP or UDP port number as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <b>match</b> <b>dst-port</b> <b>port</b> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65535



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Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **flow-label** *number*

Synopsis	Flow identifier used to discriminate traffic flows
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">flow-label</a> <i>number</i>
Tree	<a href="#">flow-label</a>
Range	0 to 1048575
Introduced	16.0.R4
Platforms	All

### **mgmt-port**

Synopsis	Enter the <b>mgmt-port</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">mgmt-port</a>
Tree	<a href="#">mgmt-port</a>
Description	Commands in this context specify match criteria based on the Ethernet port.
Introduced	16.0.R4
Platforms	All

### **cpm**

Synopsis	Match any traffic received on any Ethernet port
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">mgmt-port</a> <a href="#">cpm</a>
Tree	<a href="#">cpm</a>
Notes	The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .
Introduced	16.0.R4
Platforms	All

**lag string**

Synopsis	LAG ID as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">mgmt-port</a> <b>lag</b> <i>string</i>
Tree	<a href="#">lag</a>
String Length	1 to 27
Notes	The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .
Introduced	21.2.R1
Platforms	All

**port-id string**

Synopsis	Port ID as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">mgmt-port</a> <b>port-id</b> <i>string</i>
Tree	<a href="#">port-id</a>
Notes	The following elements are part of a choice: <b>cpm</b> , ( <b>lag</b> and <b>lag-id</b> ), or <b>port-id</b> .
Introduced	16.0.R4
Platforms	All

**next-header** (*number* | *keyword*)

Synopsis	IP protocol to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">next-header</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">next-header</a>
Range	0 to 255
Options	tcp-udp, icmp, igmp, ip, tcp, egp, igp, udp, rdp, ipv6, ipv6-route, ipv6-frag, idrp, rsvp, gre, ipv6-icmp, ipv6-no-nxt, ipv6-opts, iso-ip, eigrp, ospf-igp, ether-ip, encap, pnni, pim, vrrp, l2tp, stp, ptp, isis, crtp, crudp, sctp
Introduced	16.0.R4
Platforms	All

**router-instance string**

Synopsis	Router instance as the match criterion
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Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">router-instance</a>
Introduced	16.0.R4
Platforms	All

## src-ip

Synopsis	Enter the <b>src-ip</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a>
Tree	<a href="#">src-ip</a>
Description	Commands in this context specify match criteria based on the source port.
Introduced	16.0.R4
Platforms	All

## address (*ipv6-prefix* | *ipv6-address*)

Synopsis	IPv6 address or IPv6 prefix to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">address</a> ( <i>ipv6-prefix</i>   <i>ipv6-address</i> )
Tree	<a href="#">address</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

## ipv6-prefix-list *reference*

Synopsis	IPv6 prefix list as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">ipv6-prefix-list</a> <i>reference</i>
Tree	<a href="#">ipv6-prefix-list</a>
Reference	<b>configure</b> <a href="#">filter</a> <a href="#">match-list</a> <a href="#">ipv6-prefix-list</a> <i>string</i>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	20.7.R1
Platforms	All

### **mask string**

Synopsis	IP address mask as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-ip</a> <a href="#">mask</a> <i>string</i>
Tree	<a href="#">mask</a>
Notes	The following elements are part of a choice: ( <b>address</b> and <b>mask</b> ) or <b>ipv6-prefix-list</b> .
Introduced	16.0.R4
Platforms	All

### **src-port**

Synopsis	Enable the <b>src-port</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a>
Tree	<a href="#">src-port</a>
Description	Commands in this context specify match criteria based on the source port.
Introduced	21.7.R1
Platforms	All

### **mask number**

Synopsis	IP address mask as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 65535
Default	65535
Introduced	21.7.R1
Platforms	All

### **port number**

Synopsis	TCP or UDP port number as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">ipv6-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">src-port</a> <a href="#">port</a> <i>number</i>

Tree	<a href="#">port</a>
Range	1 to 65535
Notes	This element is mandatory.
Introduced	21.7.R1
Platforms	All

## mac-filter

Synopsis	Enter the <b>mac-filter</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a>
Tree	<a href="#">mac-filter</a>
Introduced	16.0.R4
Platforms	All

## admin-state *keyword*

Synopsis	Administrative state of management access MAC filter
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R4
Platforms	All

## default-action *keyword*

Synopsis	Default action for the management access filter
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">default-action</a> <i>keyword</i>
Tree	<a href="#">default-action</a>
Description	This command specifies the default action for management access in the absence of a specific management access filter match.
Options	ignore-match, accept, drop
Default	ignore-match
Introduced	16.0.R4
Platforms	All

**entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Introduced	16.0.R4
Platforms	All

**[entry-id]** *number*

Synopsis	Entry ID to identify the match criteria and the action
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i>
Tree	<a href="#">entry</a>
Description	This command specifies the entry ID to identify the match criteria and the corresponding action. It is recommended that entries are numbered in staggered increments. This allows users to insert a new entry in an existing policy without having to renumber the existing entries.
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

**action** *keyword*

Synopsis	Action associated with the management access filter
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <a href="#">action</a> <i>keyword</i>
Tree	<a href="#">action</a>
Description	This command specifies the action associated with the management access filter match criteria entry.  If the packet does not meet any of the match criteria, the configured default action is applied.
Options	ignore-match, accept, drop
Default	ignore-match
Introduced	16.0.R4
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	All

### **log-events** *boolean*

Synopsis	Enable match logging
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <a href="#">log-events</a> <i>boolean</i>
Tree	<a href="#">log-events</a>
Description	When configured to <b>true</b> , this command enables match logging. When enabled, matches on the entry cause the Security event mafEntryMatch to be raised. When configured to <b>false</b> , match logging is disabled.
Default	false
Introduced	16.0.R4
Platforms	All

### **match**

Synopsis	Enter the <b>match</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <a href="#">match</a>
Tree	<a href="#">match</a>
Description	Commands in this context specify match criteria for the entry.
Introduced	16.0.R4
Platforms	All

### **cfm-opcode**

Synopsis	Enter the <b>cfm-opcode</b> context
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Context	<b>configure system security management-access-filter mac-filter entry <i>number match cfm-opcode</i></b>
Tree	<b>cfm-opcode</b>
Description	Commands in this context specify match criteria based on the CFM opcode.
Introduced	16.0.R4
Platforms	All

### **eq *number***

Synopsis	Equal to comparison operator for the CFM opcode
Context	<b>configure system security management-access-filter mac-filter entry <i>number match cfm-opcode eq number</i></b>
Tree	<b>eq</b>
Range	0 to 255
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R4
Platforms	All

### **gt *number***

Synopsis	Greater than comparison operator for the CFM opcode
Context	<b>configure system security management-access-filter mac-filter entry <i>number match cfm-opcode gt number</i></b>
Tree	<b>gt</b>
Range	0 to 254
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R4
Platforms	All

### **lt *number***

Synopsis	Less than comparison operator for the CFM opcode
Context	<b>configure system security management-access-filter mac-filter entry <i>number match cfm-opcode lt number</i></b>
Tree	<b>lt</b>
Range	1 to 255



Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R4
Platforms	All

## range

Synopsis	Enable the <b>range</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">cfm-opcode</a> <b>range</b>
Tree	<a href="#">range</a>
Notes	The following elements are part of a choice: <b>eq</b> , <b>gt</b> , <b>lt</b> , or <b>range</b> .
Introduced	16.0.R4
Platforms	All

## end number

Synopsis	Upper bound of the range for the OpCode to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">cfm-opcode</a> <b>range</b> <b>end</b> <i>number</i>
Tree	<a href="#">end</a>
Range	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## start number

Synopsis	Lower bound of the range for the OpCode to match
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <a href="#">cfm-opcode</a> <b>range</b> <b>start</b> <i>number</i>
Tree	<a href="#">start</a>
Range	0 to 254
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## dot1p

Synopsis	Enable the <b>dot1p</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number match dot1p</i>
Tree	<a href="#">dot1p</a>
Description	Commands in this context specify match criteria based on the IEEE 802.1p value.
Introduced	16.0.R4
Platforms	All

## mask *number*

Synopsis	3-bit mask as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number match dot1p mask number</i>
Tree	<a href="#">mask</a>
Range	1 to 7
Default	7
Introduced	16.0.R4
Platforms	All

## priority *number*

Synopsis	IEEE 802.1p value as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number match dot1p priority number</i>
Tree	<a href="#">priority</a>
Range	0 to 7
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

## dst-mac

Synopsis	Enable the <b>dst-mac</b> context
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Context	<b>configure system security management-access-filter mac-filter entry <i>number</i> match dst-mac</b>
Tree	<b>dst-mac</b>
Description	Commands in this context specify match criteria based on the destination MAC.
Introduced	16.0.R4
Platforms	All

### **address string**

Synopsis	MAC address used as the match criterion
Context	<b>configure system security management-access-filter mac-filter entry <i>number</i> match dst-mac address <i>string</i></b>
Tree	<b>address</b>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **mask string**

Synopsis	MAC address mask as the match criterion
Context	<b>configure system security management-access-filter mac-filter entry <i>number</i> match dst-mac mask <i>string</i></b>
Tree	<b>mask</b>
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R4
Platforms	All

### **etype string**

Synopsis	Ethernet type II Ethertype value as the match criterion
Context	<b>configure system security management-access-filter mac-filter entry <i>number</i> match etype <i>string</i></b>
Tree	<b>etype</b>
Description	This command specifies an Ethernet type II Ethertype value to be used as a MAC filter match criterion.  The Ethernet type field is used by the Ethernet version-II frames and does not apply to IEEE 802.3 Ethernet frames.

String Length	5 to 6
Introduced	16.0.R4
Platforms	All

### **frame-type** *keyword*

Synopsis	MAC frame type as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>frame-type</b> <i>keyword</i>
Tree	<a href="#">frame-type</a>
Options	802dot3, 802dot2-llc, 802dot2-snap, ethernet-ii, 802dot1-ag
Default	802dot3
Introduced	16.0.R4
Platforms	All

### **llc-dsap**

Synopsis	Enable the <b>llc-dsap</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>llc-dsap</b>
Tree	<a href="#">llc-dsap</a>
Description	Commands in this context specify match criteria based on the Destination Service Access Point (DSAP).
Introduced	16.0.R4
Platforms	All

### **dsap** *number*

Synopsis	8-bit DSAP as the match criterion
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">management-access-filter</a> <a href="#">mac-filter</a> <a href="#">entry</a> <i>number</i> <a href="#">match</a> <b>llc-dsap</b> <b>dsap</b> <i>number</i>
Tree	<a href="#">dsap</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

**mask number**

Synopsis	Mask for DSAP value as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <a href="#">match llc-dsap</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

**llc-ssap**

Synopsis	Enable the <b>llc-ssap</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <a href="#">match llc-ssap</a>
Tree	<a href="#">llc-ssap</a>
Description	Commands in this context specify match criteria based on the Source Service Access Point (SSAP).
Introduced	16.0.R4
Platforms	All

**mask number**

Synopsis	Mask for SSAP value as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number</i> <a href="#">match llc-ssap</a> <a href="#">mask</a> <i>number</i>
Tree	<a href="#">mask</a>
Range	1 to 255
Default	255
Introduced	16.0.R4
Platforms	All

**ssap number**

Synopsis	8-bit SSAP as the match criterion
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Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number match llc-ssap ssap number</i>
Tree	<a href="#">ssap</a>
Range	0 to 255
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **service string**

Synopsis	Service ID used as the match condition
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number match service string</i>
Tree	<a href="#">service</a>
String Length	1 to 64
Introduced	16.0.R4
Platforms	All

### **snap-oui keyword**

Synopsis	IEEE 802.3 LLC SNAP Ethernet Frame OUI value for match
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number match snap-oui keyword</i>
Tree	<a href="#">snap-oui</a>
Description	This command specifies the IEEE 802.3 LLC SNAP Ethernet Frame OUI value as the MAC filter match criterion.
Options	zero, non-zero
Introduced	16.0.R4
Platforms	All

### **snap-pid number**

Synopsis	IEEE 802.3 LLC SNAP Ethernet Frame PID as the match
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry</a> <i>number match snap-pid number</i>
Tree	<a href="#">snap-pid</a>

Description	This command specifies an IEEE 802.3 LLC SNAP Ethernet Frame PID value used as the MAC filter match criterion.  The SNAP PID match criterion is independent of the OUI field within the SNAP header. Two packets with different 3-byte OUI fields but the same PID field match the same filter entry based on a SNAP PID match criterion.
Range	0 to 65535
Introduced	16.0.R4
Platforms	All

### src-mac

Synopsis	Enable the <b>src-mac</b> context
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match src-mac</a>
Tree	<a href="#">src-mac</a>
Description	Commands in this context specify match criteria based on the source MAC.
Introduced	16.0.R4
Platforms	All

### address string

Synopsis	MAC address used as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match src-mac address string</a>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### mask string

Synopsis	MAC address mask as the match criterion
Context	<b>configure</b> <a href="#">system security management-access-filter mac-filter entry number match src-mac mask string</a>
Tree	<a href="#">mask</a>
Default	ff:ff:ff:ff:ff:ff
Introduced	16.0.R4

Platforms All

### **per-peer-queuing** *boolean*

Synopsis Allow CPM hardware queuing per peer

Context **configure** [system security per-peer-queuing](#) *boolean*

Tree [per-peer-queuing](#)

Description When configured to **true**, the router automatically allocates a separate CPM hardware queue for the peer when a peering session is established.  
When configured to **false**, a separate CPM hardware queue is not allowed.

Introduced 16.0.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pki**

Synopsis Enter the **pki** context

Context **configure** [system security pki](#)

Tree [pki](#)

Introduced 16.0.R1

Platforms All

### **ca-profile** [[ca-profile-name](#)] *string*

Synopsis Enter the **ca-profile** list instance

Context **configure** [system security pki ca-profile](#) *string*

Tree [ca-profile](#)

Max. Instances 128

Introduced 16.0.R1

Platforms All

### **[ca-profile-name]** *string*

Synopsis CA profile name

Context **configure** [system security pki ca-profile](#) *string*

Tree [ca-profile](#)



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String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the CA profile
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **auto-crl-update**

Synopsis	Enable the <b>auto-crl-update</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>auto-crl-update</b>
Tree	<a href="#">auto-crl-update</a>
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the automatic CRL update
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>auto-crl-update</b> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

## crl-urls



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>crl-urls</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <b>crl-urls</b>
Tree	<a href="#">crl-urls</a>
Introduced	16.0.R1
Platforms	All

## url-entry [[entry-id](#)] *number*

Synopsis	Enter the <b>url-entry</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">crl-urls</a> <b>url-entry</b> <i>number</i>
Tree	<a href="#">url-entry</a>
Introduced	16.0.R1
Platforms	All

## [[entry-id](#)] *number*

Synopsis	URL on this system
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">crl-urls</a> <b>url-entry</b> <i>number</i>
Tree	<a href="#">url-entry</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## transmission-profile *reference*

Synopsis	File transmission profile to update CRL
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">crl-urls</a> <b>url-entry</b> <i>number</i> <a href="#">transmission-profile</a> <i>reference</i>
Tree	<a href="#">transmission-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i>

Introduced 16.0.R4  
 Platforms All

### **url** *http-url-path-loose*

Synopsis Location of updated CRL  
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [auto-crl-update](#) [crl-urls](#) [url-entry](#) *number*  
[url](#) *http-url-path-loose*  
 Tree [url](#)  
 String Length 1 to 180  
 Introduced 16.0.R1  
 Platforms All

### **periodic-update-interval** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Interval between two consecutive CRL updates  
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [auto-crl-update](#) [periodic-update-interval](#)  
*number*  
 Tree [periodic-update-interval](#)  
 Range 3600 to 31622400  
 Units seconds  
 Default 86400  
 Introduced 16.0.R1  
 Platforms All

### **pre-update-time** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Time prior to the next update time of the current CRL  
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* [auto-crl-update](#) [pre-update-time](#) *number*

Tree	<a href="#">pre-update-time</a>
Range	0 to 31622400
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	All

### **retry-interval** *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Interval before retrying to update CRL
Context	<b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">retry-interval</a> <i>number</i>
Tree	<a href="#">retry-interval</a>
Range	0 to 31622400
Units	seconds
Default	3600
Introduced	16.0.R1
Platforms	All

### **schedule-type** *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Time scheduler type for an automated CRL update
Context	<b>configure</b> <a href="#">system security pki ca-profile</a> <i>string</i> <a href="#">auto-crl-update</a> <a href="#">schedule-type</a> <i>keyword</i>
Tree	<a href="#">schedule-type</a>
Options	next-update-based, periodic
Default	next-update-based
Introduced	16.0.R1
Platforms	All

## cert-file *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Certificate file name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>cert-file</b> <i>string</i>
Tree	<a href="#">cert-file</a>
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

## cmpv2

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>cmpv2</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>cmpv2</b>
Tree	<a href="#">cmpv2</a>
Introduced	16.0.R1
Platforms	All

## accept-unprotected-message

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>accept-unprotected-message</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <b>cmpv2</b> <b>accept-unprotected-message</b>
Tree	<a href="#">accept-unprotected-message</a>
Introduced	16.0.R1
Platforms	All

**error-message** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept unprotected error messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">accept-unprotected-message</a> <a href="#">error-message</a> <i>boolean</i>
Tree	<a href="#">error-message</a>
Default	false
Introduced	16.0.R1
Platforms	All

**pkiconf-message** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Accept unprotected PKI confirmation messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">accept-unprotected-message</a> <a href="#">pkiconf-message</a> <i>boolean</i>
Tree	<a href="#">pkiconf-message</a>
Default	false
Introduced	16.0.R1
Platforms	All

**always-set-sender-for-ir** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Set subject name in CMPv2 header for all IR messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">always-set-sender-for-ir</a> <i>boolean</i>
Tree	<a href="#">always-set-sender-for-ir</a>
Default	false
Introduced	16.0.R1

Platforms All

## http



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **http** context

Context **configure** system security pki ca-profile string cmpv2 http

Tree [http](#)

Introduced 16.0.R1

Platforms All

## response-timeout *number*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis HTTP response timeout

Context **configure** system security pki ca-profile string cmpv2 http response-timeout *number*

Tree [response-timeout](#)

Range 1 to 3600

Units seconds

Default 30

Introduced 16.0.R1

Platforms All

## version *keyword*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis HTTP version for CMPv2 messages

Context **configure** system security pki ca-profile string cmpv2 http version *keyword*

Tree [version](#)

Options	1.0, 1.1
Default	1.1
Introduced	16.0.R1
Platforms	All

## key-list



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>key-list</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <b>key-list</b>
Tree	<a href="#">key-list</a>
Introduced	16.0.R1
Platforms	All

## key [[reference-number](#)] *string*

Synopsis	Enter the <b>key</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">key-list</a> <b>key</b> <i>string</i>
Tree	<a href="#">key</a>
Max. Instances	128
Introduced	16.0.R1
Platforms	All

## [[reference-number](#)] *string*

Synopsis	Unique identifier for the CA initial authentication key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">key-list</a> <b>key</b> <i>string</i>
Tree	<a href="#">key</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



**password** *string*

Synopsis	Shared secret for this CA initial authentication key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">key-list</a> <a href="#">key</a> <i>string</i> <b>password</b> <i>string</i>
Tree	<a href="#">password</a>
String Length	1 to 115
Introduced	16.0.R1
Platforms	All

**recipient-subject** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	DN attributes for recipient subject of CMPv2 requests
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <b>recipient-subject</b> <i>string</i>
Tree	<a href="#">recipient-subject</a>
String Length	1 to 256
Notes	The following elements are part of a choice: <b>recipient-subject</b> or <b>use-ca-subject</b> .
Introduced	22.10.R1
Platforms	All

**response-signing-cert** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	File name of the certificate to verify CMPv2 responses
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <b>response-signing-cert</b> <i>string</i>
Tree	<a href="#">response-signing-cert</a>
Description	This command specifies an imported certificate used to verify the CMP response message that they are protected by signature. When unconfigured, CA's certificate is used.
String Length	1 to 95

Notes	The following elements are part of a choice: <b>response-signing-cert</b> or <b>response-signing-use-extracert</b> .
Introduced	16.0.R1
Platforms	All

## response-signing-use-extracert



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use extraCerts certificate to verify response signature
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">response-signing-use-extracert</a>
Tree	<a href="#">response-signing-use-extracert</a>
Notes	The following elements are part of a choice: <b>response-signing-cert</b> or <b>response-signing-use-extracert</b> .
Introduced	22.10.R1
Platforms	All

## same-recipient-nonce-for-poll-request *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use same recipNonce as last CMPv2 response
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">same-recipient-nonce-for-poll-request</a> <i>boolean</i>
Tree	<a href="#">same-recipient-nonce-for-poll-request</a>
Default	false
Introduced	16.0.R1
Platforms	All

**signing-cert-subject** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Subject DN attributes to identify signing certificate
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">signing-cert-subject</a> <i>string</i>
Tree	<a href="#">signing-cert-subject</a>
String Length	1 to 256
Introduced	23.3.R1
Platforms	All

**url****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>url</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">url</a>
Tree	<a href="#">url</a>
Introduced	16.0.R1
Platforms	All

**service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">url</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Notes	The following elements are part of a choice: <b>service-name</b> or <b>transmission-profile</b> .
Introduced	16.0.R1
Platforms	All

**transmission-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Transmission profile for CMPv2
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">url</a> <b>transmission-profile</b> <i>reference</i>
Tree	<a href="#">transmission-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i>
Notes	The following elements are part of a choice: <b>service-name</b> or <b>transmission-profile</b> .
Introduced	23.3.R1
Platforms	All

**url-string** *http-optional-url-loose***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	URL for CMPv2
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <a href="#">url</a> <b>url-string</b> <i>http-optional-url-loose</i>
Tree	<a href="#">url-string</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

**use-ca-subject****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Use subject DN in CA certificate as CMPv2 request recipient
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">cmpv2</a> <b>use-ca-subject</b>
Tree	<a href="#">use-ca-subject</a>
Notes	The following elements are part of a choice: <b>recipient-subject</b> or <b>use-ca-subject</b> .

Introduced 22.10.R1  
 Platforms All

### **crl-file** *string*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Certificate Revocation List (CRL) file name  
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* **crl-file** *string*  
 Tree [crl-file](#)  
 String Length 1 to 95  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* **description** *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **ocsp**



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Enter the **ocsp** context  
 Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* **ocsp**  
 Tree [ocsp](#)  
 Introduced 16.0.R1  
 Platforms All

**responder-url** *http-optional-url-loose***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	HTTP URL of the OCSP responder for the CA
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">ocsp</a> <a href="#">responder-url</a> <i>http-optional-url-loose</i>
Tree	<a href="#">responder-url</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

**service-name** *string***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Administrative service name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">ocsp</a> <a href="#">service-name</a> <i>string</i>
Tree	<a href="#">service-name</a>
String Length	1 to 64
Introduced	16.0.R1
Platforms	All

**transmission-profile** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Transmission profile for the OCSP
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i> <a href="#">ocsp</a> <a href="#">transmission-profile</a> <i>reference</i>
Tree	<a href="#">transmission-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i>
Introduced	16.0.R6

Platforms All

### revocation-check *keyword*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis Revocation method to check status of CA certificates

Context **configure** [system](#) [security](#) [pki](#) [ca-profile](#) *string* **revocation-check** *keyword*

Tree [revocation-check](#)

Options `crl`, `crl-optional`

Default `crl`

Introduced 16.0.R1

Platforms All

### certificate-auto-update [[certificate-file-name](#)] *string*

Synopsis Enter the **certificate-auto-update** list instance

Context **configure** [system](#) [security](#) [pki](#) [certificate-auto-update](#) *string*

Tree [certificate-auto-update](#)

Description Commands in this context configure automatic certificate update associations.

Max. Instances 256

Introduced 22.10.R1

Platforms All

### [[certificate-file-name](#)] *string*

Synopsis Certificate file name

Context **configure** [system](#) [security](#) [pki](#) [certificate-auto-update](#) *string*

Tree [certificate-auto-update](#)

String Length 1 to 95

Notes This element is part of a list key.

Introduced 22.10.R1

Platforms All

**key-file-name** *string*

Synopsis	Imported key filename
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-auto-update</a> <i>string</i> <b>key-file-name</b> <i>string</i>
Tree	<a href="#">key-file-name</a>
String Length	1 to 95
Introduced	22.10.R1
Platforms	All

**profile** *reference*

Synopsis	Certificate update profile name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-auto-update</a> <i>string</i> <b>profile</b> <i>reference</i>
Tree	<a href="#">profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i>
Introduced	22.10.R1
Platforms	All

**certificate-display-format** *keyword*

Synopsis	Display format for Certificates and CRLs
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-display-format</a> <i>keyword</i>
Tree	<a href="#">certificate-display-format</a>
Options	ascii, utf8
Default	ascii
Introduced	16.0.R1
Platforms	All

**certificate-expiration-warning**

Synopsis	Enter the <b>certificate-expiration-warning</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-expiration-warning</a>
Tree	<a href="#">certificate-expiration-warning</a>
Introduced	16.0.R1
Platforms	All



**hours** *number*

Synopsis	Time before system generates certificate warning trap
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-expiration-warning</a> <i>hours</i> <i>number</i>
Tree	<a href="#">hours</a>
Range	0 to 8760
Units	hours
Introduced	16.0.R1
Platforms	All

**repeat-hours** *number*

Synopsis	Time system repeats certificate expiration warning trap
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-expiration-warning</a> <a href="#">repeat-hours</a> <i>number</i>
Tree	<a href="#">repeat-hours</a>
Range	0 to 8760
Units	hours
Default	0
Introduced	16.0.R1
Platforms	All

**certificate-update-profile** [[name](#)] *string*

Synopsis	Enter the <b>certificate-update-profile</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i>
Tree	<a href="#">certificate-update-profile</a>
Description	Commands in this context configure a certificate update profile that specifies the behavior of the automatic update certificate.
Max. Instances	256
Introduced	22.10.R1
Platforms	All

**[name]** *string*

Synopsis	Certificate update profile name
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Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i>
Tree	<a href="#">certificate-update-profile</a>
Description	This command configures the certificate update profile name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	All

### **after-issue** *number*

Synopsis	Time for scheduler updates after certificate issuance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>after-issue</b> <i>number</i>
Tree	<a href="#">after-issue</a>
Description	This command configures the time for scheduler updates after the certificate issue time.
Range	864000 to 157680000
Units	seconds
Notes	The following elements are part of a choice: <b>after-issue</b> or <b>before-expiry</b> .
Introduced	22.10.R1
Platforms	All

### **before-expiry** *number*

Synopsis	Time scheduler updates before certificate expiry
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>before-expiry</b> <i>number</i>
Tree	<a href="#">before-expiry</a>
Description	This command configures the time that the scheduler updates before the certificate expiration time.
Range	3600 to 157680000
Units	seconds
Default	86400
Notes	The following elements are part of a choice: <b>after-issue</b> or <b>before-expiry</b> .
Introduced	22.10.R1
Platforms	All

## cmpv2

Synopsis	Enter the <b>cmpv2</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>cmpv2</b>
Tree	<a href="#">cmpv2</a>
Notes	The following elements are part of a choice: <b>cmpv2</b> or <b>est</b> .
Introduced	22.10.R1
Platforms	All

## ca-profile *reference*

Synopsis	CA profile name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>cmpv2</b> <a href="#">ca-profile</a> <i>reference</i>
Tree	<a href="#">ca-profile</a>
Description	This command specifies the use of CMPv2 as the protocol to update the certificate. The CMPv2 configuration is derived from the referenced CA profile.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i>
Introduced	22.10.R1
Platforms	All

## dsa

Synopsis	Enter the <b>dsa</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>dsa</b>
Tree	<a href="#">dsa</a>
Notes	The following elements are part of a choice: <b>dsa</b> , <b>ecdsa</b> , <b>rsa</b> , or <b>same-as-existing-key</b> .
Introduced	22.10.R1
Platforms	All

## key-size *number*

Synopsis	Length of the generated DSA key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>dsa</b> <a href="#">key-size</a> <i>number</i>
Tree	<a href="#">key-size</a>
Description	This command specifies that the newly generated key is an DSA key with the specified key length in bits.

Range	512 to 8192
Default	2048
Introduced	22.10.R1
Platforms	All

## ecdsa

Synopsis	Enter the <b>ecdsa</b> context
Context	<b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <a href="#">ecdsa</a>
Tree	<a href="#">ecdsa</a>
Notes	The following elements are part of a choice: <b>dsa</b> , <b>ecdsa</b> , <b>rsa</b> , or <b>same-as-existing-key</b> .
Introduced	22.10.R1
Platforms	All

## curve *keyword*

Synopsis	Elliptic curve to be used in ECDSA key generation
Context	<b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <a href="#">ecdsa curve</a> <i>keyword</i>
Tree	<a href="#">curve</a>
Description	This command specifies that the newly generated key is an ECDSA key with the specified curve.
Options	secp256r1, secp384r1, secp521r1
Default	secp256r1
Introduced	22.10.R1
Platforms	All

## est

Synopsis	Enter the <b>est</b> context
Context	<b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <a href="#">est</a>
Tree	<a href="#">est</a>
Notes	The following elements are part of a choice: <b>cmpv2</b> or <b>est</b> .
Introduced	22.10.R1
Platforms	All

### **est-profile** *reference*

Synopsis	EST profile name
Context	<b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <b>est</b> <a href="#">est-profile</a> <i>reference</i>
Tree	<a href="#">est-profile</a>
Description	This command specifies the use of EST as the protocol to update the certificate. The EST configuration is derived from the referenced EST profile.
Reference	<b>configure</b> <a href="#">system security pki est-profile</a> <i>string</i>
Introduced	22.10.R1
Platforms	All

### **hash-algorithm** *keyword*

Synopsis	Hash algorithm for a certificate request
Context	<b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <b>hash-algorithm</b> <i>keyword</i>
Tree	<a href="#">hash-algorithm</a>
Description	This command specifies the hash algorithm used to generate a certificate request.
Options	md5, sha1, sha224, sha256, sha384, sha512
Default	sha256
Introduced	22.10.R1
Platforms	All

### **retry-interval** *number*

Synopsis	Retry interval after a failed update
Context	<b>configure</b> <a href="#">system security pki certificate-update-profile</a> <i>string</i> <b>retry-interval</b> <i>number</i>
Tree	<a href="#">retry-interval</a>
Description	This command configures the retry interval after the update fails.
Range	60 to 36000
Units	seconds
Default	3600
Introduced	22.10.R1
Platforms	All

**rsa**

Synopsis	Enter the <b>rsa</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>rsa</b>
Tree	<a href="#">rsa</a>
Notes	The following elements are part of a choice: <b>dsa</b> , <b>ecdsa</b> , <b>rsa</b> , or <b>same-as-existing-key</b> .
Introduced	22.10.R1
Platforms	All

**key-size number**

Synopsis	Length of the generated RSA key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>rsa</b> <a href="#">key-size</a> <i>number</i>
Tree	<a href="#">key-size</a>
Description	This command specifies that the newly generated key is a RSA key with the specified key length in bits.
Range	512 to 8192
Default	2048
Introduced	22.10.R1
Platforms	All

**same-as-existing-key**

Synopsis	Generate the new key to same type and key length
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">certificate-update-profile</a> <i>string</i> <b>same-as-existing-key</b>
Tree	<a href="#">same-as-existing-key</a>
Description	When configured, this command specifies that the newly generated key is the same type and key length as the existing key.
Notes	The following elements are part of a choice: <b>dsa</b> , <b>ecdsa</b> , <b>rsa</b> , or <b>same-as-existing-key</b> .
Introduced	22.10.R1
Platforms	All

**common-name-list [cn-list-name] string**

Synopsis	Enter the <b>common-name-list</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i>

Tree	<a href="#">common-name-list</a>
Max. Instances	64
Introduced	16.0.R1
Platforms	All

**[cn-list-name]** *string*

Synopsis	CN list name
Context	<b>configure</b> <a href="#">system security pki common-name-list</a> <i>string</i>
Tree	<a href="#">common-name-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**common-name** [[cn-index](#)] *number*

Synopsis	Enter the <b>common-name</b> list instance
Context	<b>configure</b> <a href="#">system security pki common-name-list</a> <i>string</i> <a href="#">common-name</a> <i>number</i>
Tree	<a href="#">common-name</a>
Introduced	16.0.R1
Platforms	All

**[cn-index]** *number*

Synopsis	Common name index
Context	<b>configure</b> <a href="#">system security pki common-name-list</a> <i>string</i> <a href="#">common-name</a> <i>number</i>
Tree	<a href="#">common-name</a>
Range	1 to 128
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **cn-type** *keyword*

Synopsis	Common name type
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i> <a href="#">common-name</a> <i>number</i> <b>cn-type</b> <i>keyword</i>
Tree	<a href="#">cn-type</a>
Options	ip-address, domain-name
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **cn-value** *string*

Synopsis	Common name value
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i> <a href="#">common-name</a> <i>number</i> <b>cn-value</b> <i>string</i>
Tree	<a href="#">cn-value</a>
String Length	1 to 255
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **crl-expiration-warning**

Synopsis	Enter the <b>crl-expiration-warning</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">crl-expiration-warning</a>
Tree	<a href="#">crl-expiration-warning</a>
Introduced	16.0.R1
Platforms	All

### **hours** *number*

Synopsis	Time before system generates CRL expiration warning trap
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">crl-expiration-warning</a> <b>hours</b> <i>number</i>
Tree	<a href="#">hours</a>
Range	0 to 8760



Units	hours
Introduced	16.0.R1
Platforms	All

**repeat-hours** *number*

Synopsis	Time system repeats CRL expiration warning trap
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">crl-expiration-warning</a> <a href="#">repeat-hours</a> <i>number</i>
Tree	<a href="#">repeat-hours</a>
Range	0 to 8760
Units	hours
Default	0
Introduced	16.0.R1
Platforms	All

**est-profile** [*name*] *string*

Synopsis	Enter the <b>est-profile</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i>
Tree	<a href="#">est-profile</a>
Description	Commands in this context configure an Enrollment over Secure Transport (EST) profile.
Max. Instances	128
Introduced	21.10.R1
Platforms	All

**[name]** *string*

Synopsis	Enrollment over Secured Transport profile name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i>
Tree	<a href="#">est-profile</a>
Description	This command configures the EST profile name.
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	21.10.R1

Platforms All

### **check-id-kp-cmcra-only** *boolean*

Synopsis Check id-kp-cmcra in the EST certificate  
 Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* **check-id-kp-cmcra-only** *boolean*  
 Tree [check-id-kp-cmcra-only](#)  
 Default false  
 Introduced 21.10.R1  
 Platforms All

### **client-tls-profile** *string*

Synopsis TLS client profile assigned to applications  
 Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* **client-tls-profile** *string*  
 Tree [client-tls-profile](#)  
 Description This command specifies the TLS client profile to be assigned to applications for encryption. The profile creates the TLS connection to the EST server.  
 String Length 1 to 32  
 Introduced 21.10.R1  
 Platforms All

### **http-authentication**

Synopsis Enter the **http-authentication** context  
 Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* **http-authentication**  
 Tree [http-authentication](#)  
 Introduced 21.10.R1  
 Platforms All

### **password** *string*

Synopsis Password for EST authentication  
 Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* **http-authentication** **password** *string*  
 Tree [password](#)

String Length 1 to 115  
Introduced 21.10.R1  
Platforms All

### **username** *string*

Synopsis Username for the EST authentication  
Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* [http-authentication](#) [username](#) *string*  
Tree [username](#)  
String Length 1 to 32  
Introduced 21.10.R1  
Platforms All

### **server**

Synopsis Enter the **server** context  
Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* [server](#)  
Tree [server](#)  
Description Commands in this context configure EST server parameters.  
Introduced 21.10.R1  
Platforms All

### **fqdn** *string*

Synopsis Fully Qualified Domain Name (FQDN) of the EST server  
Context **configure** [system](#) [security](#) [pki](#) [est-profile](#) *string* [server](#) [fqdn](#) *string*  
Tree [fqdn](#)  
Description This command specifies to use the FQDN of the EST server.  
String Length 1 to 255  
Notes The following elements are part of a choice: **fqdn**, **ipv4**, or **ipv6**.  
Introduced 21.10.R1  
Platforms All

### **ipv4 string**

Synopsis	IPv4 address of the EST server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">server</a> <a href="#">ipv4</a> <i>string</i>
Tree	<a href="#">ipv4</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	21.10.R1
Platforms	All

### **ipv6 (ipv4-address-no-zone | ipv6-address-no-zone)**

Synopsis	IPv6 address of the EST server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">server</a> <a href="#">ipv6</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> )
Tree	<a href="#">ipv6</a>
Notes	The following elements are part of a choice: <b>fqdn</b> , <b>ipv4</b> , or <b>ipv6</b> .
Introduced	21.10.R1
Platforms	All

### **port number**

Synopsis	Port number of the EST server
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">server</a> <a href="#">port</a> <i>number</i>
Tree	<a href="#">port</a>
Range	1 to 65535
Default	443
Introduced	21.10.R1
Platforms	All

### **transmission-profile string**

Synopsis	Transmission profile name for EST
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">est-profile</a> <i>string</i> <a href="#">transmission-profile</a> <i>string</i>
Tree	<a href="#">transmission-profile</a>
Description	This command associates a file transmission profile to the EST profile.

The transmission profile defines transport parameters for protocol such as HTTP, include routing instance, source address, timeout value, and so on.

String Length	1 to 32
Introduced	21.10.R1
Platforms	All

### **imported-format** *keyword*

Synopsis	The supported encrypted file formats
Context	<b>configure</b> <a href="#">system security pki imported-format</a> <i>keyword</i>
Tree	<a href="#">imported-format</a>
Options	any, secure
Default	any
Introduced	16.0.R6
Platforms	All

### **maximum-cert-chain-depth** *number*

Synopsis	Maximum depth of certificate chain verification
Context	<b>configure</b> <a href="#">system security pki maximum-cert-chain-depth</a> <i>number</i>
Tree	<a href="#">maximum-cert-chain-depth</a>
Range	1 to 7
Default	7
Introduced	16.0.R1
Platforms	All

### **python-script**

Synopsis	Enter the <b>python-script</b> context
Context	<b>configure</b> <a href="#">system security python-script</a>
Tree	<a href="#">python-script</a>
Introduced	21.10.R1
Platforms	All

## authorization

Synopsis	Enter the <b>authorization</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">python-script</a> <a href="#">authorization</a>
Tree	<a href="#">authorization</a>
Introduced	21.10.R1
Platforms	All

## cron

Synopsis	Enter the <b>cron</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">python-script</a> <a href="#">authorization</a> <a href="#">cron</a>
Tree	<a href="#">cron</a>
Introduced	21.10.R1
Platforms	All

## cli-user *reference*

Synopsis	User profile name when executing a Python application
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">python-script</a> <a href="#">authorization</a> <a href="#">cron</a> <a href="#">cli-user</a> <i>reference</i>
Tree	<a href="#">cli-user</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

## event-handler

Synopsis	Enter the <b>event-handler</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">python-script</a> <a href="#">authorization</a> <a href="#">event-handler</a>
Tree	<a href="#">event-handler</a>
Introduced	21.10.R1
Platforms	All

## cli-user *reference*

Synopsis	User profile name when executing a Python application
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Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">python-script</a> <a href="#">authorization</a> <a href="#">event-handler</a> <a href="#">cli-user</a> <i>reference</i>
Tree	<a href="#">cli-user</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>
Introduced	21.10.R1
Platforms	All

## snmp

Synopsis	Enter the <b>snmp</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">snmp</a>
Tree	<a href="#">snmp</a>
Introduced	16.0.R1
Platforms	All

## **access** [[group](#)] *string* [context](#) *string* [security-model](#) *keyword* [security-level](#) *keyword*

Synopsis	Enter the <b>access</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">snmp</a> <a href="#">access</a> <i>string</i> <a href="#">context</a> <i>string</i> <a href="#">security-model</a> <i>keyword</i> <a href="#">security-level</a> <i>keyword</i>
Tree	<a href="#">access</a>
Introduced	16.0.R1
Platforms	All

## **[group]** *string*

Synopsis	Group name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">snmp</a> <a href="#">access</a> <i>string</i> <a href="#">context</a> <i>string</i> <a href="#">security-model</a> <i>keyword</i> <a href="#">security-level</a> <i>keyword</i>
Tree	<a href="#">access</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**context string**

Synopsis	String to match context name for access rights
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp access string context string security-model keyword security-level keyword</a>
Tree	<a href="#">access</a>
String Length	0 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**security-model keyword**

Synopsis	Security model
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp access string context string security-model keyword security-level keyword</a>
Tree	<a href="#">access</a>
Options	snmpv1, snmpv2c, usm
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**security-level keyword**

Synopsis	Minimum security level required to gain access rights
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp access string context string security-model keyword security-level keyword</a>
Tree	<a href="#">access</a>
Options	no-auth-no-privacy, auth-no-privacy, privacy
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**notify string**

Synopsis	SNMP view for notification access
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Context	<b>configure</b> <b>system</b> <b>security snmp access</b> <i>string</i> <b>context</b> <i>string</i> <b>security-model</b> <b>keyword</b> <b>security-level</b> <b>keyword</b> <b>notify</b> <i>string</i>
Tree	<b>notify</b>
Description	This command specifies the SNMP view used to control which MIB objects can be accessed for notifications.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **prefix-match** *keyword*

Synopsis	Match type for the context
Context	<b>configure</b> <b>system</b> <b>security snmp access</b> <i>string</i> <b>context</b> <i>string</i> <b>security-model</b> <b>keyword</b> <b>security-level</b> <b>keyword</b> <b>prefix-match</b> <b>keyword</b>
Tree	<b>prefix-match</b>
Options	exact, prefix
Introduced	16.0.R1
Platforms	All

### **read** *string*

Synopsis	SNMP view for read access
Context	<b>configure</b> <b>system</b> <b>security snmp access</b> <i>string</i> <b>context</b> <i>string</i> <b>security-model</b> <b>keyword</b> <b>security-level</b> <b>keyword</b> <b>read</b> <i>string</i>
Tree	<b>read</b>
Description	This command specifies the SNMP view used to control which MIB objects can be accessed using a read (get) operation.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

### **write** *string*

Synopsis	SNMP view for write access
Context	<b>configure</b> <b>system</b> <b>security snmp access</b> <i>string</i> <b>context</b> <i>string</i> <b>security-model</b> <b>keyword</b> <b>security-level</b> <b>keyword</b> <b>write</b> <i>string</i>
Tree	<b>write</b>

Description	This command specifies the SNMP view used to control which MIB objects can be accessed using a write (set) operation.
String Length	1 to 32
Introduced	16.0.R1
Platforms	All

## attempts

Synopsis	Enter the <b>attempts</b> context
Context	<b>configure system security snmp attempts</b>
Tree	<a href="#">attempts</a>
Description	Commands in this context configure settings for SNMPv2 or SNMPv3 connection attempts. The command settings are used to counter Denial of Service (DOS) attacks through SNMP.  If the threshold is exceeded, the host is locked out for the lockout time period.
Introduced	16.0.R1
Platforms	All

## count *number*

Synopsis	Unsuccessful attempts allowed within time period
Context	<b>configure system security snmp attempts count <i>number</i></b>
Tree	<a href="#">count</a>
Range	1 to 64
Default	20
Introduced	16.0.R1
Platforms	All

## lockout *number*

Synopsis	Lockout period during which the host cannot log in
Context	<b>configure system security snmp attempts lockout <i>number</i></b>
Tree	<a href="#">lockout</a>
Description	This command configures the time period during which the host cannot log in. When the host exceeds the attempted counts setting, the host is locked out from further login attempts for the configured time period.

Range	0 to 1440
Units	minutes
Default	10
Introduced	16.0.R1
Platforms	All

**time** *number*

Synopsis	Time before host lockout after unsuccessful attempts
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp attempts</a> <i>time number</i>
Tree	<a href="#">time</a>
Range	0 to 60
Units	minutes
Default	5
Introduced	16.0.R1
Platforms	All

**community** [[community-string](#)] *string*

Synopsis	Enter the <b>community</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp community</a> <i>string</i>
Tree	<a href="#">community</a>
Introduced	16.0.R1
Platforms	All

**[community-string]** *string*

Synopsis	SNMPv1 or SNMPv2c community string
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp community</a> <i>string</i>
Tree	<a href="#">community</a>
String Length	1 to 114
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**access-permissions** *keyword*

Synopsis	Access permissions for objects in the MIB
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp community</a> <i>string</i> <b>access-permissions</b> <i>keyword</i>
Tree	<a href="#">access-permissions</a>
Options	r, rw, rwa, mgmt, vpls-mgmt
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**source-access-list** *reference*

Synopsis	Source access list to validate received SNMP requests
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp community</a> <i>string</i> <b>source-access-list</b> <i>reference</i>
Tree	<a href="#">source-access-list</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security snmp source-access-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

**version** *keyword*

Synopsis	SNMP version
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp community</a> <i>string</i> <b>version</b> <i>keyword</i>
Tree	<a href="#">version</a>
Options	v1, v2c, both
Default	both
Introduced	16.0.R1
Platforms	All

**source-access-list** [[list-name](#)] *string*

Synopsis	Enter the <b>source-access-list</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp source-access-list</a> <i>string</i>
Tree	<a href="#">source-access-list</a>
Description	Commands in this context configure SNMP source access lists.

SNMP source access lists are used to validate the source IP address of received SNMP requests. Multiple community (VPRN or Base router) and USM community instances can reference the same SNMP source access list.

Max. Instances	16
Introduced	16.0.R1
Platforms	All

### **[list-name]** *string*

Synopsis	Source access list name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp source-access-list</a> <i>string</i>
Tree	<a href="#">source-access-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **source-host** [[host-name](#)] *string*

Synopsis	Enter the <b>source-host</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp source-access-list</a> <i>string</i> <a href="#">source-host</a> <i>string</i>
Tree	<a href="#">source-host</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

### **[host-name]** *string*

Synopsis	Source host entry name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp source-access-list</a> <i>string</i> <a href="#">source-host</a> <i>string</i>
Tree	<a href="#">source-host</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1

Platforms All

### **address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis Source IP address entry used to validate SNMP requests

Context **configure** [system](#) [security snmp source-access-list](#) *string* [source-host](#) *string* [address](#) (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Tree [address](#)

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **usm-community** [[community-string](#)] *string*

Synopsis Enter the **usm-community** list instance

Context **configure** [system](#) [security snmp usm-community](#) *string*

Tree [usm-community](#)

Introduced 16.0.R1

Platforms All

### **[community-string]** *string*

Synopsis Community string associated with SNMPv3 access group

Context **configure** [system](#) [security snmp usm-community](#) *string*

Tree [usm-community](#)

String Length 1 to 114

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **group** *string*

Synopsis Group to manage access rights of the community string

Context **configure** [system](#) [security snmp usm-community](#) *string* [group](#) *string*

Tree [group](#)

String Length 1 to 32  
 Introduced 16.0.R1  
 Platforms All

### **source-access-list** *reference*

Synopsis Source access list to validate received SNMP requests  
 Context **configure** [system](#) [security snmp usm-community](#) *string* [source-access-list](#) *reference*  
 Tree [source-access-list](#)  
 Reference **configure** [system](#) [security snmp](#) [source-access-list](#) *string*  
 Introduced 16.0.R1  
 Platforms All

### **view** [[view-name](#)] *string* [subtree](#) *string*

Synopsis Enter the **view** list instance  
 Context **configure** [system](#) [security snmp](#) [view](#) *string* [subtree](#) *string*  
 Tree [view](#)  
 Introduced 16.0.R1  
 Platforms All

### **[view-name]** *string*

Synopsis View name  
 Context **configure** [system](#) [security snmp](#) [view](#) *string* [subtree](#) *string*  
 Tree [view](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **subtree** *string*

Synopsis Object Identifier (OID) value  
 Context **configure** [system](#) [security snmp](#) [view](#) *string* [subtree](#) *string*

Tree	<a href="#">view</a>
String Length	1 to 256
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **mask string**

Synopsis	Mask value as binary value, or hex value
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp view</a> <a href="#">string subtree</a> <a href="#">string mask</a> <a href="#">string</a>
Tree	<a href="#">mask</a>
String Length	1 to 16
Introduced	16.0.R1
Platforms	All

### **type keyword**

Synopsis	Type of SNMP security view mask
Context	<b>configure</b> <a href="#">system</a> <a href="#">security snmp view</a> <a href="#">string subtree</a> <a href="#">string type</a> <a href="#">keyword</a>
Tree	<a href="#">type</a>
Options	included, excluded
Introduced	16.0.R1
Platforms	All

### **source-address**

Synopsis	Enter the <b>source-address</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security source-address</a>
Tree	<a href="#">source-address</a>
Description	<p>Commands in this context configure the IP source address that is used in all unsolicited packets sent by the specified applications.</p> <p>This configuration applies to packets transmitted in-band (for example, a network port on an IOM) and does not apply to packets transmitted out-of-band on the management interface on the CPM Ethernet port. Packets transmitted using the CPM Ethernet port use the address of the CPM Ethernet port as the IP source address in the packet.</p> <p>When a source address is specified for the PTP application, the port-based 1588 hardware timestamping assist function is applied to PTP packets matching the IPv4</p>



address of the router interface used to ingress the SR/ESS or IP address specified in this command. If the IP address is removed, the port-based 1588 hardware timestamping assist function is only applied to PTP packets matching the IPv4 address of the router interface.

Introduced 16.0.R1  
Platforms All

### **ipv4** [[application](#)] *keyword*

Synopsis Enter the **ipv4** list instance  
Context **configure system security source-address ipv4 keyword**  
Tree [ipv4](#)  
Introduced 16.0.R1  
Platforms All

### **[application]** *keyword*

Synopsis Application that uses the source IP address  
Context **configure system security source-address ipv4 keyword**  
Tree [ipv4](#)  
Options telnet, ftp, ssh, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, sntp, ntp, cflowd, ptp, mcreporter, sflow, icmp-error, ldap  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **address** *string*



#### **WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Source IPv4 address  
Context **configure system security source-address ipv4 keyword address string**  
Tree [address](#)  
Notes The following elements are part of a mandatory choice: **address** or **interface-name**.  
Introduced 16.0.R1

Platforms All

### interface-name *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis IP interface name

Context **configure** system security source-address ipv4 *keyword* interface-name *string*

Tree [interface-name](#)

String Length 1 to 32

Notes The following elements are part of a mandatory choice: **address** or **interface-name**.

Introduced 16.0.R1

Platforms All

### ipv6 [[application](#)] *keyword*

Synopsis Enter the **ipv6** list instance

Context **configure** system security source-address ipv6 *keyword*

Tree [ipv6](#)

Introduced 16.0.R1

Platforms All

### [[application](#)] *keyword*

Synopsis Application which uses the source IPv6 address

Context **configure** system security source-address ipv6 *keyword*

Tree [ipv6](#)

Options telnet, ftp, radius, tacplus, snmptrap, syslog, ping, traceroute, dns, cflowd, ntp, sflow, icmp6-error, ldap, ssh, ptp

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

## address string

**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis	Source IPv6 address
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">source-address</a> <a href="#">ipv6</a> <i>keyword</i> <a href="#">address</a> <i>string</i>
Tree	<a href="#">address</a>
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## ssh

Synopsis	Enter the <b>ssh</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a>
Tree	<a href="#">ssh</a>
Introduced	16.0.R1
Platforms	All

## authentication-method

Synopsis	Enter the <b>authentication-method</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">authentication-method</a>
Tree	<a href="#">authentication-method</a>
Introduced	23.7.R1
Platforms	All

## client

Synopsis	Enter the <b>client</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">authentication-method</a> <a href="#">client</a>
Tree	<a href="#">client</a>
Introduced	23.10.R3
Platforms	All

**public-key-only** *boolean*

Synopsis	Accept only public-key authentication for SSH session
Context	<b>configure</b> <a href="#">system security ssh authentication-method client public-key-only</a> <i>boolean</i>
Tree	<a href="#">public-key-only</a>
Description	<p>When configured to <b>true</b>, the system accepts only public key client authentication for the SSH server.</p> <p>This command defines the authentication method at the system level.</p> <p>When configured to <b>false</b>, the system accepts public key or password client authentication. If <b>interactive-authentication</b> is configured to <b>true</b> in the <b>configure system security aaa remote-servers radius</b> or <b>configure system security aaa remote-servers tacplus</b> context, the system also accepts interactive keyboard authentication.</p>
Default	false
Introduced	23.10.R3
Platforms	All

**server**

Synopsis	Enter the <b>server</b> context
Context	<b>configure</b> <a href="#">system security ssh authentication-method server</a>
Tree	<a href="#">server</a>
Introduced	23.7.R1
Platforms	All

**public-key-only** *boolean*

Synopsis	Accept only public-key authentication for SSH session
Context	<b>configure</b> <a href="#">system security ssh authentication-method server public-key-only</a> <i>boolean</i>
Tree	<a href="#">public-key-only</a>
Description	<p>When configured to <b>true</b>, the system accepts only public key client authentication for the SSH server.</p> <p>This command defines the authentication method at the system level.</p> <p>When configured to <b>false</b>, the system accepts public key or password client authentication. If <b>interactive-authentication</b> is configured to <b>true</b> in the <b>configure system security aaa remote-servers radius</b> or <b>configure system security aaa remote-servers tacplus</b> context, the system also accepts interactive keyboard authentication.</p>

Default	false
Introduced	23.7.R1
Platforms	All

## client-cipher-list-v2

Synopsis	Enter the <b>client-cipher-list-v2</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-cipher-list-v2</a>
Tree	<a href="#">client-cipher-list-v2</a>
Introduced	16.0.R1
Platforms	All

## cipher [[index](#)] *number*

Synopsis	Enter the <b>cipher</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-cipher-list-v2</a> <a href="#">cipher</a> <i>number</i>
Tree	<a href="#">cipher</a>
Description	Commands in this context configure a client-cipher instance. Client-ciphers are used when the SR OS is acting as an SSH client.
Introduced	16.0.R1
Platforms	All

## [[index](#)] *number*

Synopsis	Cipher index in the list
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-cipher-list-v2</a> <a href="#">cipher</a> <i>number</i>
Tree	<a href="#">cipher</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## name *keyword*

Synopsis	Algorithm for performing encryption or decryption
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Context	<b>configure system security ssh client-cipher-list-v2 cipher</b> <i>number name keyword</i>
Tree	<a href="#">name</a>
Options	3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

## client-kex-list-v2

Synopsis	Enter the <b>client-kex-list-v2</b> context
Context	<b>configure system security ssh client-kex-list-v2</b>
Tree	<a href="#">client-kex-list-v2</a>
Introduced	19.10.R3
Platforms	All

## kex [[index](#)] *number*

Synopsis	Enter the <b>kex</b> list instance
Context	<b>configure system security ssh client-kex-list-v2 kex</b> <i>number</i>
Tree	<a href="#">kex</a>
Description	<p>Commands in this context configure SSH Key Exchange (KEX) algorithms for SR OS as a client.</p> <p>If a list is configured, SSH uses the list with the first-listed algorithm having the highest priority.</p> <p>By default, the client list is empty. The default list contains the following:</p> <ul style="list-style-type: none"> <li>• diffie-hellman-group16-sha512</li> <li>• diffie-hellman-group14-sha256</li> <li>• diffie-hellman-group14-sha1</li> <li>• diffie-hellman-group1-sha1</li> </ul>
Introduced	19.10.R3
Platforms	All

## [[index](#)] *number*

Synopsis	SSHv2 KEX algorithm index
Context	<b>configure system security ssh client-kex-list-v2 kex</b> <i>number</i>

Tree	<a href="#">kex</a>
Description	This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.
Range	1 to 255
Notes	This element is part of a list key.
Introduced	19.10.R3
Platforms	All

### **name** *keyword*

Synopsis	KEX algorithm for computing a shared secret key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-kex-list-v2</a> <a href="#">kex</a> <i>number</i> <a href="#">name</a> <i>keyword</i>
Tree	<a href="#">name</a>
Options	diffie-hellman-group1-sha1, diffie-hellman-group14-sha1, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256, diffie-hellman-group16-sha512
Notes	This element is mandatory.
Introduced	19.10.R3
Platforms	All

### **client-mac-list-v2**

Synopsis	Enter the <b>client-mac-list-v2</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-mac-list-v2</a>
Tree	<a href="#">client-mac-list-v2</a>
Introduced	16.0.R1
Platforms	All

### **mac** [[index](#)] *number*

Synopsis	Enter the <b>mac</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">client-mac-list-v2</a> <a href="#">mac</a> <i>number</i>
Tree	<a href="#">mac</a>
Description	Commands in this context configure SSH MAC algorithms for SR OS as a client.
Introduced	16.0.R1

Platforms All

### **[index] number**

Synopsis MAC algorithm index  
Context **configure** [system security ssh client-mac-list-v2 mac number](#)  
Tree [mac](#)  
Range 1 to 255  
Notes This element is part of a list key.  
Introduced 16.0.R1  
Platforms All

### **name keyword**

Synopsis Algorithm for calculating message authentication code  
Context **configure** [system security ssh client-mac-list-v2 mac number name keyword](#)  
Tree [name](#)  
Options hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96  
Notes This element is mandatory.  
Introduced 16.0.R1  
Platforms All

### **key-re-exchange**

Synopsis Enter the **key-re-exchange** context  
Context **configure** [system security ssh key-re-exchange](#)  
Tree [key-re-exchange](#)  
Introduced 16.0.R1  
Platforms All

### **client**

Synopsis Enter the **client** context  
Context **configure** [system security ssh key-re-exchange client](#)  
Tree [client](#)



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Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the key re-exchange
Context	<b>configure</b> <a href="#">system security ssh key-re-exchange client admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

**mbytes** (*number* | *keyword*)

Synopsis	Maximum bytes transmitted before key re-exchange begins
Context	<b>configure</b> <a href="#">system security ssh key-re-exchange client mbytes</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">mbytes</a>
Range	1 to 64000
Units	megabytes
Options	infinite
Default	1024
Introduced	16.0.R1
Platforms	All

**minutes** (*number* | *keyword*)

Synopsis	Maximum time before key re-exchange is initiated
Context	<b>configure</b> <a href="#">system security ssh key-re-exchange client minutes</a> ( <i>number</i>   <i>keyword</i> )
Tree	<a href="#">minutes</a>
Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	16.0.R1

Platforms All

## server

Synopsis Enter the **server** context  
 Context **configure** [system security ssh key-re-exchange server](#)  
 Tree [server](#)  
 Introduced 16.0.R1  
 Platforms All

## admin-state *keyword*

Synopsis Administrative state of the key re-exchange  
 Context **configure** [system security ssh key-re-exchange server admin-state keyword](#)  
 Tree [admin-state](#)  
 Options enable, disable  
 Default enable  
 Introduced 16.0.R1  
 Platforms All

## mbytes (*number* | *keyword*)

Synopsis Maximum bytes transmitted before key re-exchange begins  
 Context **configure** [system security ssh key-re-exchange server mbytes \(\*number\* | \*keyword\*\)](#)  
 Tree [mbytes](#)  
 Range 1 to 64000  
 Units megabytes  
 Options infinite  
 Default 1024  
 Introduced 16.0.R1  
 Platforms All

## minutes (*number* | *keyword*)

Synopsis Maximum time before key re-exchange is initiated

Context	<b>configure system security ssh key-re-exchange server minutes</b> ( <i>number   keyword</i> )
Tree	<a href="#">minutes</a>
Range	1 to 1440
Units	minutes
Options	infinite
Default	60
Introduced	16.0.R1
Platforms	All

### **permit-empty-passwords** *boolean*

Synopsis	Permit users with empty password strings to log in
Context	<b>configure system security ssh permit-empty-passwords</b> <i>boolean</i>
Tree	<a href="#">permit-empty-passwords</a>
Default	true
Introduced	22.10.R1
Platforms	All

### **preserve-key** *boolean*

Synopsis	Preserve keys and restore on system or server restart
Context	<b>configure system security ssh preserve-key</b> <i>boolean</i>
Tree	<a href="#">preserve-key</a>
Description	When configured to <b>true</b> , private, public, and host keys are saved by the server. The keys are restored following a system reboot or a restart of an SSH server.  When configured to <b>false</b> , the keys are held in memory by an SSH server but are not restored following a system reboot.
Default	false
Introduced	16.0.R1
Platforms	All

### **server-admin-state** *keyword*

Synopsis	Administrative state of the SSH server
Context	<b>configure system security ssh server-admin-state</b> <i>keyword</i>
Tree	<a href="#">server-admin-state</a>

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Options	enable, disable
Default	enable
Introduced	16.0.R1
Platforms	All

## **server-cipher-list-v2**

Synopsis	Enter the <b>server-cipher-list-v2</b> context
Context	<b>configure</b> <a href="#">system security ssh server-cipher-list-v2</a>
Tree	<a href="#">server-cipher-list-v2</a>
Introduced	16.0.R1
Platforms	All

## **cipher** [[index](#)] *number*

Synopsis	Enter the <b>cipher</b> list instance
Context	<b>configure</b> <a href="#">system security ssh server-cipher-list-v2 cipher</a> <i>number</i>
Tree	<a href="#">cipher</a>
Description	Commands in this context configure a server-cipher instance. Server-ciphers are used when SR OS is acting as an SSH server.
Introduced	16.0.R1
Platforms	All

## **[index]** *number*

Synopsis	Cipher index in the list
Context	<b>configure</b> <a href="#">system security ssh server-cipher-list-v2 cipher</a> <i>number</i>
Tree	<a href="#">cipher</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**name** *keyword*

Synopsis	Algorithm for performing encryption or decryption
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-cipher-list-v2</a> <a href="#">cipher</a> <i>number</i> <b>name</b> <i>keyword</i>
Tree	<a href="#">name</a>
Options	3des-cbc, aes128-cbc, aes192-cbc, aes256-cbc, aes128-ctr, aes192-ctr, aes256-ctr
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**server-kex-list-v2**

Synopsis	Enter the <b>server-kex-list-v2</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-kex-list-v2</a>
Tree	<a href="#">server-kex-list-v2</a>
Introduced	19.10.R3
Platforms	All

**kex** [[index](#)] *number*

Synopsis	Enter the <b>kex</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-kex-list-v2</a> <a href="#">kex</a> <i>number</i>
Tree	<a href="#">kex</a>
Introduced	19.10.R3
Platforms	All

**[index]** *number*

Synopsis	SSHv2 KEX algorithm index
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">ssh</a> <a href="#">server-kex-list-v2</a> <a href="#">kex</a> <i>number</i>
Tree	<a href="#">kex</a>
Description	This command configures the index of the KEX algorithm in the list. The lowest index in the list is negotiated first on the SSH negotiation list, while the highest index is at the bottom of the SSH negotiation list.
Range	1 to 255
Notes	This element is part of a list key.

Introduced 19.10.R3  
Platforms All

### **name** *keyword*

Synopsis KEX algorithm for computing a shared secret key  
Context **configure** [system security ssh server-kex-list-v2](#) *kex number name keyword*  
Tree [name](#)  
Options diffie-hellman-group1-sha1, diffie-hellman-group14-sha1,  
diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha256,  
diffie-hellman-group16-sha512  
Notes This element is mandatory.  
Introduced 19.10.R3  
Platforms All

### **server-mac-list-v2**

Synopsis Enter the **server-mac-list-v2** context  
Context **configure** [system security ssh server-mac-list-v2](#)  
Tree [server-mac-list-v2](#)  
Introduced 16.0.R1  
Platforms All

### **mac** [[index](#)] *number*

Synopsis Enter the **mac** list instance  
Context **configure** [system security ssh server-mac-list-v2 mac](#) *number*  
Tree [mac](#)  
Introduced 16.0.R1  
Platforms All

### [[index](#)] *number*

Synopsis MAC algorithm index  
Context **configure** [system security ssh server-mac-list-v2 mac](#) *number*  
Tree [mac](#)

Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **name** *keyword*

Synopsis	Algorithm for calculating message authentication code
Context	<b>configure system security ssh server-mac-list-v2 mac number name keyword</b>
Tree	<a href="#">name</a>
Options	hmac-sha2-512, hmac-sha2-256, hmac-sha1, hmac-sha1-96, hmac-md5, hmac-md5-96
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **system-passwords**

Synopsis	Enter the <b>system-passwords</b> context
Context	<b>configure system security system-passwords</b>
Tree	<a href="#">system-passwords</a>
Description	This command enters the context to configure system passwords.
Introduced	16.0.R1
Platforms	All

### **admin-password** *string*

Synopsis	Context to configure system passwords
Context	<b>configure system security system-passwords admin-password string</b>
Tree	<a href="#">admin-password</a>
Description	<p>This command allows a user with administrative permissions to configure a password that enables a user to become an administrator.</p> <p>This password is valid only for one session. When enabled, no authorization to TACACS + or RADIUS is performed and the user is locally regarded as an administrative user.</p> <p>If the <b>admin-password</b> is configured in the <b>configure system security system-passwords admin-password</b> context, any user can enter the special mode by entering the <b>enable</b> command.</p>

**enable** is in the default profile. By default, all users are given access to this command.

After the **enable** command is entered, the user is prompted for a password. If the password matches, user is given unrestricted access to all commands.

The minimum length of the password is determined by the **minimum-length** command. The complexity requirements for the password are determined by the **complexity** command.

**Note:** This command applies to a local user, in addition to users on RADIUS, TACACS, and LDAP.

String Length	3 to 136
Introduced	16.0.R1
Platforms	All

## tech-support

Synopsis	Enter the <b>tech-support</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tech-support</a>
Tree	<a href="#">tech-support</a>
Introduced	16.0.R1
Platforms	All

## ts-location (*ts-sat-url* | *cflash-url* | *string*)

Synopsis	Default file path for generated tech-support files
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tech-support</a> <a href="#">ts-location</a> ( <i>ts-sat-url</i>   <i>cflash-url</i>   <i>string</i> )
Tree	<a href="#">ts-location</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	All

## telnet-server *boolean*

Synopsis	Enable Telnet servers running on the system
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">telnet-server</a> <i>boolean</i>
Tree	<a href="#">telnet-server</a>
Default	false
Introduced	16.0.R1



Platforms All

### **telnet6-server** *boolean*

Synopsis Enable Telnet IPv6 servers running on the system  
 Context **configure** [system security telnet6-server](#) *boolean*  
 Tree [telnet6-server](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **tls**

Synopsis Enter the **tls** context  
 Context **configure** [system security tls](#)  
 Tree [tls](#)  
 Introduced 16.0.R1  
 Platforms All

### **cert-profile** [[cert-profile-name](#)] *string*

Synopsis Enter the **cert-profile** list instance  
 Context **configure** [system security tls cert-profile](#) *string*  
 Tree [cert-profile](#)  
 Max. Instances 16  
 Introduced 16.0.R1  
 Platforms All

### **[cert-profile-name]** *string*

Synopsis TLS certificate profile name  
 Context **configure** [system security tls cert-profile](#) *string*  
 Tree [cert-profile](#)  
 String Length 1 to 32

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Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the certificate profile
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **entry** [[entry-id](#)] *number*

Synopsis	Enter the <b>entry</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### [[entry-id](#)] *number*

Synopsis	Certificate profile ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <b>entry</b> <i>number</i>
Tree	<a href="#">entry</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**certificate-file** *string*

Synopsis	Certificate file name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>certificate-file</b> <i>string</i>
Tree	<a href="#">certificate-file</a>
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

**key-file** *string*

Synopsis	Key file name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>key-file</b> <i>string</i>
Tree	<a href="#">key-file</a>
String Length	1 to 95
Introduced	16.0.R1
Platforms	All

**send-chain**

Synopsis	Enter the <b>send-chain</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>send-chain</b>
Tree	<a href="#">send-chain</a>
Introduced	16.0.R1
Platforms	All

**ca-profile** [[ca-profile-name](#)] *reference*

Synopsis	Add a list entry for <b>ca-profile</b>
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <b>send-chain</b> <b>ca-profile</b> <i>reference</i>
Tree	<a href="#">ca-profile</a>
Max. Instances	7
Introduced	16.0.R1
Platforms	All

**[ca-profile-name]** *reference*

Synopsis	CA profile name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i> <a href="#">entry</a> <i>number</i> <a href="#">send-chain</a> <a href="#">ca-profile</a> <i>reference</i>
Tree	<a href="#">ca-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**client-cipher-list** [[client-cipher-list-name](#)] *string*

Synopsis	Enter the <b>client-cipher-list</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-cipher-list</a> <i>string</i>
Tree	<a href="#">client-cipher-list</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[client-cipher-list-name]** *string*

Synopsis	Client cipher list name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-cipher-list</a> <i>string</i>
Tree	<a href="#">client-cipher-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**tls12-cipher** [[index](#)] *number*

Synopsis	Enter the <b>tls12-cipher</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-cipher-list</a> <i>string</i> <a href="#">tls12-cipher</a> <i>number</i>

Tree	<a href="#">tls12-cipher</a>
Introduced	22.2.R1
Platforms	All

**[index] number**

Synopsis	Index of the cipher
Context	<b>configure</b> <a href="#">system security tls client-cipher-list</a> <i>string</i> <a href="#">tls12-cipher</a> <i>number</i>
Tree	<a href="#">tls12-cipher</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.2.R1
Platforms	All

**name keyword**

Synopsis	Cipher suite code
Context	<b>configure</b> <a href="#">system security tls client-cipher-list</a> <i>string</i> <a href="#">tls12-cipher</a> <i>number</i> <b>name</b> <i>keyword</i>
Tree	<a href="#">name</a>
Options	tls-rsa-with3des-edc-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384
Notes	This element is mandatory.
Introduced	22.2.R1
Platforms	All

**tls13-cipher [index] number**

Synopsis	Enter the <b>tls13-cipher</b> list instance
Context	<b>configure</b> <a href="#">system security tls client-cipher-list</a> <i>string</i> <a href="#">tls13-cipher</a> <i>number</i>
Tree	<a href="#">tls13-cipher</a>
Description	Commands in this context configure the TLS 1.3-supported ciphers used by the client.
Introduced	22.7.R1
Platforms	All

**[index] number**

Synopsis	Index number of the TLS 1.3 cipher
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-cipher-list</a> <i>string</i> <a href="#">tls13-cipher</a> <i>number</i>
Tree	<a href="#">tls13-cipher</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**name keyword**

Synopsis	Name of the TLS 1.3 cipher suite code
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-cipher-list</a> <i>string</i> <a href="#">tls13-cipher</a> <i>number</i> <a href="#">name</a> <i>keyword</i>
Tree	<a href="#">name</a>
Options	<a href="#">tls-aes256-gcm-sha384</a> , <a href="#">tls-aes128-gcm-sha256</a> , <a href="#">tls-chacha20-poly1305-sha256</a> , <a href="#">tls-aes128-ccm8-sha256</a> , <a href="#">tls-aes128-ccm-sha256</a>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

**client-group-list [client-group-list-name] string**

Synopsis	Enter the <b>client-group-list</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-group-list</a> <i>string</i>
Tree	<a href="#">client-group-list</a>
Description	Commands in this context configure the list of TLS 1.3-supported group suite codes that the client sends in a client Hello message.
Max. Instances	16
Introduced	22.7.R1
Platforms	All

**[client-group-list-name] string**

Synopsis	Name of the TLS client group list
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Context	<b>configure system security tls client-group-list</b> <i>string</i>
Tree	<a href="#">client-group-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

### **tls13-group** [[index](#)] *number*

Synopsis	Enter the <b>tls13-group</b> list instance
Context	<b>configure system security tls client-group-list</b> <i>string</i> <a href="#">tls13-group</a> <i>number</i>
Tree	<a href="#">tls13-group</a>
Description	Commands in this context configure the TLS 1.3-supported group suite codes sent by the client in its Hello messages. SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups.
Introduced	22.7.R1
Platforms	All

### **[index]** *number*

Synopsis	Index number of the TLS 1.3 group
Context	<b>configure system security tls client-group-list</b> <i>string</i> <a href="#">tls13-group</a> <i>number</i>
Tree	<a href="#">tls13-group</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

### **name** *keyword*

Synopsis	Name of the TLS 1.3 group suite code
Context	<b>configure system security tls client-group-list</b> <i>string</i> <a href="#">tls13-group</a> <i>number</i> <b>name</b> <i>keyword</i>
Tree	<a href="#">name</a>
Options	tls-ecdhe-256, tls-ecdhe-384, tls-ecdhe-521, tls-x25519, tls-x448
Notes	This element is mandatory.

Introduced 22.7.R1  
 Platforms All

### **client-signature-list** [[client-signature-list-name](#)] *string*

Synopsis Enter the **client-signature-list** list instance  
 Context **configure** [system security tls client-signature-list](#) *string*  
 Tree [client-signature-list](#)  
 Description Commands in this context configure the list of TLS 1.3-supported signature suite codes that the client sends in a client Hello message.  
 Max. Instances 16  
 Introduced 22.7.R1  
 Platforms All

### **[client-signature-list-name]** *string*

Synopsis Name of the TLS 1.3 client signature list  
 Context **configure** [system security tls client-signature-list](#) *string*  
 Tree [client-signature-list](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 22.7.R1  
 Platforms All

### **tls13-signature** [[index](#)] *number*

Synopsis Enter the **tls13-signature** list instance  
 Context **configure** [system security tls client-signature-list](#) *string* [tls13-signature](#) *number*  
 Tree [tls13-signature](#)  
 Description Commands in this context configure the TLS 1.3-supported signature suite codes sent by the client in its Hello messages.  
 Introduced 22.7.R1  
 Platforms All



**[index] number**

Synopsis	Index number of the TLS 1.3 signature
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-signature-list</a> <i>string</i> <a href="#">tls13-signature</a> <i>number</i>
Tree	<a href="#">tls13-signature</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**name keyword**

Synopsis	Name of the TLS 1.3 signature suite code
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-signature-list</a> <i>string</i> <a href="#">tls13-signature</a> <i>number</i> <i>name</i> <i>keyword</i>
Tree	<a href="#">name</a>
Options	<a href="#">tls-rsa-pkcs1-sha256</a> , <a href="#">tls-ecdsa-secp256r1-sha256</a> , <a href="#">tls-rsa-pkcs1-sha384</a> , <a href="#">tls-ecdsa-secp384r1-sha384</a> , <a href="#">tls-rsa-pkcs1-sha512</a> , <a href="#">tls-ecdsa-secp521r1-sha512</a> , <a href="#">tls-rsa-pss-rsae-sha256</a> , <a href="#">tls-rsa-pss-rsae-sha384</a> , <a href="#">tls-rsa-pss-rsae-sha512</a> , <a href="#">tls-ed25519</a> , <a href="#">tls-ed448</a> , <a href="#">tls-rsa-pss-pss-sha256</a> , <a href="#">tls-rsa-pss-pss-sha384</a> , <a href="#">tls-rsa-pss-pss-sha512</a>
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

**client-tls-profile [client-profile-name] string**

Synopsis	Enter the <b>client-tls-profile</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i>
Tree	<a href="#">client-tls-profile</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[client-profile-name] string**

Synopsis	Client TLS profile name
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Context	<b>configure system security tls client-tls-profile</b> <i>string</i>
Tree	<a href="#">client-tls-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of the client TLS profile
Context	<b>configure system security tls client-tls-profile</b> <i>string admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **cert-profile** *reference*

Synopsis	Certificate profile ID
Context	<b>configure system security tls client-tls-profile</b> <i>string cert-profile reference</i>
Tree	<a href="#">cert-profile</a>
Reference	<b>configure system security tls cert-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **cipher-list** *reference*

Synopsis	Cipher list for negotiation in the client Hello message
Context	<b>configure system security tls client-tls-profile</b> <i>string cipher-list reference</i>
Tree	<a href="#">cipher-list</a>
Reference	<b>configure system security tls client-cipher-list</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **group-list** *reference*

Synopsis	Name of the list of supported group suite codes
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <a href="#">group-list</a> <i>reference</i>
Tree	<a href="#">group-list</a>
Description	This command assigns an existing TLS 1.3 group list to the TLS client profile.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-group-list</a> <i>string</i>
Introduced	22.7.R1
Platforms	All

### **protocol-version** *keyword*

Synopsis	TLS protocol version used by the TLS client profile
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <a href="#">protocol-version</a> <i>keyword</i>
Tree	<a href="#">protocol-version</a>
Description	This command configures the TLS version to be negotiated between the client and the server.  The client adds the specified version as a supported version in its Hello message to the server.
Options	<a href="#">tls-version-all</a> , <a href="#">tls-version-12</a> , <a href="#">tls-version-13</a>
Default	<a href="#">tls-version-12</a>
Introduced	22.7.R1
Platforms	All

### **signature-list** *reference*

Synopsis	Name of the list of supported signature suite codes
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <a href="#">signature-list</a> <i>reference</i>
Tree	<a href="#">signature-list</a>
Description	This command assigns an existing TLS 1.3 signature list to the TLS client profile.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-signature-list</a> <i>string</i>
Introduced	22.7.R1
Platforms	All

**status-verify**

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <b>status-verify</b>
Tree	<a href="#">status-verify</a>
Description	Commands in this context configure certificate revocation status verification options for the end-entity certificate in a TLS client.
Introduced	23.7.R1
Platforms	All

**default-result** *keyword*

Synopsis	Default result of certificate status verification
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <b>status-verify</b> <b>default-result</b> <i>keyword</i>
Tree	<a href="#">default-result</a>
Description	<p>This command configures the default result of the entity certificate verification in the TLS client profile. This command overwrites the EE certificate revocation verification for the TLS client profile.</p> <p>By default the router checks the certification revocation status, but if this command is set to <b>good</b>, the end-entity certificate revocation status is overwritten and a good revocation status is returned for the EE certificate.</p> <p>If this command is set to <b>revoked</b>, the router returns the actual revocation status of the end-entity certificate.</p>
Options	revoked, good
Default	revoked
Introduced	23.7.R1
Platforms	All

**trust-anchor-profile** *reference*

Synopsis	Trust anchor profile
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i> <b>trust-anchor-profile</b> <i>reference</i>
Tree	<a href="#">trust-anchor-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <b>trust-anchor-profile</b> <i>string</i>
Introduced	16.0.R1
Platforms	All

**server-cipher-list** [[server-cipher-list-name](#)] *string*

Synopsis	Enter the <b>server-cipher-list</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i>
Tree	<a href="#">server-cipher-list</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[server-cipher-list-name]** *string*

Synopsis	Server cipher list name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i>
Tree	<a href="#">server-cipher-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**tls12-cipher** [[index](#)] *number*

Synopsis	Enter the <b>tls12-cipher</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i> <a href="#">tls12-cipher</a> <i>number</i>
Tree	<a href="#">tls12-cipher</a>
Introduced	22.2.R1
Platforms	All

**[index]** *number*

Synopsis	Index of the cipher
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i> <a href="#">tls12-cipher</a> <i>number</i>
Tree	<a href="#">tls12-cipher</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.2.R1

Platforms All

### **name** *keyword*

Synopsis Cipher suite code

Context **configure system security tls server-cipher-list** *string* **tls12-cipher** *number* **name** *keyword*

Tree **name**

Options tls-rsa-with3des-edc-cbc-sha, tls-rsa-with-aes128-cbc-sha, tls-rsa-with-aes256-cbc-sha, tls-rsa-with-aes128-cbc-sha256, tls-rsa-with-aes256-cbc-sha256, tls-rsa-with-aes128-gcm-sha256, tls-rsa-with-aes256-gcm-sha384

Notes This element is mandatory.

Introduced 22.2.R1

Platforms All

### **tls13-cipher** [*index*] *number*

Synopsis Enter the **tls13-cipher** list instance

Context **configure system security tls server-cipher-list** *string* **tls13-cipher** *number*

Tree **tls13-cipher**

Description Commands in this context configure the TLS 1.3-supported ciphers used by the server.

Introduced 22.7.R1

Platforms All

### [*index*] *number*

Synopsis Index number of the TLS 1.3 cipher

Context **configure system security tls server-cipher-list** *string* **tls13-cipher** *number*

Tree **tls13-cipher**

Range 1 to 255

Notes This element is part of a list key.

Introduced 22.7.R1

Platforms All

**name** *keyword*

Synopsis	Name of the TLS 1.3 cipher suite code
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i> <a href="#">tls13-cipher</a> <i>number</i> <i>name</i> <i>keyword</i>
Tree	<a href="#">name</a>
Options	tls-aes256-gcm-sha384, tls-aes128-gcm-sha256, tls-chacha20-poly1305-sha256, tls-aes128-ccm8-sha256, tls-aes128-ccm-sha256
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

**server-group-list** [[server-group-list-name](#)] *string*

Synopsis	Enter the <b>server-group-list</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-group-list</a> <i>string</i>
Tree	<a href="#">server-group-list</a>
Description	Commands in this context configure the list of TLS 1.3-supported group suite codes that the server sends in a server Hello message.
Max. Instances	16
Introduced	22.7.R1
Platforms	All

**[server-group-list-name]** *string*

Synopsis	Name of the TLS server group list
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-group-list</a> <i>string</i>
Tree	<a href="#">server-group-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**tls13-group** [[index](#)] *number*

Synopsis	Enter the <b>tls13-group</b> list instance
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Context	<b>configure system security tls server-group-list</b> <i>string</i> <b>tls13-group</b> <i>number</i>
Tree	<b>tls13-group</b>
Description	Commands in this context configure the TLS 1.3-supported group suite codes sent by the server in its Hello messages. SR OS supports the use of Elliptic-Curve Diffie-Hellman Ephemeral (ECDHE) groups.
Introduced	22.7.R1
Platforms	All

**[index]** *number*

Synopsis	Index number of the TLS 1.3 group
Context	<b>configure system security tls server-group-list</b> <i>string</i> <b>tls13-group</b> <i>number</i>
Tree	<b>tls13-group</b>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**name** *keyword*

Synopsis	Name of the TLS 1.3 group suite code
Context	<b>configure system security tls server-group-list</b> <i>string</i> <b>tls13-group</b> <i>number</i> <b>name</b> <i>keyword</i>
Tree	<b>name</b>
Options	tls-ecdhe-256, tls-ecdhe-384, tls-ecdhe-521, tls-x25519, tls-x448
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

**server-signature-list** [**server-signature-list-name**] *string*

Synopsis	Enter the <b>server-signature-list</b> list instance
Context	<b>configure system security tls server-signature-list</b> <i>string</i>
Tree	<b>server-signature-list</b>
Description	Commands in this context configure the list of TLS 1.3-supported signature suite codes for the digital signature that the server sends in a server Hello message.



Max. Instances	16
Introduced	22.7.R1
Platforms	All

### **[server-signature-list-name]** *string*

Synopsis	Name of the TLS 1.3 server signature list
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-signature-list</a> <i>string</i>
Tree	<a href="#">server-signature-list</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

### **tls13-signature** [[index](#)] *number*

Synopsis	Enter the <b>tls13-signature</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-signature-list</a> <i>string</i> <a href="#">tls13-signature</a> <i>number</i>
Tree	<a href="#">tls13-signature</a>
Description	Commands in this context configure the TLS 1.3-supported signature suite codes sent by the server in its Hello messages.
Introduced	22.7.R1
Platforms	All

### **[index]** *number*

Synopsis	Index number of the TLS 1.3 signature
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-signature-list</a> <i>string</i> <a href="#">tls13-signature</a> <i>number</i>
Tree	<a href="#">tls13-signature</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	All

**name** *keyword*

Synopsis	Name of the TLS 1.3 signature suite code
Context	<b>configure</b> <b>system</b> <b>security</b> <b>tls</b> <b>server-signature-list</b> <i>string</i> <b>tls13-signature</b> <i>number</i> <b>name</b> <i>keyword</i>
Tree	<b>name</b>
Options	tls-rsa-pkcs1-sha256, tls-ecdsa-secp256r1-sha256, tls-rsa-pkcs1-sha384, tls-ecdsa-secp384r1-sha384, tls-rsa-pkcs1-sha512, tls-ecdsa-secp521r1-sha512, tls-rsa-pss-rsae-sha256, tls-rsa-pss-rsae-sha384, tls-rsa-pss-rsae-sha512, tls-ed25519, tls-ed448, tls-rsa-pss-pss-sha256, tls-rsa-pss-pss-sha384, tls-rsa-pss-pss-sha512
Notes	This element is mandatory.
Introduced	22.7.R1
Platforms	All

**server-tls-profile** [**server-profile-name**] *string*

Synopsis	Enter the <b>server-tls-profile</b> list instance
Context	<b>configure</b> <b>system</b> <b>security</b> <b>tls</b> <b>server-tls-profile</b> <i>string</i>
Tree	<b>server-tls-profile</b>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

**[server-profile-name]** *string*

Synopsis	TLS server profile name
Context	<b>configure</b> <b>system</b> <b>security</b> <b>tls</b> <b>server-tls-profile</b> <i>string</i>
Tree	<b>server-tls-profile</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of the server TLS profile
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Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

### **authenticate-client**

Synopsis	Enter the <b>authenticate-client</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">authenticate-client</a>
Tree	<a href="#">authenticate-client</a>
Introduced	16.0.R1
Platforms	All

### **common-name-list** *reference*

Synopsis	Common name list for client certificate authentication
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">authenticate-client</a> <a href="#">common-name-list</a> <i>reference</i>
Tree	<a href="#">common-name-list</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">common-name-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **trust-anchor-profile** *reference*

Synopsis	Trust anchor profile for client authentication
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">authenticate-client</a> <a href="#">trust-anchor-profile</a> <i>reference</i>
Tree	<a href="#">trust-anchor-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">trust-anchor-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **cert-profile** *reference*

Synopsis	Certificate profile ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">cert-profile</a> <i>reference</i>
Tree	<a href="#">cert-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">cert-profile</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **cipher-list** *reference*

Synopsis	Cipher list used by the TLS server profile
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">cipher-list</a> <i>reference</i>
Tree	<a href="#">cipher-list</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-cipher-list</a> <i>string</i>
Introduced	16.0.R1
Platforms	All

### **group-list** *reference*

Synopsis	Name of the list of supported group suite codes
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">group-list</a> <i>reference</i>
Tree	<a href="#">group-list</a>
Description	This command assigns an existing TLS 1.3 group list to the TLS server profile.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-group-list</a> <i>string</i>
Introduced	22.7.R1
Platforms	All

### **protocol-version** *keyword*

Synopsis	TLS protocol version used by the TLS server profile
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">protocol-version</a> <i>keyword</i>
Tree	<a href="#">protocol-version</a>
Description	This command configures the TLS version to be negotiated between the server and the client.

The server adds the specified version as a supported version in its Hello message to the client.

Options	tls-version-all, tls-version-12, tls-version-13
Default	tls-version-12
Introduced	22.7.R1
Platforms	All

### **signature-list** *reference*

Synopsis	Name of the list of supported signature suite codes
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">signature-list</a> <i>reference</i>
Tree	<a href="#">signature-list</a>
Description	This command assigns an existing TLS 1.3 signature list to the TLS server profile.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-signature-list</a> <i>string</i>
Introduced	22.7.R1
Platforms	All

### **status-verify**

Synopsis	Enter the <b>status-verify</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">status-verify</a>
Tree	<a href="#">status-verify</a>
Description	Commands in this context configure certificate revocation status verification options for the end-entity certificate in a TLS server.
Introduced	23.7.R1
Platforms	All

### **default-result** *keyword*

Synopsis	Default result of certificate status verification
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">server-tls-profile</a> <i>string</i> <a href="#">status-verify</a> <a href="#">default-result</a> <i>keyword</i>
Tree	<a href="#">default-result</a>
Description	This command configures the default result of the entity certificate verification in the TLS server profile. This command overwrites the EE certificate revocation verification for the TLS server profile.

By default the router checks the certification revocation status, but if this command is set to **good**, the end-entity certificate revocation status is overwritten and a good revocation status is returned for the EE certificate.

If this command is set to **revoked**, the router returns the actual revocation status of the end-entity certificate.

Options	revoked, good
Default	revoked
Introduced	23.7.R1
Platforms	All

### **tls-re-negotiate-timer** *number*

Synopsis	TLS HELLO request timer
Context	<b>configure</b> <a href="#">system security tls server-tls-profile</a> <i>string</i> <b>tls-re-negotiate-timer</b> <i>number</i>
Tree	<a href="#">tls-re-negotiate-timer</a>
Range	0 to 65000
Units	minutes
Default	0
Introduced	16.0.R1
Platforms	All

### **trust-anchor-profile** [[trust-anchor-profile-name](#)] *string*

Synopsis	Enter the <b>trust-anchor-profile</b> list instance
Context	<b>configure</b> <a href="#">system security tls trust-anchor-profile</a> <i>string</i>
Tree	<a href="#">trust-anchor-profile</a>
Max. Instances	16
Introduced	16.0.R1
Platforms	All

### **[trust-anchor-profile-name]** *string*

Synopsis	Trust anchor profile name
Context	<b>configure</b> <a href="#">system security tls trust-anchor-profile</a> <i>string</i>
Tree	<a href="#">trust-anchor-profile</a>

String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **trust-anchor** [[ca-profile-name](#)] *reference*

Synopsis	Add a list entry for <b>trust-anchor</b>
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">trust-anchor-profile</a> <i>string</i> <b>trust-anchor</b> <i>reference</i>
Tree	<a href="#">trust-anchor</a>
Max. Instances	8
Introduced	16.0.R1
Platforms	All

### **[ca-profile-name]** *reference*

Synopsis	Trusted CA profile name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">trust-anchor-profile</a> <i>string</i> <b>trust-anchor</b> <i>reference</i>
Tree	<a href="#">trust-anchor</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">pki</a> <a href="#">ca-profile</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **user-params**

Synopsis	Enter the <b>user-params</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a>
Tree	<a href="#">user-params</a>
Introduced	16.0.R1
Platforms	All

## attempts

Synopsis	Enter the <b>attempts</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">attempts</a>
Tree	<a href="#">attempts</a>
Introduced	16.0.R1
Platforms	All

## count *number*

Synopsis	Number of unsuccessful login attempts
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">attempts</a> <i>count number</i>
Tree	<a href="#">count</a>
Range	1 to 64
Default	3
Introduced	16.0.R1
Platforms	All

## lockout *number*

Synopsis	Lockout period after unsuccessful login attempts
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">attempts</a> <i>lockout number</i>
Tree	<a href="#">lockout</a>
Range	0 to 1440
Units	minutes
Default	10
Introduced	16.0.R1
Platforms	All

## time *number*

Synopsis	Time frame of unsuccessful login attempts
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">attempts</a> <i>time number</i>
Tree	<a href="#">time</a>
Range	0 to 60
Units	minutes



Default	5
Introduced	16.0.R1
Platforms	All

## authentication-order

Synopsis	Enter the <b>authentication-order</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">authentication-order</a>
Tree	<a href="#">authentication-order</a>
Description	<p>Commands in this context configure the sequence in which the system attempts authentication and authorization among the local user database, RADIUS servers, TACACS+ servers, and LDAP servers.</p> <p>Configure the order from the most preferred method to the least preferred. The presence of all methods in the command line does not guarantee they are all operational. Specifying options that are not available delays user authentication.</p> <p>If all operational methods are attempted and no authentication for a particular login has been granted, an entry in the security log records the failed attempt. Both the attempted login identification and originating IP address are logged with a timestamp.</p> <p>The order is not applicable to SNMPv3. SNMPv3 messages ignore the configured order and are authorized using the locally configured users only. TACACS+, RADIUS, and LDAP are not supported for SNMPv3 authentication.</p> <p><b>Note:</b> This command applies to a local user, in addition to users on RADIUS, TACACS+, and LDAP.</p>
Introduced	16.0.R1
Platforms	All

## exit-on-reject *boolean*

Synopsis	Stop authentication and authorization attempts after a reject
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">authentication-order</a> <a href="#">exit-on-reject</a> <i>boolean</i>
Tree	<a href="#">exit-on-reject</a>
Description	<p>When configured to <b>true</b>, the router stops authentication and authorization if one of the AAA methods configured in the order sends a rejection.</p> <p>When configured to <b>false</b>, the router attempts the next AAA method if a AAA method sends a rejection. If all AAA methods are exhausted, authentication and authorization is rejected.</p> <p>If the order specifies <b>local</b> as the first method, the following actions apply:</p> <ul style="list-style-type: none"> <li>• If this command is set to <b>true</b> and the user does not exist, the user is not authenticated.</li> </ul>

- If the user can be authenticated locally, other methods, if configured, are used for authorization and accounting.
- If the user is configured locally but without console access, login is denied.

Default	false
Introduced	16.0.R1
Platforms	All

### **order** *keyword*

Synopsis	Authentication and authorization order
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">authentication-order</a> <b>order</b> <i>keyword</i>
Tree	<a href="#">order</a>
Description	This command specifies the order of authentication and authorization. The default order is [ <b>radius tacplus ldap local</b> ].
Options	local, radius, tacplus, ldap
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

### **local-user**

Synopsis	Enter the <b>local-user</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <b>local-user</b>
Tree	<a href="#">local-user</a>
Introduced	16.0.R1
Platforms	All

### **password**

Synopsis	Enter the <b>password</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <b>password</b>
Tree	<a href="#">password</a>
Introduced	16.0.R1

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Platforms All

### **aging** *number*

Synopsis Maximum time during which a user password is valid

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) *aging* *number*

Tree [aging](#)

Range 1 to 500

Units days

Introduced 16.0.R1

Platforms All

### **complexity-rules**

Synopsis Enter the **complexity-rules** context

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#)

Tree [complexity-rules](#)

Introduced 16.0.R1

Platforms All

### **allow-user-name** *boolean*

Synopsis Allow the username to be used as part of the password

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#) [allow-user-name](#) *boolean*

Tree [allow-user-name](#)

Default false

Introduced 16.0.R1

Platforms All

### **credits**

Synopsis Enter the **credits** context

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [password](#) [complexity-rules](#) [credits](#)

Tree [credits](#)

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Notes	The following elements are part of a choice: <b>credits</b> or <b>required</b> .
Introduced	16.0.R1
Platforms	All

### **lowercase** *number*

Synopsis	Maximum credits for the use of lowercase letters
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a> <a href="#">lowercase</a> <i>number</i>
Tree	<a href="#">lowercase</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

### **numeric** *number*

Synopsis	Maximum credits for the use of numeric characters
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a> <a href="#">numeric</a> <i>number</i>
Tree	<a href="#">numeric</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

### **special-character** *number*

Synopsis	Maximum credits for the use of special characters
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a> <a href="#">special-character</a> <i>number</i>
Tree	<a href="#">special-character</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

**uppercase** *number*

Synopsis	Maximum credits for the use of uppercase letters
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">credits</a> <a href="#">uppercase</a> <i>number</i>
Tree	<a href="#">uppercase</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

**minimum-classes** *number*

Synopsis	Minimum number of different character classes to use
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">minimum-classes</a> <i>number</i>
Tree	<a href="#">minimum-classes</a>
Range	2 to 4
Introduced	16.0.R1
Platforms	All

**minimum-length** *number*

Synopsis	Minimum length required for local passwords
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">minimum-length</a> <i>number</i>
Tree	<a href="#">minimum-length</a>
Range	6 to 50
Default	6
Introduced	16.0.R1
Platforms	All

**repeated-characters** *number*

Synopsis	Number of times same character can repeat consecutively
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">repeated-characters</a> <i>number</i>
Tree	<a href="#">repeated-characters</a>

Range	2 to 8
Introduced	16.0.R1
Platforms	All

### **required**

Synopsis	Enter the <b>required</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a>
Tree	<a href="#">required</a>
Notes	The following elements are part of a choice: <b>credits</b> or <b>required</b> .
Introduced	16.0.R1
Platforms	All

### **lowercase number**

Synopsis	Number of lowercase letters required
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> <a href="#">lowercase</a> <i>number</i>
Tree	<a href="#">lowercase</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

### **numeric number**

Synopsis	Number of numeric characters required
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> <a href="#">numeric</a> <i>number</i>
Tree	<a href="#">numeric</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

### **special-character number**

Synopsis	Number of special characters required
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Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> <a href="#">special-character</a> <i>number</i>
Tree	<a href="#">special-character</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

### **uppercase** *number*

Synopsis	Number of uppercase letters required
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">complexity-rules</a> <a href="#">required</a> <a href="#">uppercase</a> <i>number</i>
Tree	<a href="#">uppercase</a>
Range	1 to 10
Introduced	16.0.R1
Platforms	All

### **hashing** *keyword*

Synopsis	Hashing algorithm for user passwords
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">hashing</a> <i>keyword</i>
Tree	<a href="#">hashing</a>
Options	bcrypt, sha2-pbkdf2, sha3-pbkdf2
Default	bcrypt
Introduced	20.7.R1
Platforms	All

### **history-size** *number*

Synopsis	Number of previous passwords to compare against
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <a href="#">history-size</a> <i>number</i>
Tree	<a href="#">history-size</a>
Range	0 to 20
Introduced	16.0.R1
Platforms	All

**minimum-age** *number*

Synopsis	Minimum age required for a password before changing it
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <i>minimum-age</i> <i>number</i>
Tree	<a href="#">minimum-age</a>
Range	0 to 86400
Units	seconds
Default	600
Introduced	16.0.R1
Platforms	All

**minimum-change** *number*

Synopsis	Minimum character differences between passwords
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">password</a> <i>minimum-change</i> <i>number</i>
Tree	<a href="#">minimum-change</a>
Range	1 to 20
Default	5
Introduced	16.0.R1
Platforms	All

**user** [[user-name](#)] *string*

Synopsis	Enter the <b>user</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>
Tree	<a href="#">user</a>
Introduced	16.0.R1
Platforms	All

**[user-name]** *string*

Synopsis	Local user name
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i>
Tree	<a href="#">user</a>
String Length	1 to 32



Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## **access**

Synopsis	Enter the <b>access</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>access</b>
Tree	<a href="#">access</a>
Introduced	16.0.R1
Platforms	All

## **console** *boolean*

Synopsis	Allow console port, Telnet, and SSH access
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>console</b> <i>boolean</i>
Tree	<a href="#">console</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **ftp** *boolean*

Synopsis	Allow FTP access
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>ftp</b> <i>boolean</i>
Tree	<a href="#">ftp</a>
Default	false
Introduced	16.0.R1
Platforms	All

## **grpc** *boolean*

Synopsis	Allow gRPC access
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>grpc</b> <i>boolean</i>
Tree	<a href="#">grpc</a>

Default	false
Introduced	16.0.R1
Platforms	All

**li** *boolean*

Synopsis	Allow access to LI
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>li</b> <i>boolean</i>
Tree	<a href="#">li</a>
Default	false
Introduced	19.10.R1
Platforms	All

**netconf** *boolean*

Synopsis	Allow NETCONF access
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>netconf</b> <i>boolean</i>
Tree	<a href="#">netconf</a>
Default	false
Introduced	16.0.R1
Platforms	All

**snmp** *boolean*

Synopsis	Allow SNMP access
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">access</a> <b>snmp</b> <i>boolean</i>
Tree	<a href="#">snmp</a>
Default	false
Introduced	16.0.R1
Platforms	All

**cli-engine** *keyword*

Synopsis	User level override for CLI engine access
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">cli-engine</a> <i>keyword</i>

Tree	<a href="#">cli-engine</a>
Options	classic-cli, md-cli
Max. Instances	2
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

## console

Synopsis	Enter the <b>console</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>console</b>
Tree	<a href="#">console</a>
Introduced	16.0.R1
Platforms	All

## cannot-change-password *boolean*

Synopsis	Change password privileges
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>console</b> <b>cannot-change-password</b> <i>boolean</i>
Tree	<a href="#">cannot-change-password</a>
Default	false
Introduced	16.0.R1
Platforms	All

## login-exec (*sat-url* | *cflash-url* | *ftp-tftp-url* | *filename*)

Synopsis	File to execute when a user successfully logs in
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <b>console</b> <b>login-exec</b> ( <i>sat-url</i>   <i>cflash-url</i>   <i>ftp-tftp-url</i>   <i>filename</i> )
Tree	<a href="#">login-exec</a>
String Length	1 to 200
Introduced	16.0.R1
Platforms	All

**member reference**

Synopsis	User profiles for this user
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">console</a> <a href="#">member</a> <i>reference</i>
Tree	<a href="#">member</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">aaa</a> <a href="#">local-profiles</a> <a href="#">profile</a> <i>string</i>
Max. Instances	8
Notes	This element is ordered by the user.
Introduced	16.0.R1
Platforms	All

**new-password-at-login boolean**

Synopsis	Prompt a user to change password at next console login
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">console</a> <a href="#">new-password-at-login</a> <i>boolean</i>
Tree	<a href="#">new-password-at-login</a>
Default	false
Introduced	16.0.R1
Platforms	All

**home-directory (sat-url | cflash-without-slot-url)**

Synopsis	Home directory for the user
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">home-directory</a> ( <i>sat-url</i>   <i>cflash-without-slot-url</i> )
Tree	<a href="#">home-directory</a>
Description	<p>This command configures the home directory of the user for file access. Files can be accessed locally by CLI <b>file</b> commands and output modifiers such as &gt; (file redirect), or remotely via FTP and SCP. If the home directory does not exist, a warning message is displayed when the user logs in.</p> <p>When <b>restricted-to-home</b> is configured, file access is denied unless the <b>home-directory</b> is configured and the directory is created by an administrator.</p>
String Length	1 to 200
Introduced	16.0.R1

Platforms All

### **password** *string*

Synopsis User password for console and FTP access

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* **password** *string*

Tree [password](#)

String Length 3 to 136

Notes This element is mandatory.

Introduced 16.0.R1

Platforms All

### **public-keys**

Synopsis Enter the **public-keys** context

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* **public-keys**

Tree [public-keys](#)

Description Commands in this context configure public keys for SSH.

Introduced 16.0.R1

Platforms All

### **ecdsa**

Synopsis Enter the **ecdsa** context

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [public-keys](#) **ecdsa**

Tree [ecdsa](#)

Description Commands in this context configure Elliptic Curve Digital Signature Algorithm (ECDSA) public keys.

Introduced 16.0.R1

Platforms All

### **ecdsa-key** [[ecdsa-public-key-id](#)] *number*

Synopsis Enter the **ecdsa-key** list instance

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* [public-keys](#) [ecdsa](#) **ecdsa-key** *number*

Tree	<a href="#">ecdsa-key</a>
Description	Commands in this context configure an ECDSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	16.0.R1
Platforms	All

### **[ecdsa-public-key-id] *number***

Synopsis	ECDSA public key identifier
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">ecdsa</a> <a href="#">ecdsa-key</a> <i>number</i>
Tree	<a href="#">ecdsa-key</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **description *string***

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">ecdsa</a> <a href="#">ecdsa-key</a> <i>number</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

### **key-value *string***

Synopsis	ECDSA public key value
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">ecdsa</a> <a href="#">ecdsa-key</a> <i>number</i> <a href="#">key-value</a> <i>string</i>
Tree	<a href="#">key-value</a>
Description	This command configures a value for the ECDSA public key. The public key must be enclosed in quotation marks. For ECDSA, the key is between 1 and 1024 bits.
String Length	1 to 255

Introduced	16.0.R1
Platforms	All

**rsa**

Synopsis	Enter the <b>rsa</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a>
Tree	<a href="#">rsa</a>
Description	Commands in this context configure RSA public keys.
Introduced	16.0.R1
Platforms	All

**rsa-key** [[rsa-public-key-id](#)] *number*

Synopsis	Enter the <b>rsa-key</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> <a href="#">rsa-key</a> <i>number</i>
Tree	<a href="#">rsa-key</a>
Description	Commands in this context configure an RSA public key and associate the key with a username. A user can associate multiple public keys with a username. The key ID identifies these keys for the user.
Introduced	16.0.R1
Platforms	All

**[rsa-public-key-id]** *number*

Synopsis	RSA public key identifier
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> <a href="#">rsa-key</a> <i>number</i>
Tree	<a href="#">rsa-key</a>
Range	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> <a href="#">rsa-key</a> <a href="#">number</a> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	All

**key-value** *string*

Synopsis	RSA public key value
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">public-keys</a> <a href="#">rsa</a> <a href="#">rsa-key</a> <a href="#">number</a> <a href="#">key-value</a> <i>string</i>
Tree	<a href="#">key-value</a>
Description	This command configures a value for the RSA public key. The public key must be enclosed in quotation marks. For RSA, the key is between 768 and 4096 bits.
String Length	1 to 800
Introduced	16.0.R1
Platforms	All

**restricted-to-home** *boolean*

Synopsis	Restrict file access to the home directory of the user
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">restricted-to-home</a> <i>boolean</i>
Tree	<a href="#">restricted-to-home</a>
Description	<p>When configured to <b>true</b>, the router denies the user from accessing files outside of their home directory. Files can be accessed locally by CLI file commands and output modifiers such as <b>&gt;</b> (file redirect), or remotely via FTP and SCP. The system denies all configuration save operations (such as <b>admin save</b>) via any management interface (such as CLI and NETCONF) unless <b>save-when-restricted</b> is enabled.</p> <p>File access is denied unless a home directory is configured and the directory is created by an administrator.</p> <p>When configured to <b>false</b>, the router permits the user to access all files on the system.</p>
Default	false
Introduced	16.0.R1



Platforms All

### **save-when-restricted** *boolean*

Synopsis Save configurations when the user is restricted to home

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* **save-when-restricted** *boolean*

Tree [save-when-restricted](#)

Description When configured to **true**, the system permits configuration save operations for all configuration regions (such as bof and configure) via any management interface (such as CLI and NETCONF) even if **restricted-to-home** is enabled.

The configuration for each region can be saved with **admin save** CLI commands or when committed over NETCONF and gRPC.

When configured to **false**, the system denies saving the configuration when **restricted-to-home** is enabled, unless the home directory of the user includes the location of the saved configuration file.

Default false

Introduced 22.10.R1

Platforms All

### **snmp**

Synopsis Enter the **snmp** context

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* **snmp**

Tree [snmp](#)

Introduced 16.0.R1

Platforms All

### **authentication**

Synopsis Enable the **authentication** context

Context **configure** [system](#) [security](#) [user-params](#) [local-user](#) [user](#) *string* **snmp** **authentication**

Tree [authentication](#)

Description Commands in this context configure the SNMPv3 authentication and privacy protocols for the user to communicate with the router. The keys are stored in an encrypted format in the configuration.

The keys configured with these commands must be localized keys, which are a hash of the SNMP engine ID and a password. The password is not entered directly in this

command. Use the **tools perform system management-interface snmp generate-key** command to generate localized authentication and privacy keys.

If authentication is not configured, only the username is required to allow and authenticate SNMPv3 operations.

Introduced	16.0.R1
Platforms	All

### **authentication-key** *string*

Synopsis	Localized authentication key
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">snmp</a> <a href="#">authentication</a> <a href="#">authentication-key</a> <i>string</i>
Tree	<a href="#">authentication-key</a>
Description	This command specifies the authentication key for the authentication protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the <b>tools perform system management-interface snmp generate-key</b> command to generate a localized authentication key.
String Length	1 to 115
Introduced	16.0.R1
Platforms	All

### **authentication-protocol** *keyword*

Synopsis	Authentication protocol
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">snmp</a> <a href="#">authentication</a> <a href="#">authentication-protocol</a> <i>keyword</i>
Tree	<a href="#">authentication-protocol</a>
Options	hmac-md5-96, hmac-sha1-96, hmac-sha2-224, hmac-sha2-256, hmac-sha2-384, hmac-sha2-512
Introduced	16.0.R1
Platforms	All

### **privacy**

Synopsis	Enable the <b>privacy</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">snmp</a> <a href="#">authentication</a> <a href="#">privacy</a>

Tree	<a href="#">privacy</a>
Introduced	16.0.R1
Platforms	All

### **privacy-key string**

Synopsis	Localized privacy key
Context	<b>configure</b> <a href="#">system security user-params local-user user string snmp authentication privacy privacy-key string</a>
Tree	<a href="#">privacy-key</a>
Description	This command specifies the privacy key for the privacy protocol. The key must be a localized key, which is a hash of the SNMP engine ID and a password. The password is not entered directly in this command. Use the <b>tools perform system management-interface snmp generate-key</b> command to generate a localized privacy key.
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **privacy-protocol keyword**

Synopsis	Privacy protocol
Context	<b>configure</b> <a href="#">system security user-params local-user user string snmp authentication privacy privacy-protocol keyword</a>
Tree	<a href="#">privacy-protocol</a>
Options	cbc-des, cfb128-aes-128, cfb128-aes-192, cfb128-aes-256
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **group string**

Synopsis	User to associate with a group name
Context	<b>configure</b> <a href="#">system security user-params local-user user string snmp group string</a>
Tree	<a href="#">group</a>
String Length	1 to 32

Introduced	16.0.R1
Platforms	All

### ssh-authentication-method

Synopsis	Enter the <b>ssh-authentication-method</b> context
Context	<b>configure</b> <a href="#">system security user-params local-user user</a> <i>string</i> <a href="#">ssh-authentication-method</a>
Tree	<a href="#">ssh-authentication-method</a>
Introduced	23.7.R1
Platforms	All

### client

Synopsis	Enter the <b>client</b> context
Context	<b>configure</b> <a href="#">system security user-params local-user user</a> <i>string</i> <a href="#">ssh-authentication-method client</a>
Tree	<a href="#">client</a>
Introduced	23.10.R3
Platforms	All

### public-key-only *keyword*

Synopsis	Public key only SSH authentication for this user
Context	<b>configure</b> <a href="#">system security user-params local-user user</a> <i>string</i> <a href="#">ssh-authentication-method client public-key-only</a> <i>keyword</i>
Tree	<a href="#">public-key-only</a>
Description	<p>This command configures the authentication method accepted for the SSH session for the specified user. This user-level configuration overrides the system-level configuration defined in the <b>configure system security ssh authentication-method public-key-only</b> command.</p> <p>When unconfigured, the command inherits the setting from the system level command.</p> <p>The command options are:</p> <ul style="list-style-type: none"> <li>• <b>true</b> — accept only public key client authentication for the SSH server</li> <li>• <b>false</b> — accept public key or password client authentication for the SSH server. If <b>interactive-authentication</b> is configured to <b>true</b> in the <b>configure system security aaa remote-servers radius</b> or <b>configure system security aaa remote-servers tacplus</b> context, the system also accepts interactive keyboard authentication.</li> </ul>

Options	false, true
Introduced	23.10.R3
Platforms	All

## server

Synopsis	Enter the <b>server</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">ssh-authentication-method</a> <b>server</b>
Tree	<a href="#">server</a>
Introduced	23.7.R1
Platforms	All

## public-key-only *keyword*

Synopsis	Public key only SSH authentication for this user
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">user-params</a> <a href="#">local-user</a> <a href="#">user</a> <i>string</i> <a href="#">ssh-authentication-method</a> <b>server</b> <a href="#">public-key-only</a> <i>keyword</i>
Tree	<a href="#">public-key-only</a>
Description	<p>This command configures the authentication method accepted for the SSH session for the specified user. This user-level configuration overrides the system-level configuration defined in the <b>configure system security ssh authentication-method public-key-only</b> command.</p> <p>When unconfigured, the command inherits the setting from the system level command. The command options are:</p> <ul style="list-style-type: none"> <li>• <b>true</b> — accept only public key client authentication for the SSH server</li> <li>• <b>false</b> — accept public key or password client authentication for the SSH server. If <b>interactive-authentication</b> is configured to <b>true</b> in the <b>configure system security aaa remote-servers radius</b> or <b>configure system security aaa remote-servers tacplus</b> context, the system also accepts interactive keyboard authentication.</li> </ul>
Options	false, true
Introduced	23.7.R1
Platforms	All

## vprn-network-exceptions

Synopsis	Enable the <b>vprn-network-exceptions</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">vprn-network-exceptions</a>

Tree	<a href="#">vprn-network-exceptions</a>
Description	<p>Commands in this context configure the rate limiting attributes for processing packets with label TTL expiry received within an LSP shortcut or VPRN instances in the system and from all network IP interfaces. This includes labeled user and control plan packets, ping, and traceroute packets within GRT and VPRN, and ICMP replies.</p> <p>These commands do not rate limit MPLS or service OAM packets.</p>
Introduced	16.0.R1
Platforms	All

### **count** *number*

Synopsis	Limit of exception messages received
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">vprn-network-exceptions</a> <b>count</b> <i>number</i>
Tree	<a href="#">count</a>
Description	This command specifies the threshold limit of exception messages. If the threshold value is exceeded within the configured time interval, packets are dropped.
Range	10 to 1000
Default	100
Introduced	16.0.R1
Platforms	All

### **window** *number*

Synopsis	Time interval to measure exception messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">vprn-network-exceptions</a> <b>window</b> <i>number</i>
Tree	<a href="#">window</a>
Description	This command configures the time interval within which exception messages are counted. If the threshold value is exceeded within the configured time interval, packets are dropped.
Range	1 to 60
Units	seconds
Default	10
Introduced	16.0.R1
Platforms	All

**selective-fib** *boolean*

Synopsis	FIB assigned to the system
Context	<b>configure</b> <a href="#">system</a> <a href="#">selective-fib</a> <i>boolean</i>
Tree	<a href="#">selective-fib</a>
Default	false
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**software-repository** [[repository-name](#)] *string*

Synopsis	Enter the <b>software-repository</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i>
Tree	<a href="#">software-repository</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[repository-name]** *string*

Synopsis	Software repository name
Context	<b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i>
Tree	<a href="#">software-repository</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **primary-location** *string*

Synopsis	Primary location for files in the software repository
Context	<b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> <a href="#">primary-location</a> <i>string</i>
Tree	<a href="#">primary-location</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **secondary-location** *string*

Synopsis	Secondary location for files in the software repository
Context	<b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> <a href="#">secondary-location</a> <i>string</i>
Tree	<a href="#">secondary-location</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **tertiary-location** *string*

Synopsis	Tertiary location for files in the software repository
Context	<b>configure</b> <a href="#">system</a> <a href="#">software-repository</a> <i>string</i> <a href="#">tertiary-location</a> <i>string</i>
Tree	<a href="#">tertiary-location</a>
String Length	1 to 180
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **switch-fabric**

Synopsis	Enter the <b>switch-fabric</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">switch-fabric</a>
Tree	<a href="#">switch-fabric</a>
Description	Commands in this context configure system level attributes related to the switch fabric.
Introduced	20.5.R1
Platforms	7450 ESS, 7750 SR-7, 7750 SR-12e, 7750 SR-7s, 7750 SR-14s, 7950 XRS



**failure-recovery**

Synopsis	Enter the <b>failure-recovery</b> context
Context	<b>configure system switch-fabric failure-recovery</b>
Tree	<a href="#">failure-recovery</a>
Description	Commands in this context configure the attributes related to the automatic switch fabric recovery process. This process is triggered when there are two resets of an IOM/XCM due to ICC failures within a small time frame. The recovery process involves the sequential resetting of SFM in case the issues are due to one of the SFM in the ICC communication path. As the final step in the recovery process, a CPM switchover is triggered to reset the active CPM.
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR-7, 7750 SR-12e, 7950 XRS

**admin-state** *keyword*

Synopsis	Administrative state of the failure recovery process
Context	<b>configure system switch-fabric failure-recovery admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	21.2.R1
Platforms	7450 ESS, 7750 SR-7, 7750 SR-12e, 7950 XRS

**sfm-loss-threshold** *number*

Synopsis	Number of SFMs that can fail before SFM overload state
Context	<b>configure system switch-fabric sfm-loss-threshold</b> <i>number</i>
Tree	<a href="#">sfm-loss-threshold</a>
Description	This command specifies the number of SFMs that are permitted to fail before the system goes into SFM overload state.  The default value for the 7750 SR-7s is 1 and the default value for the 7750 SR-14s is 2. Users can select the SFM limit based on the number possible for the system minus one. For the 7750 SR-7s, the limit is 3 and the limit for the 7750 SR-14s is 7.
Range	1 to 7
Introduced	20.5.R1
Platforms	7750 SR-7s, 7750 SR-14s

**telemetry**

Synopsis	Enter the <b>telemetry</b> context
Context	<b>configure system telemetry</b>
Tree	<b>telemetry</b>
Description	Commands in this context configure the parameters for the dial-out telemetry functionality.
Introduced	20.2.R1
Platforms	All

**destination-group [name] string**

Synopsis	Enter the <b>destination-group</b> list instance
Context	<b>configure system telemetry destination-group string</b>
Tree	<b>destination-group</b>
Description	Commands in this context configure parameters for destination groups.
Max. Instances	225
Introduced	20.5.R1
Platforms	All

**[name] string**

Synopsis	Destination group name
Context	<b>configure system telemetry destination-group string</b>
Tree	<b>destination-group</b>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**allow-unsecure-connection**

Synopsis	Allow connection without secured transport protocol
Context	<b>configure system telemetry destination-group string allow-unsecure-connection</b>

Tree	<a href="#">allow-unsecure-connection</a>
Description	When configured, this command allows an unsecured connection to remote managers; TCP connections are not encrypted, including username and password information.
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-client-profile</b> .
Introduced	20.5.R1
Platforms	All

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system telemetry destination-group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

### **destination** [[address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*) [port](#) *number*

Synopsis	Enter the <b>destination</b> list instance
Context	<b>configure</b> <a href="#">system telemetry destination-group</a> <i>string</i> <a href="#">destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">destination</a>
Max. Instances	4
Notes	This element is ordered by the user.
Introduced	20.5.R1
Platforms	All

### **[address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *fully-qualified-domain-name*)

Synopsis	Address of the destination within the destination group
Context	<b>configure</b> <a href="#">system telemetry destination-group</a> <i>string</i> <a href="#">destination</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>fully-qualified-domain-name</i> ) <a href="#">port</a> <i>number</i>
Tree	<a href="#">destination</a>

---

String Length	1 to 255
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

### **port number**

Synopsis	TCP port number for the destination
Context	<b>configure system telemetry destination-group</b> <i>string destination (ipv4-address-no-zone   ipv6-address-no-zone   fully-qualified-domain-name)</i> <b>port number</b>
Tree	<a href="#">destination</a>
Range	0   1 to 65535
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

### **router-instance string**

Synopsis	Router name or VPRN service name
Context	<b>configure system telemetry destination-group</b> <i>string destination (ipv4-address-no-zone   ipv6-address-no-zone   fully-qualified-domain-name)</i> <b>port number</b> <b>router-instance string</b>
Tree	<a href="#">router-instance</a>
Introduced	20.5.R1
Platforms	All

### **tcp-keepalive**

Synopsis	Enter the <b>tcp-keepalive</b> context
Context	<b>configure system telemetry destination-group</b> <i>string tcp-keepalive</i>
Tree	<a href="#">tcp-keepalive</a>
Introduced	20.5.R1
Platforms	All

### **admin-state keyword**

Synopsis	Administrative state of the TCP keep-alive algorithm
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Context	<b>configure system telemetry destination-group</b> <i>string tcp-keepalive admin-state keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

### **idle-time** *number*

Synopsis	Time until the first TCP keepalive probe is sent
Context	<b>configure system telemetry destination-group</b> <i>string tcp-keepalive idle-time number</i>
Tree	<a href="#">idle-time</a>
Range	1 to 100000
Units	seconds
Default	600
Introduced	20.5.R1
Platforms	All

### **interval** *number*

Synopsis	Time between TCP keepalive probes
Context	<b>configure system telemetry destination-group</b> <i>string tcp-keepalive interval number</i>
Tree	<a href="#">interval</a>
Range	1 to 100000
Units	seconds
Default	15
Introduced	20.5.R1
Platforms	All

### **retries** *number*

Synopsis	Number of probe retries before closing the connection
Context	<b>configure system telemetry destination-group</b> <i>string tcp-keepalive retries number</i>
Tree	<a href="#">retries</a>

Description	This command configures the number of missed TCP keepalive probes before closing the TCP connection and attempting to reach the other destinations within the same destination group.
Range	3 to 100
Default	4
Introduced	20.5.R1
Platforms	All

### **tls-client-profile** *reference*

Synopsis	TLS client profile assigned to the destination group
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">destination-group</a> <i>string</i> <b>tls-client-profile</b> <i>reference</i>
Tree	<a href="#">tls-client-profile</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">tls</a> <a href="#">client-tls-profile</a> <i>string</i>
Notes	The following elements are part of a choice: <b>allow-unsecure-connection</b> or <b>tls-client-profile</b> .
Introduced	20.5.R1
Platforms	All

### **notification-bundling**

Synopsis	Enter the <b>notification-bundling</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">notification-bundling</a>
Tree	<a href="#">notification-bundling</a>
Description	Commands in this context configure the bundling of multiple notifications into one telemetry message.
Introduced	21.10.R1
Platforms	All

### **admin-state** *keyword*

Synopsis	Administrative state of notification bundling
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">notification-bundling</a> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

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Introduced	21.10.R1
Platforms	All

### **max-msg-count** *number*

Synopsis	Maximum notifications count in telemetry message bundle
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">notification-bundling</a> <b>max-msg-count</b> <i>number</i>
Tree	<a href="#">max-msg-count</a>
Range	2 to 1000
Default	100
Introduced	21.10.R1
Platforms	All

### **max-time-granularity** *number*

Synopsis	Maximum interval when bundling of notifications occurs
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">notification-bundling</a> <b>max-time-granularity</b> <i>number</i>
Tree	<a href="#">max-time-granularity</a>
Description	This command sets the maximum time interval during which telemetry notifications are bundled. All bundled notifications have the same timestamp, which is the timestamp of the bundle.
Range	1 to 1000
Units	milliseconds
Default	100
Introduced	21.10.R1
Platforms	All

### **persistent-subscriptions**

Synopsis	Enter the <b>persistent-subscriptions</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <b>persistent-subscriptions</b>
Tree	<a href="#">persistent-subscriptions</a>
Introduced	20.5.R1
Platforms	All

**delay-on-boot** *number*

Synopsis	Delay for persistent subscriptions after system boot
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <b>delay-on-boot</b> <i>number</i>
Tree	<a href="#">delay-on-boot</a>
Description	This command configures the delay timer for gRPC telemetry persistent subscriptions. When the timer expires, gRPC telemetry persistent subscriptions become operational and connections are initiated. This delay prevents the system from trying to establish gRPC persistent subscriptions while it is still converging.  When no delay is configured, gRPC telemetry persistent subscriptions are initiated after the system boots and gRPC becomes operational.
Range	1 to 3600
Units	seconds
Introduced	23.10.R1
Platforms	All

**subscription** [*name*] *string*

Synopsis	Enter the <b>subscription</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <b>subscription</b> <i>string</i>
Tree	<a href="#">subscription</a>
Max. Instances	225
Introduced	20.5.R1
Platforms	All

**[name]** *string*

Synopsis	Persistent subscription name
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <b>subscription</b> <i>string</i>
Tree	<a href="#">subscription</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All



**admin-state** *keyword*

Synopsis	Administrative state of the persistent subscription
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	20.5.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

**destination-group** *reference*

Synopsis	Name of the destination group used in the subscription
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>destination-group</b> <i>reference</i>
Tree	<a href="#">destination-group</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">destination-group</a> <i>string</i>
Introduced	20.5.R1
Platforms	All

**encoding** *keyword*

Synopsis	Encoding used for telemetry notifications
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>encoding</b> <i>keyword</i>
Tree	<a href="#">encoding</a>

Description	This command specifies the encoding used for telemetry notifications as defined by the gNMI OpenConfig standard.
Options	json – JSON encoded text bytes – Encoded according to gnmi.schemas proto – Encoded with scalar TypedValue values json-ietf – JSON encoded text as per RFC 7951
Default	json
Introduced	20.5.R1
Platforms	All

### **local-source-address** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Local IP address of packets sent from the source
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>local-source-address</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">local-source-address</a>
Introduced	20.5.R1
Platforms	All

### **mode** *keyword*

Synopsis	Mode for telemetry notifications
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>mode</b> <i>keyword</i>
Tree	<a href="#">mode</a>
Description	This command specifies the subscription path mode for telemetry notifications sent out for the persistent subscription.
Options	target-defined, on-change, sample
Introduced	20.5.R1
Platforms	All

### **originated-qos-marking** *keyword*

Synopsis	QoS marking used for telemetry notification packets
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">persistent-subscriptions</a> <a href="#">subscription</a> <i>string</i> <b>originated-qos-marking</b> <i>keyword</i>
Tree	<a href="#">originated-qos-marking</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31,

cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Introduced 20.5.R1  
Platforms All

### **sample-interval** *number*

Synopsis Sampling interval for the persistent subscription

Context **configure** [system](#) [telemetry](#) [persistent-subscriptions](#) [subscription](#) *string* **sample-interval** *number*

Tree [sample-interval](#)

Description This command configures the sampling interval for the persistent subscription. The interval applies only in sampling or target-defined modes.

Range 1000 to 18446744073709551615

Units milliseconds

Default 10000

Introduced 20.5.R1

Platforms All

### **sensor-group** *reference*

Synopsis Sensor group used in the persistent subscription

Context **configure** [system](#) [telemetry](#) [persistent-subscriptions](#) [subscription](#) *string* **sensor-group** *reference*

Tree [sensor-group](#)

Description This command specifies the sensor group to be used in the persistent subscription. If no valid paths exist in the sensor group, the configuration is accepted, however, no gRPC connection is established when persistent subscription is activated.

Reference **configure** [system](#) [telemetry](#) [sensor-groups](#) [sensor-group](#) *string*

Introduced 20.5.R1

Platforms All

### **sensor-groups**

Synopsis Enter the **sensor-groups** context

Context **configure** [system](#) [telemetry](#) [sensor-groups](#)

---

Tree	<a href="#">sensor-groups</a>
Introduced	20.5.R1
Platforms	All

**sensor-group** [[name](#)] *string*

Synopsis	Enter the <b>sensor-group</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">sensor-groups</a> <a href="#">sensor-group</a> <i>string</i>
Tree	<a href="#">sensor-group</a>
Max. Instances	225
Introduced	20.5.R1
Platforms	All

**[name]** *string*

Synopsis	Sensor group name
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">sensor-groups</a> <a href="#">sensor-group</a> <i>string</i>
Tree	<a href="#">sensor-group</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">sensor-groups</a> <a href="#">sensor-group</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.5.R1
Platforms	All

**path** [*xpath*] *string*

Synopsis	Add a list entry for <b>path</b>
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">sensor-groups</a> <a href="#">sensor-group</a> <i>string</i> <b>path</b> <i>string</i>
Tree	<a href="#">path</a>
Max. Instances	4500
Introduced	20.5.R1
Platforms	All

**[xpath]** *string*

Synopsis	gNMI path to be streamed
Context	<b>configure</b> <a href="#">system</a> <a href="#">telemetry</a> <a href="#">sensor-groups</a> <a href="#">sensor-group</a> <i>string</i> <b>path</b> <i>string</i>
Tree	<a href="#">path</a>
Description	The command specifies the path from which data is streamed to the collector. Streamed data includes all descendants of the tree indicated by the path.
String Length	1 to 512
Notes	This element is part of a list key.
Introduced	20.5.R1
Platforms	All

**thresholds**

Synopsis	Enter the <b>thresholds</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a>
Tree	<a href="#">thresholds</a>
Introduced	16.0.R1
Platforms	All

**cflash-cap-alarm-percent** [*cflash-id*] *string*

Synopsis	Enter the <b>cflash-cap-alarm-percent</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-alarm-percent</a> <i>string</i>
Tree	<a href="#">cflash-cap-alarm-percent</a>
Introduced	16.0.R1

Platforms All

### **[cflash-id]** *string*

Synopsis cflash device name monitored for capacity  
 Context **configure** [system](#) [thresholds](#) [cflash-cap-alarm-percent](#) *string*  
 Tree [cflash-cap-alarm-percent](#)  
 String Length 1 to 200  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **falling-threshold** *number*

Synopsis Falling threshold for the sampled statistic  
 Context **configure** [system](#) [thresholds](#) [cflash-cap-alarm-percent](#) *string* [falling-threshold](#) *number*  
 Tree [falling-threshold](#)  
 Description This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated **startup-alarm** command is equal to the **falling** or **either** values.  
 After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the **rising-threshold** command.  
 Range 0 to 100  
 Units percent  
 Introduced 16.0.R4  
 Platforms All

### **interval** *number*

Synopsis Polling period over which data is sampled and compared  
 Context **configure** [system](#) [thresholds](#) [cflash-cap-alarm-percent](#) *string* [interval](#) *number*  
 Tree [interval](#)

Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **rising-threshold** *number*

Synopsis	Rising threshold for the sampled statistic
Context	<b>configure</b> <a href="#">system thresholds cflash-cap-alarm-percent</a> <i>string</i> <a href="#">rising-threshold</a> <i>number</i>
Tree	<a href="#">rising-threshold</a>
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>rising</b> or <b>either</b> values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the <b>falling-threshold</b> command.</p>
Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **rmon-event-type** *keyword*

Synopsis	Notification type specifying action when event occurs
Context	<b>configure</b> <a href="#">system thresholds cflash-cap-alarm-percent</a> <i>string</i> <a href="#">rmon-event-type</a> <i>keyword</i>
Tree	<a href="#">rmon-event-type</a>
Options	none, log, trap, both
Default	both
Introduced	16.0.R1
Platforms	All

**startup-alarm** *keyword*

Synopsis	Alarm type when the alarm is first created
Context	<b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-alarm-percent</b> <i>string</i> <b>startup-alarm</b> <i>keyword</i>
Tree	<b>startup-alarm</b>
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and <b>startup-alarm</b> is equal to <b>rising</b> or <b>either</b> , a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and <b>startup-alarm</b> is equal to <b>falling</b> or <b>either</b> , a single falling threshold crossing event is generated.
Options	rising, falling, either
Default	either
Introduced	16.0.R1
Platforms	All

**cflash-cap-warn-percent** [**cflash-id**] *string*

Synopsis	Enter the <b>cflash-cap-warn-percent</b> list instance
Context	<b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-warn-percent</b> <i>string</i>
Tree	<b>cflash-cap-warn-percent</b>
Description	Commands in this context configure the capacity monitoring of the compact flash. The usage is monitored as a percentage of the capacity of the compact flash. The severity level is warning. Both a rising and falling threshold can be specified.
Introduced	16.0.R1
Platforms	All

**[cflash-id]** *string*

Synopsis	cflash device name monitored for capacity
Context	<b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-warn-percent</b> <i>string</i>
Tree	<b>cflash-cap-warn-percent</b>
String Length	1 to 200
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All



### **falling-threshold** *number*

Synopsis	Falling threshold for the sampled statistic
Context	<b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-warn-percent</b> <i>string</i> <b>falling-threshold</b> <i>number</i>
Tree	<b>falling-threshold</b>
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>falling</b> or <b>either</b> values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the <b>rising-threshold</b> command.</p>
Range	0 to 100
Units	percent
Introduced	16.0.R4
Platforms	All

### **interval** *number*

Synopsis	Polling period over which data is sampled and compared
Context	<b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-warn-percent</b> <i>string</i> <b>interval</b> <i>number</i>
Tree	<b>interval</b>
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

### **rising-threshold** *number*

Synopsis	Rising threshold for the sampled statistic
Context	<b>configure</b> <b>system</b> <b>thresholds</b> <b>cflash-cap-warn-percent</b> <i>string</i> <b>rising-threshold</b> <i>number</i>
Tree	<b>rising-threshold</b>
Description	This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last

sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated **startup-alarm** command is equal to the **rising** or **either** values.

After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the **falling-threshold** command.

Range	0 to 100
Units	percent
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **rmon-event-type** *keyword*

Synopsis	Notification type specifying action when event occurs
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-warn-percent</a> <i>string</i> <b>rmon-event-type</b> <i>keyword</i>
Tree	<a href="#">rmon-event-type</a>
Options	none, log, trap, both
Default	both
Introduced	16.0.R1
Platforms	All

### **startup-alarm** *keyword*

Synopsis	Alarm type when the alarm is first created
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">cflash-cap-warn-percent</a> <i>string</i> <b>startup-alarm</b> <i>keyword</i>
Tree	<a href="#">startup-alarm</a>
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and <b>startup-alarm</b> is equal to <b>rising</b> or <b>either</b> , a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and <b>startup-alarm</b> is equal to <b>falling</b> or <b>either</b> , a single falling threshold crossing event is generated.
Options	rising, falling, either
Default	either
Introduced	16.0.R1
Platforms	All

## kb-memory-use-alarm

Synopsis	Enable the <b>kb-memory-use-alarm</b> context
Context	<b>configure</b> <a href="#">system thresholds kb-memory-use-alarm</a>
Tree	<a href="#">kb-memory-use-alarm</a>
Introduced	16.0.R4
Platforms	All

## falling-threshold *number*

Synopsis	Falling threshold for the sampled statistic
Context	<b>configure</b> <a href="#">system thresholds kb-memory-use-alarm falling-threshold <i>number</i></a>
Tree	<a href="#">falling-threshold</a>
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>falling</b> or <b>either</b> values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the <b>rising-threshold</b> command.</p>
Range	-2147483648 to 2147483647
Introduced	16.0.R4
Platforms	All

## interval *number*

Synopsis	Polling period over which data is sampled and compared
Context	<b>configure</b> <a href="#">system thresholds kb-memory-use-alarm interval <i>number</i></a>
Tree	<a href="#">interval</a>
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **rising-threshold** *number*

Synopsis	Rising threshold for the sampled statistic
Context	<b>configure</b> <a href="#">system thresholds</a> <a href="#">kb-memory-use-alarm</a> <b>rising-threshold</b> <i>number</i>
Tree	<a href="#">rising-threshold</a>
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>rising</b> or <b>either</b> values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the <b>falling-threshold</b> command.</p>
Range	-2147483648 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **rmon-event-type** *keyword*

Synopsis	Notification type specifying action when event occurs
Context	<b>configure</b> <a href="#">system thresholds</a> <a href="#">kb-memory-use-alarm</a> <b>rmon-event-type</b> <i>keyword</i>
Tree	<a href="#">rmon-event-type</a>
Options	none, log, trap, both
Default	both
Introduced	16.0.R4
Platforms	All

### **startup-alarm** *keyword*

Synopsis	Alarm type when the alarm is first created
Context	<b>configure</b> <a href="#">system thresholds</a> <a href="#">kb-memory-use-alarm</a> <b>startup-alarm</b> <i>keyword</i>
Tree	<a href="#">startup-alarm</a>
Description	<p>This command specifies the alarm type that may be sent when this alarm is first created.</p> <p>If the first sample is greater than or equal to the rising threshold value and <b>startup-alarm</b> is equal to <b>rising</b> or <b>either</b>, a single rising threshold crossing event is generated.</p>

If the first sample is less than or equal to the falling threshold value and **startup-alarm** is equal to **falling** or **either**, a single falling threshold crossing event is generated.

Options	rising, falling, either
Default	either
Introduced	16.0.R4
Platforms	All

### **kb-memory-use-warn**

Synopsis	Enable the <b>kb-memory-use-warn</b> context
Context	<b>configure</b> <a href="#">system thresholds kb-memory-use-warn</a>
Tree	<a href="#">kb-memory-use-warn</a>
Introduced	16.0.R4
Platforms	All

### **falling-threshold** *number*

Synopsis	Falling threshold for the sampled statistic
Context	<b>configure</b> <a href="#">system thresholds kb-memory-use-warn falling-threshold</a> <i>number</i>
Tree	<a href="#">falling-threshold</a>
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold, and the value at the last sampling interval was greater than this threshold, a single threshold-crossing event is generated. A single threshold-crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>falling</b> or <b>either</b> values.</p> <p>After a falling threshold-crossing event is generated, another such event is not generated until the sampled value rises above this threshold and reaches greater than or equal to the <b>rising-threshold</b> command.</p>
Range	-2147483648 to 2147483647
Introduced	16.0.R4
Platforms	All

### **interval** *number*

Synopsis	Polling period over which data is sampled and compared
Context	<b>configure</b> <a href="#">system thresholds kb-memory-use-warn interval</a> <i>number</i>
Tree	<a href="#">interval</a>

---

Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds.
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **rising-threshold** *number*

Synopsis	Rising threshold for the sampled statistic
Context	<b>configure</b> <a href="#">system thresholds kb-memory-use-warn rising-threshold</a> <i>number</i>
Tree	<a href="#">rising-threshold</a>
Description	<p>This command specifies a rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold, and the value at the last sampling interval was less than this threshold, a single threshold-crossing event is generated. A single threshold crossing event is also generated if the first sample taken is greater than or equal to this threshold and the associated <b>startup-alarm</b> command is equal to the <b>rising</b> or <b>either</b> values.</p> <p>After a rising threshold-crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches less than or equal the <b>falling-threshold</b> command.</p>
Range	-2147483648 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R4
Platforms	All

### **rmon-event-type** *keyword*

Synopsis	Notification type specifying action when event occurs
Context	<b>configure</b> <a href="#">system thresholds kb-memory-use-warn rmon-event-type</a> <i>keyword</i>
Tree	<a href="#">rmon-event-type</a>
Options	none, log, trap, both
Default	both
Introduced	16.0.R4
Platforms	All

**startup-alarm** *keyword*

Synopsis	Alarm type when the alarm is first created
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">kb-memory-use-warn</a> <a href="#">startup-alarm</a> <i>keyword</i>
Tree	<a href="#">startup-alarm</a>
Description	This command specifies the alarm type that may be sent when this alarm is first created. If the first sample is greater than or equal to the rising threshold value and <b>startup-alarm</b> is equal to <b>rising</b> or <b>either</b> , a single rising threshold crossing event is generated. If the first sample is less than or equal to the falling threshold value and <b>startup-alarm</b> is equal to <b>falling</b> or <b>either</b> , a single falling threshold crossing event is generated.
Options	rising, falling, either
Default	either
Introduced	16.0.R4
Platforms	All

**rmon**

Synopsis	Enter the <b>rmon</b> context
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a>
Tree	<a href="#">rmon</a>
Introduced	16.0.R1
Platforms	All

**alarm** [[rmon-alarm-id](#)] *number*

Synopsis	Enter the <b>alarm</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i>
Tree	<a href="#">alarm</a>
Max. Instances	1200
Introduced	16.0.R1
Platforms	All

**[rmon-alarm-id]** *number*

Synopsis	Index ID for an entry in the alarm table
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i>

Tree	<a href="#">alarm</a>
Range	0 to 65400
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **falling-event** *number*

Synopsis	RMON event ID for falling threshold crossing event
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <a href="#">falling-event</a> <i>number</i>
Tree	<a href="#">falling-event</a>
Range	0 to 65400
Introduced	16.0.R1
Platforms	All

### **falling-threshold** *number*

Synopsis	Falling threshold for the sampled statistic
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <a href="#">falling-threshold</a> <i>number</i>
Tree	<a href="#">falling-threshold</a>
Description	<p>This command specifies a falling threshold for the sampled statistic. When the current sampled value is less than or equal to this threshold and the value at the last sampling interval was greater than this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken is less than or equal to this threshold and the associated <b>startup-alarm</b> command is set to <b>falling</b> or <b>either</b>.</p> <p>After a falling threshold crossing event is generated, another such event is not generated until the sampled value exceeds this threshold and reaches or exceeds the <b>rising-threshold</b> command setting.</p>
Range	-2147483648 to 2147483647
Introduced	16.0.R1
Platforms	All

### **interval** *number*

Synopsis	Polling period over which data is sampled and compared
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <a href="#">interval</a> <i>number</i>



Tree	<a href="#">interval</a>
Description	This command specifies the polling interval over which the data is sampled and compared with the rising and falling thresholds
Range	1 to 2147483647
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**owner string**

Synopsis	Owner that created this entry and uses the resources
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <b>owner</b> <i>string</i>
Tree	<a href="#">owner</a>
String Length	1 to 80
Default	TIMOS CLI
Introduced	16.0.R1
Platforms	All

**rising-event number**

Synopsis	RMON event ID for rising threshold crossing event
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <b>rising-event</b> <i>number</i>
Tree	<a href="#">rising-event</a>
Range	0 to 65400
Introduced	16.0.R1
Platforms	All

**rising-threshold number**

Synopsis	Rising threshold for the sampled statistic
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <b>rising-threshold</b> <i>number</i>
Tree	<a href="#">rising-threshold</a>
Description	This command specifies the rising threshold for the sampled statistic. When the current sampled value is greater than or equal to this threshold and the value at the last sampling interval was below this threshold, a single threshold crossing event is generated. A single threshold crossing event is also generated if the first sample taken

is greater than or equal to this threshold and the associated **startup-alarm** command is set to **rising** or **either**.

After a rising threshold crossing event is generated, another such event is not generated until the sampled value falls below this threshold and reaches or falls below the **falling-threshold** command setting.

Range	-2147483648 to 2147483647
Introduced	16.0.R1
Platforms	All

### **sample-type** *keyword*

Synopsis	Sampling type for value comparison with thresholds
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <b>sample-type</b> <i>keyword</i>
Tree	<a href="#">sample-type</a>
Options	absolute, delta
Default	absolute
Introduced	16.0.R1
Platforms	All

### **startup-alarm** *keyword*

Synopsis	Alarm to send when this entry is first set to valid
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <b>startup-alarm</b> <i>keyword</i>
Tree	<a href="#">startup-alarm</a>
Options	rising, falling, either
Default	either
Introduced	16.0.R1
Platforms	All

### **variable-oid** *string*

Synopsis	Object identifier to sample the specific variable
Context	<b>configure</b> <a href="#">system</a> <a href="#">thresholds</a> <a href="#">rmon</a> <a href="#">alarm</a> <i>number</i> <b>variable-oid</b> <i>string</i>
Tree	<a href="#">variable-oid</a>
String Length	1 to 255
Notes	This element is mandatory.

Introduced 16.0.R1  
 Platforms All

### **event** [*rmon-event-id*] *number*

Synopsis Enter the **event** list instance  
 Context **configure system thresholds rmon event** *number*  
 Tree [event](#)  
 Max. Instances 1200  
 Introduced 16.0.R1  
 Platforms All

### **[rmon-event-id]** *number*

Synopsis Index ID for an entry in the event table  
 Context **configure system thresholds rmon event** *number*  
 Tree [event](#)  
 Range 1 to 65400  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **description** *string*

Synopsis Text description  
 Context **configure system thresholds rmon event** *number* [description](#) *string*  
 Tree [description](#)  
 String Length 1 to 80  
 Introduced 16.0.R1  
 Platforms All

### **event-type** *keyword*

Synopsis Notification action to be taken when the event occurs

Context	<b>configure system thresholds rmon event</b> <i>number event-type keyword</i>
Tree	<a href="#">event-type</a>
Options	none, log, trap, both
Default	both
Introduced	16.0.R1
Platforms	All

### **owner** *string*

Synopsis	Owner that created this entry and uses the resources
Context	<b>configure system thresholds rmon event</b> <i>number owner string</i>
Tree	<a href="#">owner</a>
String Length	1 to 80
Default	TIMOS CLI
Introduced	16.0.R1
Platforms	All

### **time**

Synopsis	Enter the <b>time</b> context
Context	<b>configure system time</b>
Tree	<a href="#">time</a>
Introduced	16.0.R1
Platforms	All

### **dst-zone** [[summer-time-zone](#)] *string*

Synopsis	Enter the <b>dst-zone</b> list instance
Context	<b>configure system time dst-zone</b> <i>string</i>
Tree	<a href="#">dst-zone</a>
Max. Instances	1
Introduced	16.0.R1
Platforms	All

**[summer-time-zone]** *string*

Synopsis	Summer time zone name
Context	<b>configure system time dst-zone</b> <i>string</i>
Tree	<i>dst-zone</i>
String Length	1 to 5
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**end**

Synopsis	Enter the <b>end</b> context
Context	<b>configure system time dst-zone</b> <i>string</i> <b>end</b>
Tree	<i>end</i>
Introduced	16.0.R1
Platforms	All

**day** *keyword*

Synopsis	Day of the week to end Daylight Savings Time
Context	<b>configure system time dst-zone</b> <i>string</i> <b>end</b> <i>day</i> <i>keyword</i>
Tree	<i>day</i>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Default	sunday
Introduced	16.0.R1
Platforms	All

**hours-minutes** *string*

Synopsis	Time to end Daylight Savings Time in hh:mm format
Context	<b>configure system time dst-zone</b> <i>string</i> <b>end</b> <i>hours-minutes</i> <i>string</i>
Tree	<i>hours-minutes</i>
String Length	5
Default	00:00
Introduced	16.0.R1

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Platforms All

### **month** *keyword*

Synopsis Month to end Daylight Savings Time

Context **configure** [system](#) [time](#) [dst-zone](#) *string* [end](#) **month** *keyword*

Tree [month](#)

Options january, february, march, april, may, june, july, august, september, october, november, december

Default january

Introduced 16.0.R1

Platforms All

### **week** *keyword*

Synopsis Week of the month to end Daylight Savings Time

Context **configure** [system](#) [time](#) [dst-zone](#) *string* [end](#) **week** *keyword*

Tree [week](#)

Options first, second, third, fourth, last

Default first

Introduced 16.0.R1

Platforms All

### **offset** *number*

Synopsis Offset for Daylight Savings Time

Context **configure** [system](#) [time](#) [dst-zone](#) *string* **offset** *number*

Tree [offset](#)

Range 0 to 60

Units minutes

Default 60

Introduced 16.0.R1

Platforms All

**start**

Synopsis	Enter the <b>start</b> context
Context	<b>configure system time dst-zone string start</b>
Tree	<b>start</b>
Introduced	16.0.R1
Platforms	All

**day keyword**

Synopsis	Day of the week to start Daylight Savings Time
Context	<b>configure system time dst-zone string start day keyword</b>
Tree	<b>day</b>
Options	sunday, monday, tuesday, wednesday, thursday, friday, saturday
Default	sunday
Introduced	16.0.R1
Platforms	All

**hours-minutes string**

Synopsis	Time to start Daylight Savings Time in hh:mm format
Context	<b>configure system time dst-zone string start hours-minutes string</b>
Tree	<b>hours-minutes</b>
String Length	5
Default	00:00
Introduced	16.0.R1
Platforms	All

**month keyword**

Synopsis	Month to start Daylight Savings Time
Context	<b>configure system time dst-zone string start month keyword</b>
Tree	<b>month</b>
Options	january, february, march, april, may, june, july, august, september, october, november, december
Default	january

Introduced 16.0.R1  
Platforms All

### **week** *keyword*

Synopsis Week of the month to start Daylight Savings Time  
Context **configure system time dst-zone string start week keyword**  
Tree [week](#)  
Options first, second, third, fourth, last  
Default first  
Introduced 16.0.R1  
Platforms All

### **ntp**

Synopsis Enable the **ntp** context  
Context **configure system time ntp**  
Tree [ntp](#)  
Introduced 16.0.R1  
Platforms All

### **admin-state** *keyword*

Synopsis Administrative state of NTP execution  
Context **configure system time ntp admin-state keyword**  
Tree [admin-state](#)  
Options enable, disable  
Default disable  
Introduced 16.0.R1  
Platforms All

### **authentication-check** *boolean*

Synopsis Authenticate NTP PDUs and reject mismatches  
Context **configure system time ntp authentication-check boolean**



Tree	<a href="#">authentication-check</a>
Default	true
Introduced	16.0.R1
Platforms	All

### **authentication-key** [[key-id](#)] *number*

Synopsis	Enter the <b>authentication-key</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i>
Tree	<a href="#">authentication-key</a>
Introduced	16.0.R1
Platforms	All

### **[key-id]** *number*

Synopsis	Authentication key ID used for NTP packets
Context	<b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i>
Tree	<a href="#">authentication-key</a>
Range	1 to 255
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **key** *string*

Synopsis	Key to authenticate NTP packets
Context	<b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i> <a href="#">key</a> <i>string</i>
Tree	<a href="#">key</a>
String Length	1 to 71
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**type** *keyword*

Synopsis	Authentication method to authenticate NTP packet
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp authentication-key</a> <i>number</i> <a href="#">type</a> <i>keyword</i>
Tree	<a href="#">type</a>
Options	des, message-digest
Notes	This element is mandatory.
Introduced	16.0.R1
Platforms	All

**authentication-keychain** *reference*

Synopsis	Authentication keychain for unsolicited traffic
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command configures the authentication keychain used to handle unsolicited NTP requests.  If a request is received with a key ID that matches both a configured key and the keychain, the MAC is checked first using the key information. If the authentication fails, the MAC is checked using the information from the keychain.
Reference	<b>configure</b> <a href="#">system security keychains keychain</a> <i>string</i>
Introduced	23.10.R1
Platforms	All

**broadcast** [[router-instance](#)] *reference interface-name string*

Synopsis	Enter the <b>broadcast</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast</a> <i>reference interface-name string</i>
Tree	<a href="#">broadcast</a>
Introduced	16.0.R1
Platforms	All

**[router-instance]** *reference*

Synopsis	Router name
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp broadcast</a> <i>reference interface-name string</i>
Tree	<a href="#">broadcast</a>

Reference	<b>configure</b> <a href="#">router</a> <i>string</i>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **interface-name** *string*

Synopsis	Interface to transmit or receive NTP broadcast packets
Context	<b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">ntp</a> <a href="#">broadcast</a> <i>reference</i> <a href="#">interface-name</a> <i>string</i>
Tree	<a href="#">broadcast</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">ntp</a> <a href="#">broadcast</a> <i>reference</i> <a href="#">interface-name</a> <i>string</i> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	<p>This command configures the keychain used to authenticate messages sent by this node.</p> <p>The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.</p>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	23.10.R1
Platforms	All

**key-id reference**

Synopsis	Authentication key and type used by the node
Context	<b>configure system time ntp broadcast reference interface-name string key-id reference</b>
Tree	<a href="#">key-id</a>
Reference	<b>configure system time ntp authentication-key number</b>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	16.0.R1
Platforms	All

**ttl number**

Synopsis	TTL of messages transmitted by the broadcast address
Context	<b>configure system time ntp broadcast reference interface-name string ttl number</b>
Tree	<a href="#">ttl</a>
Range	1 to 255
Default	127
Introduced	16.0.R1
Platforms	All

**version number**

Synopsis	NTP version number generated by the node
Context	<b>configure system time ntp broadcast reference interface-name string version number</b>
Tree	<a href="#">version</a>
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

**broadcast-client [router-instance] string interface-name string**

Synopsis	Enter the <b>broadcast-client</b> list instance
Context	<b>configure system time ntp broadcast-client string interface-name string</b>
Tree	<a href="#">broadcast-client</a>
Introduced	16.0.R1

Platforms All

### **[router-instance]** *string*

Synopsis Router name or VPRN service name  
 Context **configure** [system](#) [time ntp broadcast-client](#) *string* [interface-name](#) *string*  
 Tree [broadcast-client](#)  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **interface-name** *string*

Synopsis Interface to transmit or receive NTP broadcast packets  
 Context **configure** [system](#) [time ntp broadcast-client](#) *string* [interface-name](#) *string*  
 Tree [broadcast-client](#)  
 String Length 1 to 32  
 Notes This element is part of a list key.  
 Introduced 16.0.R1  
 Platforms All

### **authenticate** *boolean*

Synopsis Enforce authentication of NTP PDUs  
 Context **configure** [system](#) [time ntp broadcast-client](#) *string* [interface-name](#) *string* **authenticate** *boolean*  
 Tree [authenticate](#)  
 Default false  
 Introduced 16.0.R1  
 Platforms All

### **multicast**

Synopsis Enable the **multicast** context  
 Context **configure** [system](#) [time ntp multicast](#)

Tree	<a href="#">multicast</a>
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">ntp</a> <a href="#">multicast</a> <a href="#">authentication-keychain</a> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command configures the keychain used to authenticate messages sent by this node.  The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security</a> <a href="#">keychains</a> <a href="#">keychain</a> <i>string</i>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	23.10.R1
Platforms	All

### **key-id** *reference*

Synopsis	Authentication key and type used by the node
Context	<b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">ntp</a> <a href="#">multicast</a> <a href="#">key-id</a> <i>reference</i>
Tree	<a href="#">key-id</a>
Reference	<b>configure</b> <a href="#">system</a> <a href="#">time</a> <a href="#">ntp</a> <a href="#">authentication-key</a> <i>number</i>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	16.0.R1
Platforms	All

### **version** *number*

Synopsis	NTP version number generated by the node
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Context	<b>configure system time ntp multicast version</b> <i>number</i>
Tree	<a href="#">version</a>
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

### **multicast-client**

Synopsis	Enable the <b>multicast-client</b> context
Context	<b>configure system time ntp multicast-client</b>
Tree	<a href="#">multicast-client</a>
Introduced	16.0.R1
Platforms	All

### **authenticate** *boolean*

Synopsis	Enforce authentication of NTP PDUs
Context	<b>configure system time ntp multicast-client authenticate</b> <i>boolean</i>
Tree	<a href="#">authenticate</a>
Default	false
Introduced	16.0.R1
Platforms	All

### **ntp-server**

Synopsis	Enable the <b>ntp-server</b> context
Context	<b>configure system time ntp ntp-server</b>
Tree	<a href="#">ntp-server</a>
Introduced	16.0.R1
Platforms	All

**authenticate** *boolean*

Synopsis	Authentication of NTP PDUs when acting as a server
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp ntp-server</a> <a href="#">authenticate</a> <i>boolean</i>
Tree	<a href="#">authenticate</a>
Default	false
Introduced	16.0.R1
Platforms	All

**peer** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*) [router-instance](#) *string*

Synopsis	Enter the <b>peer</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">peer</a>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the peer for a peering relationship
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**router-instance** *string*

Synopsis	Router name or VPRN service name
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp peer</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">router-instance</a> <i>string</i>
Tree	<a href="#">peer</a>
Notes	This element is part of a list key.
Introduced	16.0.R1



Platforms All

### **authentication-keychain** *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	<b>configure</b> <b>system</b> <b>time</b> <b>ntp</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>router-instance</b> <i>string</i> <b>authentication-keychain</b> <i>reference</i>
Tree	<b>authentication-keychain</b>
Description	This command configures the keychain used to authenticate messages sent by this node.  The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.
Reference	<b>configure</b> <b>system</b> <b>security</b> <b>keychains</b> <b>keychain</b> <i>string</i>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	23.10.R1
Platforms	All

### **key-id** *reference*

Synopsis	Authentication key and type used by the node
Context	<b>configure</b> <b>system</b> <b>time</b> <b>ntp</b> <b>peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>router-instance</b> <i>string</i> <b>key-id</b> <i>reference</i>
Tree	<b>key-id</b>
Reference	<b>configure</b> <b>system</b> <b>time</b> <b>ntp</b> <b>authentication-key</b> <i>number</i>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	16.0.R1
Platforms	All

### **prefer** *boolean*

Synopsis	Set NTP server as preferred to receive time
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Context	<b>configure system time ntp peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>router-instance string prefer boolean</b>
Tree	<b>prefer</b>
Default	false
Introduced	16.0.R1
Platforms	All

### **version number**

Synopsis	NTP version number generated by the node
Context	<b>configure system time ntp peer</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <b>router-instance string version number</b>
Tree	<b>version</b>
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

### **server [ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*) **router-instance string**

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure system time ntp server</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>keyword</i> ) <b>router-instance string</b>
Tree	<b>server</b>
Introduced	16.0.R1
Platforms	All

### **[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone* | *keyword*)

Synopsis	IP address of an external NTP server
Context	<b>configure system time ntp server</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>keyword</i> ) <b>router-instance string</b>
Tree	<b>server</b>

Options	ptp
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **router-instance** *string*

Synopsis	Router name or VPRN service name
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>keyword</i> ) <b>router-instance</b> <i>string</i>
Tree	<a href="#">server</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **authentication-keychain** *reference*

Synopsis	Keychain used to authenticate broadcast messages
Context	<b>configure</b> <a href="#">system</a> <a href="#">time ntp server</a> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i>   <i>keyword</i> ) <b>router-instance</b> <i>string</i> <b>authentication-keychain</b> <i>reference</i>
Tree	<a href="#">authentication-keychain</a>
Description	This command configures the keychain used to authenticate messages sent by this node.  The keychain infrastructure is queried using this keychain name to get the youngest key used for generating the authentication value for the message. When an NTP packet is received by this node, the keychain infrastructure is queried using the keychain name and the key ID extracted from the received message to get the key used to perform the authentication check. If authentication does not pass, the packet is rejected. Keychain entries also have a direction. The key ID and authentication keychain are mutually exclusive. When neither one is set, for example, the key ID has a value of '0' and the value of this command is empty, no authentication is performed.
Reference	<b>configure</b> <a href="#">system</a> <a href="#">security keychains</a> <b>keychain</b> <i>string</i>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	23.10.R1
Platforms	All

**key-id reference**

Synopsis	Authentication key and type used by the node
Context	<b>configure</b> <a href="#">system time ntp server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   keyword</i> ) <a href="#">router-instance</a> <i>string</i> <a href="#">key-id</a> <i>reference</i>
Tree	<a href="#">key-id</a>
Reference	<b>configure</b> <a href="#">system time ntp authentication-key</a> <i>number</i>
Notes	The following elements are part of a choice: <b>authentication-keychain</b> or <b>key-id</b> .
Introduced	16.0.R1
Platforms	All

**prefer boolean**

Synopsis	Set NTP server as preferred to receive time
Context	<b>configure</b> <a href="#">system time ntp server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   keyword</i> ) <a href="#">router-instance</a> <i>string</i> <a href="#">prefer</a> <i>boolean</i>
Tree	<a href="#">prefer</a>
Default	false
Introduced	16.0.R1
Platforms	All

**version number**

Synopsis	NTP version number generated by the node
Context	<b>configure</b> <a href="#">system time ntp server</a> ( <i>ipv4-address-no-zone   ipv6-address-no-zone   keyword</i> ) <a href="#">router-instance</a> <i>string</i> <a href="#">version</a> <i>number</i>
Tree	<a href="#">version</a>
Description	This command specifies the NTP version number that is generated by the node. This command does not need to be configured when in client mode, in which case all three versions are accepted.
Range	2 to 4
Default	4
Introduced	16.0.R1
Platforms	All

**prefer-local-time** *boolean*

Synopsis	Use local time over UTC time in the system
Context	<b>configure</b> <a href="#">system time prefer-local-time</a> <i>boolean</i>
Tree	<a href="#">prefer-local-time</a>
Description	<p>When configured to <b>true</b>, the system uses local time. This preference is applied to objects such as log file names, created and completed times reported in log files, NETCONF and gRPC date-and-time leafs, and rollback times displayed in <b>show</b> command outputs.</p> <p>When configured to <b>false</b>, the system uses UTC time.</p> <p><b>Note:</b> The timezone used for <b>show</b> command outputs during a CLI session can be controlled using the <b>environment time-display</b> command.</p> <p><b>Note:</b> The format used for the date-time strings may change, depending on the command setting. For example, when this command is set to <b>true</b>, all date-time strings include a suffix of three to five characters that indicates the timezone used.</p> <p><b>Note:</b> The time format for timestamps on log events is controlled on a per-log basis, using the <b>configure log log-id time-format</b> command.</p>
Default	false
Introduced	16.0.R1
Platforms	All

**sntp**

Synopsis	Enter the <b>sntp</b> context
Context	<b>configure</b> <a href="#">system time sntp</a>
Tree	<a href="#">sntp</a>
Introduced	16.0.R1
Platforms	All

**admin-state** *keyword*

Synopsis	Administrative state of SNTP
Context	<b>configure</b> <a href="#">system time sntp admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R1
Platforms	All

**server** [[ip-address](#)] (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	Enter the <b>server</b> list instance
Context	<b>configure system time sntp server</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">server</a>
Introduced	16.0.R1
Platforms	All

**[ip-address]** (*ipv4-address-no-zone* | *ipv6-address-no-zone*)

Synopsis	IP address of the SNTP server
Context	<b>configure system time sntp server</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> )
Tree	<a href="#">server</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

**interval** *number*

Synopsis	Frequency of querying the server
Context	<b>configure system time sntp server</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	64 to 1024
Units	seconds
Default	64
Introduced	16.0.R1
Platforms	All

**prefer** *boolean*

Synopsis	Preference value for this SNTP server
Context	<b>configure system time sntp server</b> ( <i>ipv4-address-no-zone</i>   <i>ipv6-address-no-zone</i> ) <a href="#">prefer</a> <i>boolean</i>
Tree	<a href="#">prefer</a>
Default	false

Introduced	16.0.R1
Platforms	All

### **version number**

Synopsis	SNTP version supported by this server
Context	<b>configure system time sntp server</b> ( <i>ipv4-address-no-zone   ipv6-address-no-zone</i> ) <b>version number</b>
Tree	<b>version</b>
Range	1 to 3
Default	3
Introduced	16.0.R1
Platforms	All

### **sntp-state keyword**

Synopsis	Mode for Simple Network Time Protocol (SNTP)
Context	<b>configure system time sntp sntp-state keyword</b>
Tree	<b>sntp-state</b>
Options	unicast, broadcast
Default	unicast
Introduced	16.0.R1
Platforms	All

### **zone**

Synopsis	Enter the <b>zone</b> context
Context	<b>configure system time zone</b>
Tree	<b>zone</b>
Introduced	16.0.R1
Platforms	All

### **non-standard**

Synopsis	Enter the <b>non-standard</b> context
Context	<b>configure system time zone non-standard</b>

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Tree	<a href="#">non-standard</a>
Notes	The following elements are part of a choice: <b>non-standard</b> or <b>standard</b> .
Introduced	16.0.R1
Platforms	All

### **name** *string*

Synopsis	Non-standard time zone name
Context	<b>configure</b> <a href="#">system time zone non-standard name</a> <i>string</i>
Tree	<a href="#">name</a>
String Length	1 to 5
Introduced	16.0.R1
Platforms	All

### **offset** *string*

Synopsis	Offset from UTC
Context	<b>configure</b> <a href="#">system time zone non-standard offset</a> <i>string</i>
Tree	<a href="#">offset</a>
String Length	5 to 6
Introduced	16.0.R1
Platforms	All

### **standard**

Synopsis	Enter the <b>standard</b> context
Context	<b>configure</b> <a href="#">system time zone standard</a>
Tree	<a href="#">standard</a>
Notes	The following elements are part of a choice: <b>non-standard</b> or <b>standard</b> .
Introduced	16.0.R1
Platforms	All

### **name** *keyword*

Synopsis	Standard time zone name
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Context	<b>configure system time zone standard name keyword</b>
Tree	<a href="#">name</a>
Options	hst, akst, pst, mst, cst, est, ast, nst, utc, gmt, wet, cet, eet, msk, msd, awst, acst, aest, nzst
Default	utc
Introduced	16.0.R1
Platforms	All

### **transmission-profile** [[name](#)] *string*

Synopsis	Enter the <b>transmission-profile</b> list instance
Context	<b>configure system transmission-profile string</b>
Tree	<a href="#">transmission-profile</a>
Introduced	16.0.R4
Platforms	All

### **[name]** *string*

Synopsis	File transmission profile name
Context	<b>configure system transmission-profile string</b>
Tree	<a href="#">transmission-profile</a>
String Length	1 to 32
Notes	This element is part of a list key.
Introduced	16.0.R4
Platforms	All

### **http-version** *keyword*

Synopsis	HTTP version
Context	<b>configure system transmission-profile string http-version keyword</b>
Tree	<a href="#">http-version</a>
Options	1.0, 1.1
Default	1.1
Introduced	23.3.R1
Platforms	All

### **ipv4-source-address** *string*

Synopsis	IPv4 source address used for the transport protocol
Context	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i> <b>ipv4-source-address</b> <i>string</i>
Tree	<a href="#">ipv4-source-address</a>
Introduced	16.0.R4
Platforms	All

### **ipv6-source-address** *string*

Synopsis	IPv6 source address used for the transport protocol
Context	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i> <b>ipv6-source-address</b> <i>string</i>
Tree	<a href="#">ipv6-source-address</a>
Introduced	16.0.R4
Platforms	All

### **redirection** *number*

Synopsis	Maximum level of redirection
Context	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i> <b>redirection</b> <i>number</i>
Tree	<a href="#">redirection</a>
Range	1 to 8
Introduced	16.0.R4
Platforms	All

### **retry** *number*

Synopsis	Number of attempts to reconnecting to the server
Context	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i> <b>retry</b> <i>number</i>
Tree	<a href="#">retry</a>
Range	1 to 256
Introduced	16.0.R4
Platforms	All

**router-instance** *string*

Synopsis	Router instance used by the transport protocol
Context	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i> <b>router-instance</b> <i>string</i>
Tree	<a href="#">router-instance</a>
String Length	1 to 64
Default	Base
Introduced	16.0.R4
Platforms	All

**timeout** *number*

Synopsis	Timeout for a response from the server
Context	<b>configure</b> <a href="#">system</a> <a href="#">transmission-profile</a> <i>string</i> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 3600
Units	seconds
Default	60
Introduced	16.0.R4
Platforms	All

**usb** [[usb-cflash](#)] *keyword*

Synopsis	Enter the <b>usb</b> list instance
Context	<b>configure</b> <a href="#">system</a> <a href="#">usb</a> <i>keyword</i>
Tree	<a href="#">usb</a>
Description	Commands in this context configure the operational state of the USB port.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

**[usb-cflash]** *keyword*

Synopsis	Specifies the compact flash ID
Context	<b>configure</b> <a href="#">system</a> <a href="#">usb</a> <i>keyword</i>
Tree	<a href="#">usb</a>

---

Options	cf2
Notes	This element is part of a list key.
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

### **admin-state** *keyword*

Synopsis	Administrative state of the USB port
Context	<b>configure</b> <b>system</b> <b>usb</b> <i>keyword</i> <b>admin-state</b> <i>keyword</i>
Tree	<b>admin-state</b>
Options	enable, disable
Default	disable
Introduced	22.10.R1
Platforms	7750 SR-1-24D, 7750 SR-1-46S, 7750 SR-1-48D, 7750 SR-1-92S, 7750 SR-1x-48D, 7750 SR-1x-92S, 7750 SR-1se, 7750 SR-2se

## 3.47 test-oam commands

```

configure
- test-oam
  - apply-groups reference
  - apply-groups-exclude reference
  - icmp
    - ipv6
      - apply-groups reference
      - apply-groups-exclude reference
      - length-field boolean
      - maximum-original-datagram boolean
    - ping-template string
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - dot1p number
      - dscp keyword
      - failure-threshold number
      - interval number
      - reactivation-failure-threshold number
      - reactivation-interval number
      - reactivation-threshold number
      - reactivation-timeout number
      - size number
      - timeout number
      - ttl number
  - link-measurement
    - measurement-template string
      - admin-state keyword
      - aggregate-sample-window
        - multiplier number
        - threshold
          - absolute number
          - relative number
        - window-integrity number
      - apply-groups reference
      - apply-groups-exclude reference
      - delay keyword
      - description string
      - interval number
      - last-reported-delay-hold number
      - reporting boolean
      - sample-window
        - multiplier number
        - threshold
          - absolute number
          - relative number
        - window-integrity number
      - twamp-light
        - allow-egress-remark-dscp boolean
        - allow-ipv6-udp-checksum-zero boolean
        - dest-udp-port number
        - dscp keyword
        - fc keyword
        - ipv6-destination-discovery
          - admin-state keyword
          - discovery-interval number
          - discovery-timer number
          - update-interval number
        - pad-tlv-size number

```

configure test-oam link-measurement measurement-template twamp-light profile

```

    - profile keyword
    - return-path
      - link boolean
    - src-udp-port number
    - timestamp-format keyword
    - ttl number
    - unidirectional-measurement keyword
- mpls
  - apply-groups reference
  - apply-groups-exclude reference
  - echo-request-downstream-map keyword
  - timestamp-format keyword
- mpls-dm
  - admin-state keyword
  - apply-groups reference
  - apply-groups-exclude reference
- service-activation-testhead
  - acceptance-criteria-template string
    - apply-groups reference
    - apply-groups-exclude reference
    - cir-threshold number
    - delay-threshold number
    - delay-var-threshold number
    - description string
    - loss-threshold decimal-number
    - loss-threshold-policing decimal-number
    - m-factor number
    - pir-threshold number
  - apply-groups reference
  - apply-groups-exclude reference
  - frame-size-template string
    - apply-groups reference
    - apply-groups-exclude reference
    - size-a number
    - size-b number
    - size-c number
    - size-d number
    - size-e number
    - size-f number
    - size-g number
    - size-h number
    - size-u number
  - service-test string
    - accounting-policy reference
    - admin-state keyword
    - apply-groups reference
    - apply-groups-exclude reference
    - description string
    - service-stream number
      - acceptance-criteria-template reference
      - admin-state keyword
      - apply-groups reference
      - apply-groups-exclude reference
      - description string
      - frame-mix
        - frame-size-template reference
        - sequence string
      - frame-payload
        - data-pattern
          - repeat (hex-string | number)
        - ethernet
          - c-tag
            - discard-eligible boolean
            - dot1p number

```

configure test-oam service-activation-testhead service-test service-stream frame-payload ethernet dst-mac

- **dst-mac** *string*
- **eth-cfm**
  - **source**
    - **ma-admin-name** *reference*
    - **md-admin-name** *reference*
    - **mep-id** *number*
  - **s-tag**
    - **discard-eligible** *boolean*
    - **dot1p** *number*
- **rate-cir** *number*
- **rate-pir** *number*
- **service-stream-completion-notification** *boolean*
- **test-types**
  - **cir** *boolean*
  - **cir-pir** *boolean*
  - **performance** *boolean*
  - **policing** *boolean*
- **service-test-completion-notification** *boolean*
- **stream-run-type** *keyword*
- **test-duration**
  - **cir**
    - **minutes-seconds** *string*
  - **cir-pir**
    - **minutes-seconds** *string*
  - **performance**
    - **hours-minutes-seconds** *string*
  - **policing**
    - **minutes-seconds** *string*
- **twamp**
  - **apply-groups** *reference*
  - **apply-groups-exclude** *reference*
  - **server**
    - **admin-state** *keyword*
    - **allow-ipv6-udp-checksum-zero** *boolean*
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **enforce-test-session-start-time** *boolean*
    - **inactivity-timeout** *number*
    - **max-connections** *number*
    - **max-sessions** *number*
    - **prefix** (*ipv4-prefix | ipv6-prefix*)
      - **apply-groups** *reference*
      - **apply-groups-exclude** *reference*
      - **description** *string*
      - **max-connections** *number*
      - **max-sessions** *number*
  - **twamp-light**
    - **apply-groups** *reference*
    - **apply-groups-exclude** *reference*
    - **inactivity-timeout** *number*
    - **source-udp-port-pools**
      - **port** *number*
        - **apply-groups** *reference*
        - **apply-groups-exclude** *reference*
        - **pool-type** *keyword*

### 3.47.1 test-oam command descriptions

#### test-oam

Synopsis	Enter the <b>test-oam</b> context
Context	<b>configure test-oam</b>
Tree	<a href="#">test-oam</a>
Introduced	16.0.R4
Platforms	All

#### icmp

Synopsis	Enter the <b>icmp</b> context
Context	<b>configure test-oam icmp</b>
Tree	<a href="#">icmp</a>
Introduced	20.10.R1
Platforms	All

#### ipv6

Synopsis	Enter the <b>ipv6</b> context
Context	<b>configure test-oam icmp ipv6</b>
Tree	<a href="#">ipv6</a>
Introduced	22.7.R1
Platforms	All

#### length-field *boolean*

Synopsis	Use length field in ICMPv6 responses
Context	<b>configure test-oam icmp ipv6 length-field boolean</b>
Tree	<a href="#">length-field</a>
Default	false
Introduced	22.7.R1
Platforms	All



**maximum-original-datagram** *boolean*

Synopsis	ICMPv6 traceroute responses with largest datagram
Context	<b>configure test-oam icmp ipv6 maximum-original-datagram</b> <i>boolean</i>
Tree	<a href="#">maximum-original-datagram</a>
Description	When configured to <b>true</b> , this command enables the original datagram field of the ICMPv6 error message to be a maximum of 1232 bytes.  When configured to <b>false</b> , the original datagram field of the ICMPv6 error message smaller than 1232 bytes be built smaller.
Default	false
Introduced	22.7.R1
Platforms	All

**ping-template** [[name](#)] *string*

Synopsis	Enter the <b>ping-template</b> list instance
Context	<b>configure test-oam icmp ping-template</b> <i>string</i>
Tree	<a href="#">ping-template</a>
Description	Commands in this context define ping timers and thresholds that verify connectivity and the the operational state of the IP interface.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**[name]** *string*

Synopsis	Ping template name
Context	<b>configure test-oam icmp ping-template</b> <i>string</i>
Tree	<a href="#">ping-template</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
----------	------------------

Context	<b>configure test-oam icmp ping-template</b> <i>string description string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dot1p** *number*

Synopsis	Dot1p in Ethernet header of outgoing ping packets
Context	<b>configure test-oam icmp ping-template</b> <i>string dot1p number</i>
Tree	<a href="#">dot1p</a>
Range	0 to 7
Default	7
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dscp** *keyword*

Synopsis	DSCP value used in the outgoing ping packet
Context	<b>configure test-oam icmp ping-template</b> <i>string dscp keyword</i>
Tree	<a href="#">dscp</a>
Options	be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63
Default	nc1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **failure-threshold** *number*

Synopsis	Failure threshold to declare inter-connectivity down
Context	<b>configure test-oam icmp ping-template</b> <i>string failure-threshold number</i>
Tree	<a href="#">failure-threshold</a>
Range	2 to 10

Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*

Synopsis	Packet transmit interval
Context	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">interval</a> <i>number</i>
Tree	<a href="#">interval</a>
Range	1 to 60
Units	seconds
Default	60
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reactivation-failure-threshold** *number*

Synopsis	Threshold of consecutive failures at reactivation
Context	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">reactivation-failure-threshold</a> <i>number</i>
Tree	<a href="#">reactivation-failure-threshold</a>
Description	This command configures the number of consecutive failures that must occur when transmitting at the reactivation interval without success before the transmission interval is changed to the standard interval.
Range	1 to 10
Default	4
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reactivation-interval** *number*

Synopsis	Ping reactivation interval
Context	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">reactivation-interval</a> <i>number</i>
Tree	<a href="#">reactivation-interval</a>
Description	This command configures the packet transmit interval used when the IP interface becomes operationally down because of a ping template failure after receiving a successful response to the previous ICMP echo request.

Range	1 to 60
Units	seconds
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reactivation-threshold** *number*

Synopsis	Success threshold to declare inter-connectivity up
Context	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">reactivation-threshold</a> <i>number</i>
Tree	<a href="#">reactivation-threshold</a>
Description	This command configures the minimum number of consecutive successful responses of ICMP replies that must occur before the IP interface transitions from operationally down (due to ping validation failure) to operationally up. This value is a stability metric intended to prevent flapping.
Range	1 to 10
Default	3
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **reactivation-timeout** *number*

Synopsis	Reactivation wait time before packet is declared lost
Context	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">reactivation-timeout</a> <i>number</i>
Tree	<a href="#">reactivation-timeout</a>
Range	1 to 60
Units	seconds
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **size** *number*

Synopsis	Data field size of the outgoing ICMP echo packet
Context	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <a href="#">size</a> <i>number</i>
Tree	<a href="#">size</a>

Range	12 to 9786
Units	octets
Default	56
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **timeout** *number*

Synopsis	Wait time before ICMP echo request is declared lost
Context	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <b>timeout</b> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 60
Units	seconds
Default	5
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **ttl** *number*

Synopsis	TTL value for the outgoing ping packet
Context	<b>configure</b> <a href="#">test-oam icmp ping-template</a> <i>string</i> <b>tll</b> <i>number</i>
Tree	<a href="#">ttl</a>
Description	This command configures the TTL value used in the outgoing ping packet. The tested interface must be directly connected on the same subnet.
Range	1 to 255
Default	1
Introduced	20.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **link-measurement**

Synopsis	Enter the <b>link-measurement</b> context
Context	<b>configure</b> <a href="#">test-oam link-measurement</a>
Tree	<a href="#">link-measurement</a>

Description	Commands in this context configure the link measurement template attributes that are inherited on associated IP interfaces for delay reporting to the routing engine.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **measurement-template** [[template-name](#)] *string*

Synopsis	Enter the <b>measurement-template</b> list instance
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i>
Tree	<a href="#">measurement-template</a>
Description	<p>Commands in this context configure the attributes of the measurement template that can be assigned to an IP interface.</p> <p>Changes can be made without disabling the template, although some modifications cause the test on associated IP interfaces to terminate and restart.</p> <p>A measurement template can be removed if no interfaces reference it.</p>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[template-name]** *string*

Synopsis	Measurement template name
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i>
Tree	<a href="#">measurement-template</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis	Administrative state of the measurement template
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## aggregate-sample-window

Synopsis	Enter the <b>aggregate-sample-window</b> context
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window</a>
Tree	<a href="#">aggregate-sample-window</a>
Description	Commands in this context configure the attributes of the aggregate sample window used with the measurement template assigned to an IP interface. The aggregate sample window is the collection of sample windows.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## multiplier *number*

Synopsis	Number of sample windows in the aggregate sample window
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Range	1 to 12
Default	12
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## threshold

Synopsis	Enter the <b>threshold</b> context
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window threshold</a>
Tree	<a href="#">threshold</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**absolute number**

Synopsis	Absolute delta for delay measurement reporting
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window threshold absolute number</a>
Tree	<a href="#">absolute</a>
Description	This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.  If an absolute value is not configured the threshold is disabled.
Range	1 to 100000
Units	microseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**relative number**

Synopsis	Relative delta for measurement reporting
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window threshold relative number</a>
Tree	<a href="#">relative</a>
Description	This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.  If a relative value is not configured, the threshold is disabled.
Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**window-integrity number**

Synopsis	Sample percentage required for window integrity report
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">aggregate-sample-window window-integrity number</a>
Tree	<a href="#">window-integrity</a>
Description	This command configures the percentage value that is used to determine whether the aggregate sample window is integral, by comparing the number of samples received from the sample window to the percentage configured.



The configured percentage translates to a required sample window count that must be included in the aggregate sample window. The number of samples is computed as follows:

$$(\text{window-integrity (\%)}) \times (((\text{aggregate-sample-window length (s)}) / (\text{sample-window length (s)}))$$

If the number of samples in the aggregate sample window is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.

If the count is less than the computed number of required samples, the aggregate sample window does not have integrity and the value is not considered as representative. In this case the aggregate sample window results are not compared to the configured sample window thresholds.

If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.

Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **delay** *keyword*

Synopsis	Delay measurement statistic type
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <b>delay</b> <i>keyword</i>
Tree	<a href="#">delay</a>
Description	This command configures the type of delay measurement statistic used in the sample window and aggregate sample window.
Options	min, max, avg
Default	min
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <b>description</b> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80

Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **interval** *number*

Synopsis	Interval between test packet transmissions
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string interval number</i>
Tree	<a href="#">interval</a>
Range	1 to 10
Units	seconds
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **last-reported-delay-hold** *number*

Synopsis	Time to wait to flush the last reported delay
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string last-reported-delay-hold number</i>
Tree	<a href="#">last-reported-delay-hold</a>
Description	<p>This command configures the timer that specifies the wait time before the last reported delay measurement is flushed after a link measurement test enters the operationally down state.</p> <p>The aging timer delays the flushing of the last reported delay metric to the routing engine. This timer starts a countdown to zero when an administrative function causes the operational state of the test on that specific interface to transition from up to down. If the timer expires before the operational state transitions to up, the previously reported value is flushed. The Delay Measurement Last Reported indicates “Cleared”. The timestamp indicates the time of the clear event. The Triggered By indicates “Expired”. If the administrative state recovers to operationally up before the expiration of the timer, the previous reported value is not flushed.</p> <p>The aging timer does not apply to failure conditions that do not affect the administrative state of the interface, for example interface failure or routing changes.</p>
Range	0   1 to 86400
Units	seconds
Default	86400
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**reporting** *boolean*

Synopsis	Report behavior for values for the configured threshold
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">reporting</a> <i>boolean</i>
Tree	<a href="#">reporting</a>
Description	<p>When configured to <b>true</b>, the system reports a reached threshold to the routing engine. Reaching a configured <b>sample-window</b> or <b>aggregate-sample-window</b> indicates a value of interest.</p> <p>When configured to <b>false</b>, values reaching thresholds are not reported to the routing engine. In both enabled and disabled cases, the sample-window and aggregate-sample-window information and computed values are stored on the node until overwriting occurs.</p>
Default	true
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**sample-window**

Synopsis	Enter the <b>sample-window</b> context
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window</a>
Tree	<a href="#">sample-window</a>
Description	Commands in this context configure sample window attributes used when the measurement template is assigned to an IP interface. The sample window is the collection of individual probe results over a defined period.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**multiplier** *number*

Synopsis	Multiplier of interval used for sample window length
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window</a> <a href="#">multiplier</a> <i>number</i>
Tree	<a href="#">multiplier</a>
Description	This command configures the number of probe results that should be in the sample window. For example, a multiplier of 10 and an interval of 5 equals 50 probes being transmitted from an individual sample window. Consequently, 50 probe results are expected within the 50 second duration that the sample window is "In-progress".
Range	1 to 900

Default	10
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## threshold

Synopsis	Enter the <b>threshold</b> context
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window</a> <b>threshold</b>
Tree	<a href="#">threshold</a>
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## absolute *number*

Synopsis	Absolute delta for delay measurement reporting
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window</a> <b>threshold</b> <b>absolute</b> <i>number</i>
Tree	<a href="#">absolute</a>
Description	This command configures the absolute minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.  If an absolute value is not configured the threshold is disabled.
Range	1 to 100000
Units	microseconds
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## relative *number*

Synopsis	Relative delta for delay measurement reporting
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">sample-window</a> <b>threshold</b> <b>relative</b> <i>number</i>
Tree	<a href="#">relative</a>
Description	This command configures the relative minimum delta by which a new delay measurement must differ from the previously reported measurement to be reported to the routing engine.

	If a relative value is not configured, the threshold is disabled.
Range	1 to 500
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **window-integrity** *number*

Synopsis	Sample percentage required for window integrity report
Context	<b>configure</b> <b>test-oam</b> <b>link-measurement</b> <b>measurement-template</b> <i>string</i> <b>sample-window</b> <b>window-integrity</b> <i>number</i>
Tree	<b>window-integrity</b>
Description	<p>This command configures the percentage value that is used to determine whether the sample window has enough samples to be considered representative for that window (integrity), by comparing the number of samples received from the sample window to the percentage configured.</p> <p>The configured percentage considers the interval of probes and the length of the sample window to determine the number of packets required in the sample:</p> $(\text{window-integrity } (\%)) \times ((\text{sample-window length } (s)) / \text{pps per test (interval)})$ <p>If the count is less than the computed number of required samples, the sample window does not have integrity and the sample window results are not compared to configured sample window thresholds.</p> <p>If the count is equal to or greater than the computed number of required samples, the sample window has integrity and the aggregate sample window result is compared to the configured sample window thresholds.</p> <p>If the count is less than the computed number of required samples, the sample window does not have integrity and the value is not considered as representative. In this case the sample window results are not compared to the configured sample window thresholds.</p> <p>If this parameter is not configured, integrity checking is disabled and all results are compared to the configured thresholds.</p>
Range	1 to 100
Units	percent
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **twamp-light**

Synopsis	Enter the <b>twamp-light</b> context
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Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light</a>
Tree	<a href="#">twamp-light</a>
Description	Commands in this context configure TWAMP Light attributes that are used with the measurement template when assigned to IP interfaces.
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **allow-egress-remark-dscp** *boolean*

Synopsis	Allow overwrite of DSCP value by the egress QoS policy
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">allow-egress-remark-dscp</a> <i>boolean</i>
Tree	<a href="#">allow-egress-remark-dscp</a>
Description	<p>When configured to <b>true</b>, the egress QoS process is able to modify the DSCP based on the egress QoS configuration and expose the DSCP to egress DSCP processing rules.</p> <p>When configured to <b>false</b>, the egress QoS process uses the DSCP as configured and bypasses egress QoS DSCP marking.</p> <p>If the <b>configure qos network egress remark-trusted force-egress-marking</b> command is configured for the network egress QoS profile, the egress QoS process is applied and the DSCP can be overwritten regardless of the <b>allow-egress-remark-dscp</b> configuration.</p>
Default	false
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **allow-ipv6-udp-checksum-zero** *boolean*

Synopsis	Process IPv6 packets with UDP check sum zero
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">allow-ipv6-udp-checksum-zero</a> <i>boolean</i>
Tree	<a href="#">allow-ipv6-udp-checksum-zero</a>
Description	<p>When configured to <b>true</b>, processing of IPv6 packets that arrive with a UDP checksum of zero is allowed. The destination UDP ports that are registered as TWAMP Test packets in the template allow this behavior.</p> <p>When configured to <b>false</b>, IPv6 packets that arrive with a UDP checksum of zero are discarded.</p>
Default	false
Introduced	21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dest-udp-port** *number*

Synopsis Destination UDP port used by link measurement tests

Context **configure** **test-oam link-measurement measurement-template** *string* **twamp-light dest-udp-port** *number*

Tree **dest-udp-port**

Description This command configures the destination UDP port on outbound TWAMP Light measurement packets sent from the session controller. The destination UDP port must match the UDP port value configured on the TWAMP Light reflector that responds to this specific TWAMP Light test.

Range 1 to 65535

Default 862

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **dscp** *keyword*

Synopsis DSCP copied to TWAMP Light echo request packet header

Context **configure** **test-oam link-measurement measurement-template** *string* **twamp-light dscp** *keyword*

Tree **dscp**

Description This command configures the DSCP to be copied into the IP header of each TWAMP Light echo request packet launched for the test.

Options be, cp1, cp2, cp3, cp4, cp5, cp6, cp7, cs1, cp9, af11, cp11, af12, cp13, af13, cp15, cs2, cp17, af21, cp19, af22, cp21, af23, cp23, cs3, cp25, af31, cp27, af32, cp29, af33, cp31, cs4, cp33, af41, cp35, af42, cp37, af43, cp39, cs5, cp41, cp42, cp43, cp44, cp45, ef, cp47, nc1, cp49, cp50, cp51, cp52, cp53, cp54, cp55, nc2, cp57, cp58, cp59, cp60, cp61, cp62, cp63

Default nc1

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **fc** *keyword*

Synopsis Forwarding class name for the TWAMP Light packets

Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <i>fc</i> <i>keyword</i>
Tree	<a href="#">fc</a>
Options	be, l2, af, l1, h2, ef, h1, nc
Default	h1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## ipv6-destination-discovery

Synopsis	Enter the <b>ipv6-destination-discovery</b> context
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">ipv6-destination-discovery</a>
Tree	<a href="#">ipv6-destination-discovery</a>
Description	Commands in this context configure IPv6 discovery of a directly-connected IPv6 peer address.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of IPv6 auto destination discovery
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">ipv6-destination-discovery</a> <i>admin-state</i> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## discovery-interval *number*

Synopsis	Transmission frequency for discovery packets
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light</a> <a href="#">ipv6-destination-discovery</a> <i>discovery-interval</i> <i>number</i>
Tree	<a href="#">discovery-interval</a>



Description	This command configures transmission frequency of the discovery packet to the all-routers multicast group (ff02::2) to discover the link-local address of the peer. This frequency is used during the <b>discover-timer</b> interval.
Range	1 to 10
Units	seconds
Default	10
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **discover-timer** *number*

Synopsis	Maximum time to remain in the discovery phase
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light ipv6-destination-discovery</a> <b>discover-timer</b> <i>number</i>
Tree	<a href="#">discover-timer</a>
Description	This command configures the amount of time to transmit peer discovery packets at the <b>discover-interval</b> .  The timer starts when the IPv6 protocols is enabled under the <b>configure router interface if-attribute delay dynamic twamp-light ipv6</b> context. At the expiration of the <b>discover-interval</b> or when a peer is discovered, whichever comes first, the probe interval changes to the value configured for the <b>update-interval</b> .
Range	1 to 1800
Units	seconds
Default	60
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **update-interval** *number*

Synopsis	Transmission frequency to maintain the peer address
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">link-measurement</a> <a href="#">measurement-template</a> <i>string</i> <a href="#">twamp-light ipv6-destination-discovery</a> <b>update-interval</b> <i>number</i>
Tree	<a href="#">update-interval</a>
Range	0   1 to 3600
Units	seconds
Default	600
Introduced	22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pad-tlv-size** *number*

Synopsis Optional PAD TLV size

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light pad-tlv-size](#) *number*

Tree [pad-tlv-size](#)

Description This command enables a STAMP PDU to include the PAD TLV. This increases the size of the STAMP PDU by the size of the added TLV. The PAD TLV includes an all zeros pattern.

Range 4 to 9714

Units bytes

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **profile** *keyword*

Synopsis QoS profile for packet treatment in local node

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light profile](#) *keyword*

Tree [profile](#)

Description This command specifies if the packets should be treated as in or out of profile as they move through the local node.

Options in, out

Default in

Introduced 21.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **return-path**

Synopsis Enter the **return-path** context

Context **configure** [test-oam link-measurement measurement-template](#) *string* [twamp-light return-path](#)

Tree [return-path](#)

Description Commands in this context configure the return-path TLV carried in the STAMP PDU.

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### link *boolean*

Synopsis The Return Path sub-TLV specifying link

Context **configure test-oam link-measurement measurement-template** *string twamp-light return-path link* *boolean*

Tree [link](#)

Description When configured to **true**, the system includes the **return-path** TLV link. The link sub-tlv instructs a Session-Reflector configured for type **stamp** to use the receiving logical IP interface for the transmission of the response packet from the reflector to the **session-sender**. The destination of the reflected packet must be installed in the forwarding table and reachable out the IP interface or the packet is dropped by the Session-Reflector. When there are parallel non-equal cost return paths between the Session-Reflector and the Session-Sender the response packet can only be returned on the lowest cost path.

When configured to **false**, the Return Path TLV carried in the STAMP PDU is not included with the test packet.

Default false

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### src-udp-port *number*

Synopsis Fixed source UDP port for link measurement tests

Context **configure test-oam link-measurement measurement-template** *string twamp-light src-udp-port* *number*

Tree [src-udp-port](#)

Description This command specifies a source UDP port for link measurement tests.

Unless required, Nokia suggests that the link measurement dynamically select an available source UDP port from the dynamic range. Before a UDP port in the configurable range can be configured as a source it must be owned by the application. Use the **configure test-oam twamp twamp-light source-udp-port-pools port pool-type** command to map the port range to the application.

By default a source UDP port allocates from the dynamic range. The configuration of the source port should only be configured when required for interoperability. When the source IP, destination IP, and destination UPD port are the same for a test, the source UDP port must be different in order to uniquely identify the session.

Range 64374 to 64383

Introduced 22.7.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**timestamp-format** *keyword*

Synopsis	Format of the timestamp used in TWAMP Light PDU
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light timestamp-format</a> <i>keyword</i>
Tree	<a href="#">timestamp-format</a>
Description	This command configures the format of the timestamp used in the TWAMP Light PDU and places the requested timestamp format in the packet using the appropriate epoch. This is unrelated to any time distribution protocol used to synchronize time between clocks.
Options	ntp, ptp
Default	ntp
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**tll** *number*

Synopsis	Time to live value used in the TWAMP Light test packet
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">twamp-light tll</a> <i>number</i>
Tree	<a href="#">tll</a>
Range	1 to 255
Default	1
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**unidirectional-measurement** *keyword*

Synopsis	Method used to compute the unidirectional delay value
Context	<b>configure</b> <a href="#">test-oam link-measurement measurement-template</a> <i>string</i> <a href="#">unidirectional-measurement</a> <i>keyword</i>
Tree	<a href="#">unidirectional-measurement</a>
Description	This command specifies the unidirectional delay computation method as the actual forward delay (calculated using T2-T1 timestamps) or as derived using the round-trip delay divided by two (required if nodal clocks are not synchronized using an accurate time-synchronization method or protocol such as PTP).
Options	derived, actual

Default	derived
Introduced	21.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## mpls

Synopsis	Enter the <b>mpls</b> context
Context	<b>configure test-oam mpls</b>
Tree	<b>mpls</b>
Introduced	23.7.R1
Platforms	All

## echo-request-downstream-map *keyword*

Synopsis	Format of the downstream mapping TLV
Context	<b>configure test-oam mpls echo-request-downstream-map <i>keyword</i></b>
Tree	<b>echo-request-downstream-map</b>
Description	<p>This command specifies the format of the downstream mapping TLV to use in all LSP trace packets and LDP tree trace packets originated on this node.</p> <p>The following downstream mapping TLVs are supported: the original Downstream Mapping (DSMAP) TLV, defined in RFC 4379 (obsoleted by RFC 8029) and the Downstream Detailed Mapping (DDMAP) TLV, defined in RFC 6424.</p> <p>See the "DDMAP TLV" section in the <i>7450 ESS, 7750 SR, 7950 XRS, and VSR OAM and Diagnostics Guide</i> for more information.</p>
Options	dsmap, ddmmap
Default	dsmap
Introduced	23.7.R1
Platforms	All

## timestamp-format *keyword*

Synopsis	Timestamp format for MPLS ping request and reply PDUs
Context	<b>configure test-oam mpls timestamp-format <i>keyword</i></b>
Tree	<b>timestamp-format</b>
Options	rfc4379, unix
Default	unix

Introduced	23.7.R1
Platforms	All

## **mpls-dm**

Synopsis	Enter the <b>mpls-dm</b> context
Context	<b>configure</b> <a href="#">test-oam mpls-dm</a>
Tree	<a href="#">mpls-dm</a>
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **admin-state** *keyword*

Synopsis	Administrative state of MPLS DM packet processing
Context	<b>configure</b> <a href="#">test-oam mpls-dm admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R6
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## **service-activation-testhead**

Synopsis	Enter the <b>service-activation-testhead</b> context
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead</a>
Tree	<a href="#">service-activation-testhead</a>
Description	Commands in this context configure service activation launch parameters for the testhead function.  This functionality is supported on FP4 and later platforms.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## **acceptance-criteria-template** [[ac-template-name](#)] *string*

Synopsis	Enter the <b>acceptance-criteria-template</b> list instance
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Context	<b>configure test-oam service-activation-testhead acceptance-criteria-template</b> <i>string</i>
Tree	<a href="#">acceptance-criteria-template</a>
Description	<p>Commands in this context configure the test acceptance criteria policy that the service test testhead OAM tool uses to determine the test result after test completion.</p> <p>The “default” value of this command is attached to every <b>service-stream</b> created under the <b>service-test</b> context for which no explicit acceptance criteria template policy is configured by the user.</p> <p>The default acceptance criteria template is not user-configurable.</p> <p>The default template does not set thresholds and only reports the end-of-run values.</p>
Max. Instances	100
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **[ac-template-name]** *string*

Synopsis	Acceptance criteria template name
Context	<b>configure test-oam service-activation-testhead acceptance-criteria-template</b> <i>string</i>
Tree	<a href="#">acceptance-criteria-template</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **cir-threshold** *number*

Synopsis	CIR threshold
Context	<b>configure test-oam service-activation-testhead acceptance-criteria-template</b> <i>string</i> <b>cir-threshold</b> <i>number</i>
Tree	<a href="#">cir-threshold</a>
Description	This command configures a CIR value that is compared to the measured results for the CIR test types. If the measured value is equal to or greater than the configured value, the test passes; otherwise, it fails. For more information, see the <b>m-factor</b> command.
Range	1 to 400000000
Units	kilobps
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**delay-threshold** *number*

Synopsis	Delay threshold configuration for acceptance criteria template
Context	<b>configure</b> test-oam service-activation-testhead acceptance-criteria-template <i>string</i> delay-threshold <i>number</i>
Tree	delay-threshold
Description	This command configures a delay value that is compared to the measured delay at the end of the test to declare the test result. If the measured value is greater than the configured value, the test fails; otherwise, it passes. A measured delay value of zero also causes the test to fail.
Range	1 to 100000000
Units	microseconds
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**delay-var-threshold** *number*

Synopsis	Delay variation threshold configuration for acceptance criteria template
Context	<b>configure</b> test-oam service-activation-testhead acceptance-criteria-template <i>string</i> delay-var-threshold <i>number</i>
Tree	delay-var-threshold
Description	This command configures a delay variation value that is compared to the measured delay variation at the end of the test to declare the test result. If the measured value is greater than the configured value, the test fails; otherwise, it passes.
Range	1 to 100000000
Units	microseconds
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> test-oam service-activation-testhead acceptance-criteria-template <i>string</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	23.10.R1



Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **loss-threshold** *decimal-number*

**Synopsis** Loss threshold for acceptance criteria template

**Context** **configure** **test-oam** **service-activation-testhead** **acceptance-criteria-template** *string* **loss-threshold** *decimal-number*

**Tree** [loss-threshold](#)

**Description** This command configures a frame loss ratio (FLR) value that is compared to the measured FLR at the end of the test to determine the test result. If the measured value is greater than the configured value, the test fails; otherwise, it passes. Thresholds must be explicitly configured to use them for the comparison.

The FLR is computed as a ratio of the difference of the number of received frames to the number of injected or sent frames divided by the number of sent frames.

**Range** 0.0000 to 100.0000

**Units** percent

**Introduced** 23.10.R1

**Platforms** 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **loss-threshold-policing** *decimal-number*

**Synopsis** Frame loss ratio for a policing test

**Context** **configure** **test-oam** **service-activation-testhead** **acceptance-criteria-template** *string* **loss-threshold-policing** *decimal-number*

**Tree** [loss-threshold-policing](#)

**Description** This command configures a frame loss ratio (FLR) value for a policing test. The value is compared to the measured FLR at the end of the test to determine the test result. If the measured value is greater than the configured value, the test fails; otherwise, it passes.

Thresholds must be explicitly configured before they can be used for comparison. The FLR is computed as a ratio of the difference of the number of received frames to the number of injected or sent frames divided by the number of sent frames.

**Range** 0.0000 to 100.0000

**Units** percent

**Introduced** 23.10.R1

**Platforms** 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**m-factor** *number*

Synopsis	Throughput margin configuration
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead acceptance-criteria-template</a> <i>string</i> <b>m-factor</b> <i>number</i>
Tree	<a href="#">m-factor</a>
Description	<p>This command configures the margin by which the observed throughput is off from the configured throughput to determine whether a service test passes or fails.</p> <p>The M-factor is used with the CIR threshold and PIR threshold values for different test types to determine whether a test passes or fails.</p> <p>type <b>cir</b></p> <ul style="list-style-type: none"> <li>If the measured throughput is less than the difference of the configured CIR threshold and the M-factor, the test fails.</li> </ul> <p>type <b>cir-pir</b></p> <ul style="list-style-type: none"> <li>If the measured throughput is less than the difference of the configured PIR threshold and the M-factor, the test fails.</li> </ul> <p>type <b>policing</b></p> <ul style="list-style-type: none"> <li>If the measured throughput is less than the difference of the configured PIR threshold and the M-factor, the test fails.</li> <li>If the measured throughput is greater than the sum of the configured PIR threshold and the M-factor, the test fails.</li> </ul> <p>type <b>performance</b></p> <ul style="list-style-type: none"> <li>If the measured throughput is less than the difference of the configured PIR threshold and the M-factor, the test fails.</li> </ul>
Range	1 to 400000000
Units	kilobps
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**pir-threshold** *number*

Synopsis	PIR threshold
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead acceptance-criteria-template</a> <i>string</i> <b>pir-threshold</b> <i>number</i>
Tree	<a href="#">pir-threshold</a>
Description	<p>This command configures a PIR value that is compared to the measured results for the <b>cir-pir</b>, <b>policing</b>, and <b>performance</b> test types. If the measured value is equal to or greater than the configured value, the test passes; otherwise, it fails. For more information, see the <b>m-factor</b> command.</p>
Range	1 to 400000000

Units	kilobps
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **frame-size-template** [[fs-template-name](#)] *string*

Synopsis	Enter the <b>frame-size-template</b> list instance
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string</i>
Tree	<a href="#">frame-size-template</a>
Description	Commands in this context create a template to configure frames of different sizes for use with a test stream configured under the <b>service-test</b> command. The ITU-T Y.1564 methodology designates the letters “a” to “h” for a default frame size. The default frame size can be overwritten.
Max. Instances	100
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **[fs-template-name]** *string*

Synopsis	Frame size template name
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string</i>
Tree	<a href="#">frame-size-template</a>
String Length	1 to 64
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **size-a** *number*

Synopsis	Size-a
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string</i> <b>size-a</b> <i>number</i>
Tree	<a href="#">size-a</a>
Range	64 to 9212
Units	bytes

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Default	64
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **size-b number**

Synopsis	Size-b
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string</i> <b>size-b number</b>
Tree	<a href="#">size-b</a>
Range	64 to 9212
Units	bytes
Default	128
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **size-c number**

Synopsis	Size-c
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string</i> <b>size-c number</b>
Tree	<a href="#">size-c</a>
Range	64 to 9212
Units	bytes
Default	256
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **size-d number**

Synopsis	Size-d
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string</i> <b>size-d number</b>
Tree	<a href="#">size-d</a>
Range	64 to 9212
Units	bytes

Default	512
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**size-e number**

Synopsis	Size-e
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string size-e number</i>
Tree	<a href="#">size-e</a>
Range	64 to 9212
Units	bytes
Default	1024
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**size-f number**

Synopsis	Size-f
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string size-f number</i>
Tree	<a href="#">size-f</a>
Range	64 to 9212
Units	bytes
Default	1280
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**size-g number**

Synopsis	Size-g
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string size-g number</i>
Tree	<a href="#">size-g</a>
Range	64 to 9212
Units	bytes
Default	1518

Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**size-h** *number*

Synopsis	Size-h
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string</i> <b>size-h</b> <i>number</i>
Tree	<a href="#">size-h</a>
Range	64 to 9212
Units	bytes
Default	9212
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**size-u** *number*

Synopsis	Size-u
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead frame-size-template</a> <i>string</i> <b>size-u</b> <i>number</i>
Tree	<a href="#">size-u</a>
Range	64 to 9212
Units	bytes
Default	2000
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**service-test** [[test-name](#)] *string*

Synopsis	Enter the <b>service-test</b> list instance
Context	<b>configure</b> <a href="#">test-oam service-activation-testhead service-test</a> <i>string</i>
Tree	<a href="#">service-test</a>
Description	Commands in this context configure the service test parameters.
Max. Instances	500
Introduced	23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **[test-name]** *string*

Synopsis Service activation test name

Context **configure** [test-oam service-activation-testhead service-test](#) *string*

Tree [service-test](#)

String Length 1 to 64

Notes This element is part of a list key.

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **accounting-policy** *reference*

Synopsis Accounting policy to record service test results

Context **configure** [test-oam service-activation-testhead service-test](#) *string* [accounting-policy reference](#)

Tree [accounting-policy](#)

Description This command creates a link to an accounting policy for the specified service test. The **record** of the accounting policy must be set to **complete-service-activation-test**.

Reference **configure** [log accounting-policy](#) *number*

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### **admin-state** *keyword*

Synopsis Administrative state of the service test

Context **configure** [test-oam service-activation-testhead service-test](#) *string* [admin-state](#) *keyword*

Tree [admin-state](#)

Options enable, disable

Default disable

Introduced 23.10.R1

Platforms 7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">description</a> <i>string</i>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**service-stream** [[stream-id](#)] *number*

Synopsis	Enter the <b>service-stream</b> list instance
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i>
Tree	<a href="#">service-stream</a>
Description	Commands in this context configure a service stream profile for the specified service test.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**[stream-id]** *number*

Synopsis	Service stream ID
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i>
Tree	<a href="#">service-stream</a>
Range	1 to 8
Notes	This element is part of a list key.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**acceptance-criteria-template** *reference***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.



Synopsis	Acceptance criteria association to a service stream
Context	<b>configure</b> test-oam service-activation-testhead service-test <i>string</i> service-stream <i>number</i> acceptance-criteria-template <i>reference</i>
Tree	acceptance-criteria-template
Description	This command creates a link to an acceptance criteria template policy configured by the user for the specified service stream.  Assign the "default" acceptance criteria template to remove the existing template in a service stream.
Reference	<b>configure</b> test-oam service-activation-testhead acceptance-criteria-template <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### admin-state *keyword*

Synopsis	Administrative state of the service stream
Context	<b>configure</b> test-oam service-activation-testhead service-test <i>string</i> service-stream <i>number</i> admin-state <i>keyword</i>
Tree	admin-state
Options	enable, disable
Default	disable
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### description *string*



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Text description
Context	<b>configure</b> test-oam service-activation-testhead service-test <i>string</i> service-stream <i>number</i> description <i>string</i>
Tree	description
String Length	1 to 80
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## frame-mix

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>frame-mix</b> context
Context	<b>configure</b> test-oam service-activation-testhead service-test <i>string</i> service-stream <i>number</i> frame-mix
Tree	frame-mix
Description	Commands in this context configure frame mixing for the specified service stream by referencing the frame size template.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## frame-size-template *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Frame size template for the service stream
Context	<b>configure</b> test-oam service-activation-testhead service-test <i>string</i> service-stream <i>number</i> frame-mix frame-size-template <i>reference</i>
Tree	frame-size-template
Description	This command configures the frame size template for the specified service stream. The user can assign the default <i>frame-size-tmpl-name</i> "default" to remove the existing template in a service stream.
Reference	<b>configure</b> test-oam service-activation-testhead frame-size-template <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## sequence *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Sequence of frame sizes for the service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-mix</a> <a href="#">sequence</a> <i>string</i>
Tree	<a href="#">sequence</a>
Description	This command configures the frame sequence for the specified service stream by referencing the <b>frame-size-template</b> configuration.
String Length	1 to 16
Default	a
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## frame-payload



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>frame-payload</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a>
Tree	<a href="#">frame-payload</a>
Description	Commands in this context configure packet header information used in frames generated by the testhead function.  Only the specified header information is included in the frame. At a minimum, the user must configure the Ethernet destination MAC address and ETH-CFM information to include in the frame payload configuration.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## data-pattern



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>data-pattern</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">data-pattern</a>
Tree	<a href="#">data-pattern</a>

Description	Commands in this context configure the data pattern to populate the payload portion of the frame generated by the service activation testhead.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### repeat (*hex-string* | *number*)



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Repeated 4-byte pattern to pad each packet sent
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">data-pattern</a> <b>repeat</b> ( <i>hex-string</i>   <i>number</i> )
Tree	<a href="#">repeat</a>
Description	This command configures the data pattern padding bytes for the frames launched for the service stream.  The specified data pattern value is repeated as many times as required to fill the remaining length of the payload for the highest level of the specified PDU. If only the Ethernet and ETH-CFM information is added, the data pattern is included in the data TLV of the ETH-CFM frame.
String Length	10
Max. Range	0 to 4294967295
Default	0x00000000
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### ethernet



#### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>ethernet</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <b>ethernet</b>
Tree	<a href="#">ethernet</a>
Description	Commands in this context configure the Ethernet header parameters and ETH-CFM information used by the testhead tool.

Only the specified header information is included in the frame. At a minimum, Ethernet MAC address and ETH-CFM information must be included.

Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## c-tag



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>c-tag</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <b>c-tag</b>
Tree	<a href="#">c-tag</a>
Description	Commands in this context configure the customer VLAN tag (c-tag) information.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## discard-eligible *boolean*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable marking of the DEI bit in the VLAN header
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <b>c-tag</b> <b>discard-eligible</b> <i>boolean</i>
Tree	<a href="#">discard-eligible</a>
Description	When configured to <b>true</b> , the frame is discard eligible.
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## dot1p *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PCP of Ethernet frames for service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <a href="#">c-tag</a> <b>dot1p</b> <i>number</i>
Tree	<a href="#">dot1p</a>
Description	This command configures the priority code point (dot1p) value for the VLAN.
Range	0 to 7
Default	7
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## dst-mac *string*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Destination MAC address of Ethernet frames
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <b>dst-mac</b> <i>string</i>
Tree	<a href="#">dst-mac</a>
Description	This command configures the unicast destination MAC address to use in the frame generated by the service activation testhead.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## eth-cfm

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>eth-cfm</b> context
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Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a>
Tree	<a href="#">eth-cfm</a>
Description	Commands in this context configure ETH-CFM source MEP, destination MAC, and the ETH-CFM PDU type to carry the service activation stream.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## source



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>source</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">source</a>
Tree	<a href="#">source</a>
Description	Commands in this context define the source launch maintenance association end point (MEP) for service activation. If a MEP that matches this configuration does not exist, the service activation test does not start.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## ma-admin-name *reference*



### WARNING:

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source Ethernet maintenance association name
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">source</a> <a href="#">ma-admin-name</a> <i>reference</i>
Tree	<a href="#">ma-admin-name</a>
Reference	<b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i> <a href="#">association</a> <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## md-admin-name *reference*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source Ethernet maintenance domain name
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">source</a> <a href="#">md-admin-name</a> <i>reference</i>
Tree	<a href="#">md-admin-name</a>
Reference	<b>configure</b> <a href="#">eth-cfm</a> <a href="#">domain</a> <i>string</i>
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## mep-id *number*

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Source Ethernet maintenance association end point
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <a href="#">eth-cfm</a> <a href="#">source</a> <a href="#">mep-id</a> <i>number</i>
Tree	<a href="#">mep-id</a>
Range	1 to 8191
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## s-tag

**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>s-tag</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet</a> <a href="#">s-tag</a>
Tree	<a href="#">s-tag</a>



Description	Commands in this context configure service VLAN tag (s-tag) information specification.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### discard-eligible *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable marking of the DEI bit in the VLAN header
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet s-tag</a> <b>discard-eligible</b> <i>boolean</i>
Tree	<a href="#">discard-eligible</a>
Description	When configured to <b>true</b> , the frame is discard eligible.
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### dot1p *number*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PCP of Ethernet frames for service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">frame-payload</a> <a href="#">ethernet s-tag</a> <b>dot1p</b> <i>number</i>
Tree	<a href="#">dot1p</a>
Description	This command configures the priority code point (dot1p) value for the VLAN.
Range	0 to 7
Default	7
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**rate-cir number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CIR packet transmit rate for the service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <b>rate-cir</b> <i>number</i>
Tree	<a href="#">rate-cir</a>
Description	<p>This command configures the CIR that must be validated for a specific stream. If configured, the PIR value must be equal to or greater than the CIR value.</p> <p>When specified, the CIR rate overrides the default CIR value. The configured value must be a positive integer; fractional values are not allowed. If this command is not executed, or the CIR parameter is not explicitly specified, the default CIR value applies.</p> <p>The service activation testhead generates traffic up to the specified rate based on the test-types command, as follows.</p> <ul style="list-style-type: none"> <li>• For <b>type cir</b>, traffic is generated at a rate up to the configured CIR.</li> <li>• For <b>type cir-pir</b>, traffic is generated at a rate up to the configured PIR.</li> <li>• For <b>type policing</b>, traffic is generated at a rate up to 125% of the configured PIR.</li> <li>• For <b>type performance</b>, traffic is generated at a rate up to the configured PIR.</li> </ul>
Range	0 to 400000000
Units	kilobps
Default	0
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**rate-pir number****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	PIR packet transmit rate for the service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <b>rate-pir</b> <i>number</i>
Tree	<a href="#">rate-pir</a>
Description	This command specifies the PIR rate, which overrides the default administrative PIR value. The configured value must be a positive integer; fractional values are not allowed.

If this command is not executed or the PIR parameter is not explicitly specified, the default PIR value applies.

The service activation testhead generates traffic up to the specified rate based on the test-types command, as follows.

- For **type cir**, traffic is generated at a rate up to the configured CIR.
- For **type cir-pir**, traffic is generated at a rate up to the configured PIR.
- For **type policing**, traffic is generated at a rate up to 125% of the configured PIR.
- For **type performance**, traffic is generated at a rate up to the configured PIR.

Range	0 to 400000000
Units	kilobps
Default	0
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### service-stream-completion-notification *boolean*



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enable SNMP trap generation upon test completion
Context	<b>configure</b> test-oam service-activation-testhead service-test <i>string</i> service-stream <i>number</i> service-stream-completion-notification <i>boolean</i>
Tree	service-stream-completion-notification
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### test-types



**WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Enter the <b>test-types</b> context
Context	<b>configure</b> test-oam service-activation-testhead service-test <i>string</i> service-stream <i>number</i> test-types
Tree	test-types

Description	Commands in this context configure the types of tests to perform on a specific service stream.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**cir boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CIR test for the service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">test-types</a> <a href="#">cir</a> <i>boolean</i>
Tree	<a href="#">cir</a>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**cir-pir boolean****WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	CIR-PIR test for the service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">test-types</a> <a href="#">cir-pir</a> <i>boolean</i>
Tree	<a href="#">cir-pir</a>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**performance** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Performance test for the service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">test-types</a> <a href="#">performance</a> <i>boolean</i>
Tree	<a href="#">performance</a>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**policing** *boolean***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Policing test for the service stream
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-stream</a> <i>number</i> <a href="#">test-types</a> <a href="#">policing</a> <i>boolean</i>
Tree	<a href="#">policing</a>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**service-test-completion-notification** *boolean*

Synopsis	Enable SNMP trap generation upon test completion
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">service-test-completion-notification</a> <i>boolean</i>
Tree	<a href="#">service-test-completion-notification</a>
Default	false
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**stream-run-type** *keyword*

Synopsis	Service stream run order
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <b>stream-run-type</b> <i>keyword</i>
Tree	<a href="#">stream-run-type</a>
Options	sequential, parallel
Default	parallel
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**test-duration**

Synopsis	Enter the <b>test-duration</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <b>test-duration</b>
Tree	<a href="#">test-duration</a>
Description	Commands in this context configure the test duration for the various functional test types.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**cir**

Synopsis	Enter the <b>cir</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <b>test-duration</b> <b>cir</b>
Tree	<a href="#">cir</a>
Description	Commands in this context configure the duration for the CIR test type.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

**minutes-seconds** *string*

Synopsis	Duration of the service test CIR tests
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <b>test-duration</b> <b>cir</b> <b>minutes-seconds</b> <i>string</i>
Tree	<a href="#">minutes-seconds</a>
String Length	5

Default	05:00
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## **cir-pir**

Synopsis	Enter the <b>cir-pir</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">test-duration</a> <b>cir-pir</b>
Tree	<a href="#">cir-pir</a>
Description	Commands in this context configure the duration for the CIR-PIR test type.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## **minutes-seconds** *string*

Synopsis	Duration of the service test CIR-PIR tests
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">test-duration</a> <b>cir-pir</b> <a href="#">minutes-seconds</a> <i>string</i>
Tree	<a href="#">minutes-seconds</a>
String Length	5
Default	10:00
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

## **performance**

Synopsis	Enter the <b>performance</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">test-duration</a> <b>performance</b>
Tree	<a href="#">performance</a>
Description	Commands in this context configure the duration for the performance test type.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### hours-minutes-seconds *string*

Synopsis	Duration of performance tests belonging to the test
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">test-duration</a> <a href="#">performance</a> <a href="#">hours-minutes-seconds</a> <i>string</i>
Tree	<a href="#">hours-minutes-seconds</a>
String Length	8
Default	00:15:00
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### policing

Synopsis	Enter the <b>policing</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">test-duration</a> <a href="#">policing</a>
Tree	<a href="#">policing</a>
Description	Commands in this context configure the duration for the policing test type.
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### minutes-seconds *string*

Synopsis	Duration of policing tests belonging to the test
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">service-activation-testhead</a> <a href="#">service-test</a> <i>string</i> <a href="#">test-duration</a> <a href="#">policing</a> <a href="#">minutes-seconds</a> <i>string</i>
Tree	<a href="#">minutes-seconds</a>
String Length	5
Default	10:00
Introduced	23.10.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-s, 7950 XRS

### twamp

Synopsis	Enter the <b>twamp</b> context
Context	<b>configure</b> <a href="#">test-oam</a> <a href="#">twamp</a>
Tree	<a href="#">twamp</a>



Introduced	16.0.R4
Platforms	All

## server

Synopsis	Enter the <b>server</b> context
Context	<b>configure</b> <a href="#">test-oam twamp server</a>
Tree	<a href="#">server</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## admin-state *keyword*

Synopsis	Administrative state of the TWAMP server
Context	<b>configure</b> <a href="#">test-oam twamp server admin-state</a> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	disable
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## allow-ipv6-udp-checksum-zero *boolean*

Synopsis	Process IPv6 packets with a zero UDP checksum
Context	<b>configure</b> <a href="#">test-oam twamp server allow-ipv6-udp-checksum-zero</a> <i>boolean</i>
Tree	<a href="#">allow-ipv6-udp-checksum-zero</a>
Description	<p>When configured to <b>true</b>, this command configures the acceptance of IPv6 packets with UDP checksums of 0. This optional configuration allows the router to process arriving IPv6 TWAMP Test packets that contain IPv6 UDP checksum of 0x0000. The UDP port specific to this TWAMP Light test bypasses the default discard IPv6 UDP checksum 0x0000. If this optional command is not configured, IPv6 UDP checksum 0x0000 arriving packets are discarded.</p> <p>When configured to <b>false</b>, packets that arrive with an IPv6 UDP checksum of 0x0000 are discarded.</p>
Default	false
Introduced	22.2.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**enforce-test-session-start-time** *boolean*

Synopsis	Discard TWAMP packets before test-session start time
Context	<b>configure</b> <a href="#">test-oam twamp server enforce-test-session-start-time</a> <i>boolean</i>
Tree	<a href="#">enforce-test-session-start-time</a>
Description	When configured to <b>true</b> , the router checks the signalled test-session start time against the server time and discards TWAMP test packets that arrive before the negotiated test-session start time.  When configured to <b>false</b> , the router processes all TWAMP test packets without checking the test-session start time against the server time.
Default	true
Introduced	23.3.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**inactivity-timeout** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Inactivity timeout for TWAMP control connections
Context	<b>configure</b> <a href="#">test-oam twamp server inactivity-timeout</a> <i>number</i>
Tree	<a href="#">inactivity-timeout</a>
Range	60 to 3600
Units	seconds
Default	900
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

**max-connections** *number***WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Limit of concurrent TWAMP server control connections
Context	<b>configure</b> <a href="#">test-oam twamp server max-connections</a> <i>number</i>

Tree	<a href="#">max-connections</a>
Range	0 to 64
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-sessions** *number*



#### **WARNING:**

Modifying this element toggles the **admin-state** of the parent element automatically for the new value to take effect.

Synopsis	Maximum number of concurrent TWAMP server test sessions
Context	<b>configure</b> <a href="#">test-oam twamp server max-sessions</a> <i>number</i>
Tree	<a href="#">max-sessions</a>
Range	0 to 128
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **prefix** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Enter the <b>prefix</b> list instance
Context	<b>configure</b> <a href="#">test-oam twamp server prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Max. Instances	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis	Prefix to match against TWAMP client address
Context	<b>configure</b> <a href="#">test-oam twamp server prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> )
Tree	<a href="#">prefix</a>
Notes	This element is part of a list key.

Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **description** *string*

Synopsis	Text description
Context	<b>configure</b> <a href="#">test-oam twamp server prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">description string</a>
Tree	<a href="#">description</a>
String Length	1 to 80
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-connections** *number*

Synopsis	Maximum number of control connections for TWAMP prefix
Context	<b>configure</b> <a href="#">test-oam twamp server prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">max-connections number</a>
Tree	<a href="#">max-connections</a>
Range	0 to 64
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **max-sessions** *number*

Synopsis	Maximum concurrent TWAMP test sessions based on prefix
Context	<b>configure</b> <a href="#">test-oam twamp server prefix</a> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <a href="#">max-sessions number</a>
Tree	<a href="#">max-sessions</a>
Range	0 to 128
Default	32
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **twamp-light**

Synopsis	Enter the <b>twamp-light</b> context
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Context	<b>configure</b> <a href="#">test-oam twamp twamp-light</a>
Tree	<a href="#">twamp-light</a>
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **inactivity-timeout** *number*

Synopsis	Time to maintain stale state on the session reflector
Context	<b>configure</b> <a href="#">test-oam twamp twamp-light inactivity-timeout</a> <i>number</i>
Tree	<a href="#">inactivity-timeout</a>
Range	10 to 100
Units	seconds
Default	100
Introduced	16.0.R4
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **source-udp-port-pools**

Synopsis	Enter the <b>source-udp-port-pools</b> context
Context	<b>configure</b> <a href="#">test-oam twamp twamp-light source-udp-port-pools</a>
Tree	<a href="#">source-udp-port-pools</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **port** [[port-number](#)] *number*

Synopsis	Enter the <b>port</b> list instance
Context	<b>configure</b> <a href="#">test-oam twamp twamp-light source-udp-port-pools port</a> <i>number</i>
Tree	<a href="#">port</a>
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **[port-number]** *number*

Synopsis	Source UDP port pools port number
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Context	<b>configure</b> <i>test-oam twamp twamp-light source-udp-port-pools port number</i>
Tree	<a href="#">port</a>
Range	64374 to 64383
Notes	This element is part of a list key.
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

### **pool-type** *keyword*

Synopsis	Pool type of an application pool
Context	<b>configure</b> <i>test-oam twamp twamp-light source-udp-port-pools port number pool-type keyword</i>
Tree	<a href="#">pool-type</a>
Description	<p>This command maps the specified source UDP port to the TWAMP Light application allowed to configure the source UDP port. OAM-PM IP tests can only configure the source UDP port when the port pool UDP source port is configured with a <b>pool-type oam-pm</b>. The <b>test-oam link-measurement measurement-template</b> can only configure the <b>src-udp-port</b> when the port pool UDP source port is configured with <b>pool-type link-measurement</b>.</p> <p>A pool type cannot be changed if its current application is a test (either an oam-pm session or link-measurement template) and is configured to use the specified port, regardless of the administrative or operational state. The configuration reference linking to the source UDP prevents the change.</p>
Options	oam-pm, link-measurement
Default	oam-pm
Introduced	22.7.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-a, 7750 SR-e, 7750 SR-s, 7950 XRS

## 3.48 vrrp commands

```

configure
- vrrp
- apply-groups reference
- apply-groups-exclude reference
- policy number
- admin-state keyword
- apply-groups reference
- apply-groups-exclude reference
- context string
- delta-in-use-limit number
- description string
- priority-event
- host-unreachable (ipv4-address-with-zone | ipv6-address-with-zone)
- apply-groups reference
- apply-groups-exclude reference
- drop-count number
- hold-clear number
- hold-set number
- padding-size number
- priority
- event-type keyword
- priority-level number
- request-interval number
- timeout number
- lag-port-down string
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- number-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- weight-down number
- apply-groups reference
- apply-groups-exclude reference
- priority
- event-type keyword
- priority-level number
- mc-ipsec-non-forwarding number
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- port-down string
- apply-groups reference
- apply-groups-exclude reference
- hold-clear number
- hold-set number
- priority
- event-type keyword
- priority-level number
- route-unknown (ipv4-prefix | ipv6-prefix)
- apply-groups reference

```

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configure vrrp policy priority-event route-unknown apply-groups-exclude

- **apply-groups-exclude** *reference*
- **hold-clear** *number*
- **hold-set** *number*
- **less-specific**
  - **allow-default** *boolean*
- **next-hop** (*ipv4-address-with-zone* | *ipv6-address-with-zone*)
- **priority**
  - **event-type** *keyword*
  - **priority-level** *number*
- **protocol** *keyword*



### 3.48.1 vrrp command descriptions

#### **vrrp**

Synopsis	Enter the <b>vrrp</b> context
Context	<b>configure vrrp</b>
Tree	<a href="#">vrrp</a>
Introduced	16.0.R1
Platforms	All

#### **policy** [[policy-id](#)] *number*

Synopsis	Enter the <b>policy</b> list instance
Context	<b>configure vrrp policy</b> <i>number</i>
Tree	<a href="#">policy</a>
Introduced	16.0.R1
Platforms	All

#### **[policy-id]** *number*

Synopsis	Policy ID
Context	<b>configure vrrp policy</b> <i>number</i>
Tree	<a href="#">policy</a>
Range	1 to 9999
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

#### **admin-state** *keyword*

Synopsis	Administrative state of VRRP priority control policy
Context	<b>configure vrrp policy</b> <i>number</i> <b>admin-state</b> <i>keyword</i>
Tree	<a href="#">admin-state</a>
Options	enable, disable
Default	enable

Introduced 16.0.R1  
Platforms All

### **context** *string*



**WARNING:**

Modifying this element recreates the parent element automatically for the new value to take effect.

Synopsis Service name to which this policy applies  
Context **configure vrrp policy number context string**  
Tree [context](#)  
String Length 1 to 64  
Introduced 16.0.R1  
Platforms All

### **delta-in-use-limit** *number*

Synopsis Limit on the delta priority control events  
Context **configure vrrp policy number delta-in-use-limit number**  
Tree [delta-in-use-limit](#)  
Range 1 to 254  
Default 1  
Introduced 16.0.R1  
Platforms All

### **description** *string*

Synopsis Text description  
Context **configure vrrp policy number description string**  
Tree [description](#)  
String Length 1 to 80  
Introduced 16.0.R1  
Platforms All

## priority-event

Synopsis	Enter the <b>priority-event</b> context
Context	<b>configure vrrp policy number priority-event</b>
Tree	<a href="#">priority-event</a>
Introduced	16.0.R1
Platforms	All

## host-unreachable [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Enter the <b>host-unreachable</b> list instance
Context	<b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">host-unreachable</a>
Introduced	16.0.R1
Platforms	All

## [[ip-address](#)] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Host IP address that receives a constant ping probe
Context	<b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<a href="#">host-unreachable</a>
Description	This command configures the host IP address for which the specific host unreachable priority event monitors connectivity with a continuous ICMP echo request (ping) probe.
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

## drop-count *number*

Synopsis	Threshold for consecutive message send attempts
Context	<b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <b>drop-count number</b>
Tree	<a href="#">drop-count</a>
Range	1 to 60
Default	3

Introduced	16.0.R1
Platforms	All

### **hold-clear** *number*

Synopsis	Delay time for a cleared event on the router instance
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event host-unreachable</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>hold-clear</b> <i>number</i>
Tree	<a href="#">hold-clear</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

### **hold-set** *number*

Synopsis	Hold time before transitioning to cleared state
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event host-unreachable</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>hold-set</b> <i>number</i>
Tree	<a href="#">hold-set</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

### **padding-size** *number*

Synopsis	Packet length padding of the ICMP packet
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event host-unreachable</a> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>padding-size</b> <i>number</i>
Tree	<a href="#">padding-size</a>
Range	0 to 16384
Units	bytes
Default	56
Introduced	16.0.R1
Platforms	All

## priority

Synopsis	Enter the <b>priority</b> context
Context	<b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>priority</b>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	All

## event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	<b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>priority event-type keyword</b>
Tree	<a href="#">event-type</a>
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

## priority-level *number*

Synopsis	Priority level associated with this event
Context	<b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>priority priority-level number</b>
Tree	<a href="#">priority-level</a>
Range	1 to 254
Introduced	16.0.R1
Platforms	All

## request-interval *number*

Synopsis	Time interval between consecutive ICMP echo requests
Context	<b>configure vrrp policy number priority-event host-unreachable</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> ) <b>request-interval number</b>
Tree	<a href="#">request-interval</a>

Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**timeout** *number*

Synopsis	Timeout for ICMP echo request messages
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">host-unreachable</a> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> ) <a href="#">timeout</a> <i>number</i>
Tree	<a href="#">timeout</a>
Range	1 to 60
Units	seconds
Default	1
Introduced	16.0.R1
Platforms	All

**lag-port-down** [[lag-name](#)] *string*

Synopsis	Enter the <b>lag-port-down</b> list instance
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">lag-port-down</a> <i>string</i>
Tree	<a href="#">lag-port-down</a>
Introduced	16.0.R1
Platforms	All

**[lag-name]** *string*

Synopsis	LAG name
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">lag-port-down</a> <i>string</i>
Tree	<a href="#">lag-port-down</a>
String Length	1 to 27
Notes	This element is part of a list key.
Introduced	21.2.R1
Platforms	All

**hold-clear** *number*

Synopsis	Delay time for a cleared event on the router instance
Context	<b>configure</b> <i>vrp policy number priority-event lag-port-down string hold-clear number</i>
Tree	<a href="#">hold-clear</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

**hold-set** *number*

Synopsis	Hold time before transitioning to cleared state
Context	<b>configure</b> <i>vrp policy number priority-event lag-port-down string hold-set number</i>
Tree	<a href="#">hold-set</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

**number-down** [[number-of-lag-ports-down](#)] *number*

Synopsis	Enter the <b>number-down</b> list instance
Context	<b>configure</b> <i>vrp policy number priority-event lag-port-down string number-down number</i>
Tree	<a href="#">number-down</a>
Introduced	16.0.R1
Platforms	All

**[number-of-lag-ports-down]** *number*

Synopsis	Threshold of down LAG ports that create a set event
Context	<b>configure</b> <i>vrp policy number priority-event lag-port-down string number-down number</i>
Tree	<a href="#">number-down</a>
Range	1 to 64
Notes	This element is part of a list key.

Introduced	16.0.R1
Platforms	All

## priority

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event lag-port-down string</a> <a href="#">number-down number</a> <a href="#">priority</a>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	All

## event-type *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	<b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event lag-port-down string</a> <a href="#">number-down number</a> <a href="#">priority event-type keyword</a>
Tree	<a href="#">event-type</a>
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

## priority-level *number*

Synopsis	Priority level associated with this event
Context	<b>configure</b> <a href="#">vrrp policy number</a> <a href="#">priority-event lag-port-down string</a> <a href="#">number-down number</a> <a href="#">priority priority-level number</a>
Tree	<a href="#">priority-level</a>
Range	1 to 254
Introduced	16.0.R1
Platforms	All

## weight-down [[lag-ports-down-weight](#)] *number*

Synopsis	Enter the <b>weight-down</b> list instance
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Context	<b>configure</b> <i>vrrp policy number priority-event lag-port-down string weight-down number</i>
Tree	<i>weight-down</i>
Introduced	16.0.R1
Platforms	All

### **[lag-ports-down-weight]** *number*

Synopsis	LAG name for the reduced LAG ports
Context	<b>configure</b> <i>vrrp policy number priority-event lag-port-down string weight-down number</i>
Tree	<i>weight-down</i>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **priority**

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <i>vrrp policy number priority-event lag-port-down string weight-down number priority</i>
Tree	<i>priority</i>
Introduced	16.0.R1
Platforms	All

### **event-type** *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	<b>configure</b> <i>vrrp policy number priority-event lag-port-down string weight-down number priority event-type keyword</i>
Tree	<i>event-type</i>
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

**priority-level** *number*

Synopsis	Priority level associated with this event
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event lag-port-down</a> <i>string</i> <a href="#">weight-down</a> <i>number</i> <a href="#">priority</a> <a href="#">priority-level</a> <i>number</i>
Tree	<a href="#">priority-level</a>
Range	1 to 254
Introduced	16.0.R1
Platforms	All

**mc-ipsec-non-forwarding** [[tunnel-group-id](#)] *number*

Synopsis	Enter the <b>mc-ipsec-non-forwarding</b> list instance
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i>
Tree	<a href="#">mc-ipsec-non-forwarding</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**[tunnel-group-id]** *number*

Synopsis	IPSEC tunnel group monitored by priority control event
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i>
Tree	<a href="#">mc-ipsec-non-forwarding</a>
Range	1 to 64
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

**hold-clear** *number*

Synopsis	Delay time for a cleared event on the router instance
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <a href="#">hold-clear</a> <i>number</i>
Tree	<a href="#">hold-clear</a>
Range	1 to 86400
Units	seconds

Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **hold-set** *number*

Synopsis	Hold time before transitioning to cleared state
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <b>hold-set</b> <i>number</i>
Tree	<a href="#">hold-set</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority**

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <b>priority</b>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **event-type** *keyword*

Synopsis	Event type
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event mc-ipsec-non-forwarding</a> <i>number</i> <b>priority</b> <a href="#">event-type</a> <i>keyword</i>
Tree	<a href="#">event-type</a>
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **priority-level** *number*

Synopsis	Priority level associated with this event
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Context	<b>configure</b> <i>vrrp policy number priority-event mc-ipsec-non-forwarding number priority priority-level number</i>
Tree	<a href="#">priority-level</a>
Range	1 to 254
Introduced	16.0.R1
Platforms	7450 ESS, 7750 SR, 7750 SR-e, 7750 SR-s, VSR

### **port-down** [[port-id](#)] *string*

Synopsis	Enter the <b>port-down</b> list instance
Context	<b>configure</b> <i>vrrp policy number priority-event port-down string</i>
Tree	<a href="#">port-down</a>
Introduced	16.0.R1
Platforms	All

### **[port-id]** *string*

Synopsis	Port ID for the reduced LAG ports
Context	<b>configure</b> <i>vrrp policy number priority-event port-down string</i>
Tree	<a href="#">port-down</a>
Notes	This element is part of a list key.
Introduced	16.0.R1
Platforms	All

### **hold-clear** *number*

Synopsis	Delay time for a cleared event on the router instance
Context	<b>configure</b> <i>vrrp policy number priority-event port-down string hold-clear number</i>
Tree	<a href="#">hold-clear</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

**hold-set** *number*

Synopsis	Hold time before transitioning to cleared state
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <b>hold-set</b> <i>number</i>
Tree	<a href="#">hold-set</a>
Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

**priority**

Synopsis	Enter the <b>priority</b> context
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <b>priority</b>
Tree	<a href="#">priority</a>
Introduced	16.0.R1
Platforms	All

**event-type** *keyword*

Synopsis	Effect of priority-level value on base priority value
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <a href="#">priority</a> <b>event-type</b> <i>keyword</i>
Tree	<a href="#">event-type</a>
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

**priority-level** *number*

Synopsis	Priority level associated with this event
Context	<b>configure</b> <a href="#">vrrp policy</a> <i>number</i> <a href="#">priority-event</a> <a href="#">port-down</a> <i>string</i> <a href="#">priority</a> <b>priority-level</b> <i>number</i>
Tree	<a href="#">priority-level</a>
Range	1 to 254
Introduced	16.0.R1

Platforms All

### **route-unknown** [[ip-prefix](#)] (*ipv4-prefix* | *ipv6-prefix*)

Synopsis Enter the **route-unknown** list instance

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [route-unknown](#)

Introduced 16.0.R1

Platforms All

### **[ip-prefix]** (*ipv4-prefix* | *ipv6-prefix*)

Synopsis IP prefix of route monitored by priority control event

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)

Tree [route-unknown](#)

Notes This element is part of a list key.

Introduced 16.0.R1

Platforms All

### **hold-clear** *number*

Synopsis Delay time for a cleared event on the router instance

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)  
[hold-clear](#) *number*

Tree [hold-clear](#)

Range 1 to 86400

Units seconds

Introduced 16.0.R1

Platforms All

### **hold-set** *number*

Synopsis Hold time before transitioning to cleared state

Context **configure** [vrrp policy](#) *number* [priority-event](#) [route-unknown](#) (*ipv4-prefix* | *ipv6-prefix*)  
[hold-set](#) *number*

Tree [hold-set](#)

Range	1 to 86400
Units	seconds
Introduced	16.0.R1
Platforms	All

## less-specific

Synopsis	Enable the <b>less-specific</b> context
Context	<b>configure</b> <b>vrp</b> <b>policy</b> <i>number</i> <b>priority-event</b> <b>route-unknown</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>less-specific</b>
Tree	<b>less-specific</b>
Introduced	16.0.R1
Platforms	All

## allow-default *boolean*

Synopsis	Match on default route
Context	<b>configure</b> <b>vrp</b> <b>policy</b> <i>number</i> <b>priority-event</b> <b>route-unknown</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>less-specific</b> <b>allow-default</b> <i>boolean</i>
Tree	<b>allow-default</b>
Default	false
Introduced	16.0.R1
Platforms	All

## next-hop [*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Add a list entry for <b>next-hop</b>
Context	<b>configure</b> <b>vrp</b> <b>policy</b> <i>number</i> <b>priority-event</b> <b>route-unknown</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>next-hop</b> ( <i>ipv4-address-with-zone</i>   <i>ipv6-address-with-zone</i> )
Tree	<b>next-hop</b>
Introduced	19.5.R1
Platforms	All

## [*ip-address*] (*ipv4-address-with-zone* | *ipv6-address-with-zone*)

Synopsis	Next-hop IP address for a returned route prefix
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Context	<b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>next-hop</b> ( <i>ipv4-address-with-zone   ipv6-address-with-zone</i> )
Tree	<b>next-hop</b>
Description	This command configures the next-hop IP address used to match the route prefix being monitored by the priority control event with the results of a route table lookup.
Notes	This element is part of a list key.
Introduced	19.5.R1
Platforms	All

## priority

Synopsis	Enter the <b>priority</b> context
Context	<b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>priority</b>
Tree	<b>priority</b>
Introduced	16.0.R1
Platforms	All

## event-type keyword

Synopsis	Effect of priority-level value on base priority value
Context	<b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>priority event-type keyword</b>
Tree	<b>event-type</b>
Options	delta, explicit
Default	delta
Introduced	16.0.R1
Platforms	All

## priority-level number

Synopsis	Priority level associated with this event
Context	<b>configure vrrp policy number priority-event route-unknown</b> ( <i>ipv4-prefix   ipv6-prefix</i> ) <b>priority priority-level number</b>
Tree	<b>priority-level</b>
Range	1 to 254



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Introduced	16.0.R1
Platforms	All

### **protocol** *keyword*

Synopsis	Routing protocol as match criterion
Context	<b>configure</b> <b>vrp policy</b> <i>number</i> <b>priority-event</b> <b>route-unknown</b> ( <i>ipv4-prefix</i>   <i>ipv6-prefix</i> ) <b>protocol</b> <i>keyword</i>
Tree	<b>protocol</b>
Options	bgp, ospf, isis, rip, static, bgp-vpn
Max. Instances	6
Introduced	16.0.R1
Platforms	All

## 4 Deprecated and obsolete commands

This section lists the deprecated and obsolete commands in this major release.

## 4.1 Deprecated commands

This chapter provides a list of commands that are marked as “status deprecated” in the Nokia YANG models and the MD-CLI and should no longer be used. Only releases in which commands are initially deprecated are included in this section. If applicable, the equivalent configuration groups command is also deprecated (but not explicitly listed).

See the SR OS Software Release Notes for more information.

### 4.1.1 23.3.R1

#### **subscriber-mgmt commands:**

- configure subscriber-mgmt radius-accounting-policy triggered-updates gtp-mobility

### 4.1.2 23.10.R2

#### **filter commands:**

- configure filter ip-filter entry action forward next-hop interface-name

## 4.2 Obsolete commands

This chapter provides a list of commands that are marked as “status obsolete” in the Nokia YANG models and the MD-CLI. These commands can no longer be used and are considered invalid. Only releases in which commands are initially obsoleted are included in this section. If applicable, the equivalent configuration groups command is also obsoleted (but not explicitly listed).

See the SR OS Software Release Notes for more information.

### 4.2.1 23.3.R1

#### aaa commands:

- configure aaa diameter peer-policy
- configure aaa diameter peer-policy applications
- configure aaa diameter peer-policy applications gx
- configure aaa diameter peer-policy applications gy
- configure aaa diameter peer-policy applications nasreq
- configure aaa diameter peer-policy apply-groups
- configure aaa diameter peer-policy apply-groups-exclude
- configure aaa diameter peer-policy connection-timer
- configure aaa diameter peer-policy description
- configure aaa diameter peer-policy ipv4-source-address
- configure aaa diameter peer-policy ipv6-source-address
- configure aaa diameter peer-policy name
- configure aaa diameter peer-policy origin-host
- configure aaa diameter peer-policy origin-realm
- configure aaa diameter peer-policy peer
- configure aaa diameter peer-policy peer address
- configure aaa diameter peer-policy peer admin-state
- configure aaa diameter peer-policy peer apply-groups
- configure aaa diameter peer-policy peer apply-groups-exclude
- configure aaa diameter peer-policy peer connection-timer
- configure aaa diameter peer-policy peer destination-host
- configure aaa diameter peer-policy peer destination-realm
- configure aaa diameter peer-policy peer peer-name
- configure aaa diameter peer-policy peer preference
- configure aaa diameter peer-policy peer statistics
- configure aaa diameter peer-policy peer transaction-timer

- configure aaa diameter peer-policy peer transport
- configure aaa diameter peer-policy peer transport port-number
- configure aaa diameter peer-policy peer watchdog-timer
- configure aaa diameter peer-policy proxy
- configure aaa diameter peer-policy proxy admin-state
- configure aaa diameter peer-policy proxy local-address
- configure aaa diameter peer-policy proxy mcs-peer
- configure aaa diameter peer-policy proxy mcs-peer address
- configure aaa diameter peer-policy proxy mcs-peer apply-groups
- configure aaa diameter peer-policy proxy mcs-peer apply-groups-exclude
- configure aaa diameter peer-policy proxy mcs-peer sync-tag
- configure aaa diameter peer-policy proxy router-instance
- configure aaa diameter peer-policy python-policy
- configure aaa diameter peer-policy role
- configure aaa diameter peer-policy router-instance
- configure aaa diameter peer-policy transaction-timer
- configure aaa diameter peer-policy vendor-support
- configure aaa diameter peer-policy watchdog-timer

**isa commands:**

- configure isa video-group ad-insert
- configure isa video-group rt-client

**lag commands:**

- configure lag port-weight-speed
- configure lag weight-threshold
- configure lag weight-threshold action
- configure lag weight-threshold cost
- configure lag weight-threshold value

**python commands:**

- configure python python-policy vsd
- configure python python-policy vsd apply-groups
- configure python python-policy vsd apply-groups-exclude
- configure python python-policy vsd script

**redundancy commands:**

- configure redundancy multi-chassis peer sync diameter-proxy

**router commands:**

- configure router interface ip-tunnel

- configure router interface ip-tunnel remote-ip
- configure router nat inside large-scale dual-stack-lite deterministic policy-map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure router nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure router nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure router nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure router nat inside large-scale nat44 deterministic policy-map
- configure router nat inside large-scale nat44 deterministic policy-map admin-state
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure router nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure router nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure router nat inside large-scale nat44 deterministic policy-map map from
- configure router nat inside large-scale nat44 deterministic policy-map map to
- configure router nat inside large-scale nat44 deterministic policy-map nat-policy
- configure router nat inside large-scale nat44 deterministic policy-map source-prefix

**service commands:**

- configure service ies video-interface adi
- configure service ies video-interface adi scte30
- configure service ies video-interface adi scte30 ad-server
- configure service ies video-interface adi scte30 ad-server address
- configure service ies video-interface adi scte30 local-address
- configure service ies video-interface adi scte30 local-address apply-groups
- configure service ies video-interface adi scte30 local-address apply-groups-exclude
- configure service ies video-interface adi scte30 local-address control
- configure service ies video-interface adi scte30 local-address data
- configure service ies video-interface rt-client

- configure service ies video-interface rt-client apply-groups
- configure service ies video-interface rt-client apply-groups-exclude
- configure service ies video-interface rt-client src-address
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map admin-state
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map from
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map map to
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map nat-policy
- configure service vprn nat inside large-scale dual-stack-lite deterministic policy-map source-prefix
- configure service vprn nat inside large-scale nat44 deterministic policy-map
- configure service vprn nat inside large-scale nat44 deterministic policy-map admin-state
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups
- configure service vprn nat inside large-scale nat44 deterministic policy-map map apply-groups-exclude
- configure service vprn nat inside large-scale nat44 deterministic policy-map map first-outside-address
- configure service vprn nat inside large-scale nat44 deterministic policy-map map from
- configure service vprn nat inside large-scale nat44 deterministic policy-map map to
- configure service vprn nat inside large-scale nat44 deterministic policy-map nat-policy
- configure service vprn nat inside large-scale nat44 deterministic policy-map source-prefix
- configure service vprn video-interface adi
- configure service vprn video-interface adi scte30
- configure service vprn video-interface adi scte30 ad-server
- configure service vprn video-interface adi scte30 ad-server address
- configure service vprn video-interface adi scte30 local-address
- configure service vprn video-interface adi scte30 local-address apply-groups
- configure service vprn video-interface adi scte30 local-address apply-groups-exclude

- configure service vprn video-interface adi scte30 local-address control
- configure service vprn video-interface adi scte30 local-address data
- configure service vprn video-interface rt-client
- configure service vprn video-interface rt-client apply-groups
- configure service vprn video-interface rt-client apply-groups-exclude
- configure service vprn video-interface rt-client src-address

**subscriber-mgmt commands:**

- configure subscriber-mgmt bgp-peering-policy prefix-limit
- configure subscriber-mgmt diameter-gx-policy peer-policy
- configure subscriber-mgmt diameter-gy-policy peer-policy
- configure subscriber-mgmt diameter-nasreq-policy peer-policy

**system commands:**

- configure system management-interface netconf capabilities writable-running
- configure system management-interface yang-modules base-r13-modules
- configure system security cli-script authorization vsd
- configure system security cli-script authorization vsd cli-user

#### 4.2.2 23.3.R2

**subscriber-mgmt commands:**

- configure subscriber-mgmt pfcf association association-setup-retry





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